#### Forest Carbon Partnership Facility (FCPF)

#### **ER-PD TAP REVIEW OF COSTA RICA**

#### I General Approach of the Review

Each TAP member revised the parts of the ER-PD in relation to a series of criteria and indicators that are in accordance with his/her professional experience. Teleconferences were held to clarify doubts and divergence of opinions. The coordinator organized and supplemented where necessary the comments of the TAP members, and did the final editing of the text. All criteria and indicators were systematically revised with members of Costa Rica REDD+ staff, TAP members and members of the FMT/BM, during a country visit from October 19 to 23, 2015. During this visit, the TAP members explained in detail why they considered that certain criteria or indicators did not meet the requirements stipulated in the Methodological Framework and how these observations could be incorporated in a revised version of the ER-PD. Costa Rica agreed to submit a revised version of the ER-PD and to consider the revised version as the first draft of the ER-PD proposal. As such, this report is solely based on the review of the version that was submitted on October 30, 2015 (First Draft) and additional documents provided to the TAP during the first week of December.

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

Date of Current Review: December 8, 2015

#### Name of reviewers:

Catherine Potvin
Gonzalo Griebenow
Edgar Ortiz
Ludovino Lopes
Bernardus de Jong (Coordinator)

#### Summary Assessment of the Quality and Completeness of the ER-PD:

Costa Rica in general has prepared a solid ER-PD document that can lead to a very interesting REDD+ program. Costa Rica has done a very good job of putting together an impressive amount of information, both in the ER-PD and in the various annexes provided to the TAP. In total, 43 criteria or indicators are met, 18 are not met and 17 do not apply

The indicators that are not met are outlined in various sections of the review and refer to carbon accounting, safeguards, sustainable program design, and program transactions.

Mark based on Assessment of Indicators:

II Level of Ambition → Criteria 1 - 2

1.1 Yes1.2 Yes

2.1 Yes Costa Rica intends to continue its national Forest Development Plan 2011-2020, as a follow-up of the very successful national forest development program 2001-2010. With this program, Costa Rica managed to convert part of the forestry sector from a very important source of GHG emissions during the 1980s and 1990s due to high deforestation rates, to an essentially CO2-neutral sector from 2001 onward, thanks to a decrease in deforestation rates and an increase in the category "new forests". Thanks to this early success of the forestry program, the total forest area is recovering and the rate of deforestation in primary forests has been very low since 2001. This early success puts a high constraint on Costa Rica in terms of establishing a Forest Reference Level against which the outcome of the program will be measured. Applying the criteria and indicators of the methodological framework, it is difficult for Costa Rica to show tangible emission reductions through further decreasing deforestation and increasing reforestation without substantial additional support. As a whole, the program can be considered very ambitious, as it is designed on a national scale. 3.1 Yes **III Carbon Accounting** 3.2 Yes III (a) Scope and → Criteria 3 - 6 3.3 No 4.1 Yes III (b) Uncertainties -> Criteria 7 - 9 **4.2** Yes III (c) Reference Level → Criteria 10 - 13 5.1 Yes III (d) Reference Level, Monitoring & Reporting on Emission Reductions → Criteria 6.1 Yes 14-16 6.2 Yes 7.1 Yes III (e) Accounting for Displacement (leakage) → Criterion 17 **7.2** Yes III (f) Accounting for Reversals → Criteria 18 – 21 8.1 Yes III (g) Accounting for ERs → Criteria 22 - 23 8.2 Yes 9.1 Yes 9.2 Yes The ER-Program accounts for emission reduction from deforestation and stock 9.3 No enhancement in "New Forests". It does not include estimations of emission reductions 10.1 Yes from forest degradation, nor stock changes from sustainable forest management. It 10.2 Yes calculates the potential for stock conservation, but at this stage it is not included in the ER 10.3 No Program. How the results from activities directed towards stock conservation will be 11.1 No separated from the activities directed towards emission reductions from deforestation 11.2 No and forest degradation is not clear, as these are currently estimated for the same area and 12.1 Yes as such are highly correlated. 13.1 No The ER Program includes an extensive section on uncertainty analysis that is performed on 13.2 NA uncertainties related to activity data as a whole (not separated for each REDD+ activity) 13.3 NA and emission factors together and separated. It is suggested that uncertainties of the 13.4 NA activity data be analyzed separately at least at the level of emission reductions versus 14.1 Yes stock enhancement. 14.2 Yes The reference period selected by Costa Rica does not conform to the indicators, established in the methodological framework. Costa Rica does not have land cover data 14.3 Yes for the selected dates. Furthermore, the selected dates include a period of the 1990s with 15.1 No high emissions, whereas the emissions dropped significantly in the 2000s. Therefore, the 16.1 Yes

reference level is consistently above the historical net emissions estimations from 2001	17.1 Yes
onward as can be seen from Figure 1 (see also comments under the section II Ambition).	17.2 Yes
The ER-Program will be implemented on a national scale; as such displacement of	17.3 NA
emissions will not be an issue, as any activity within the accounting area will be accounted	17.4 NA
for. The definition of "Reversals" needs to be clarified, as does the information used to	18.1 No
support the information in "Risk factor of Reversals". The Reversal proposal of Costa Rica	18.2 No
is based on the creation of a buffer derived from emission reductions estimated for 2010-	19.1 Yes
2013. However, if the reference period will be adjusted according to the	20.1 NA
recommendations of the TAP in relation to indicators 11.1 and 11.2, this will have an	20.2 NA
impact on the size of the buffer. This may require that Costa Rica propose another option	21.1 NA
to create a buffer.	21.2 NA
The estimated ERs in the ER-Program are highly correlated to the forest reference level	22 Yes
and as such, may be prone to adjustments, if a reference period is selected in accordance	
with the methodological framework.	
IV Safeguards	23 No
	24.1 Yes
Actions undertaken to meet WB and Cancun Safeguards → Criteria 23-26	24.2 Yes
	25.1 No
The safeguards triggered in the ERPD respond to the needs identified for the program and	25.2 NA
are also aligned with the ISDS. There is also alignment with the categorization of the	26.1 Yes
environmental impact assessment and a description of the potential affectation that	26.2 Yes
Category B projects may have over the environment. The indicator also pays attention to	26.3 Yes
the suggestions regarding the consideration of the Cancun safeguards (Decision 1/CP.16	
and its Appendix I as adopted by the UNFCCC) describing the way in which these safeguards are taken into account in the ERPD and how they are related to other	
supplementary documents, such as the ESFM.	
supplementary documents, such as the LSI Wi.	
However, as indicator 25.1 stipulates, the monitoring program needs to consider all	
aspects, contemplated in indicators 24.1 and 24.2, in the Safeguards Plan.	
V Sustainable Program Design and Implementation	27.1 No
V (a) Drivers and Land Resource Tenure Assessment → Criteria 27-28	27.2 No 28.1 No
	28.1 NO 28.2 Yes
V (b) Benefit sharing → Criteria 29 – 33	28.3 Yes
V (c) Non-Carbon Benefits → Criteria 34 – 35	29 Yes
	30.1 NA
There is no clear relationship between drivers and proposed measures. Proposed	31.1 NA
measures or actions do not address all key drivers identified. Relevant information is	32.1 NA
presented regarding the geographic distribution of deforestation that occurs mainly in	33.1 Yes
private lands and regarding the drivers of deforestation for each land ownership category,	34.1 Yes
but all these findings are not used to define geographically differentiated measures in the	34.2 No
ER Program.	35.1 Yes
	35.2 NA
The ER Program does not identify opportunities for carbon stock enhancement.	

There are no data presented of forest fires or illegal logging, that is: when do they occur, where, and which are the possible causes that should be addressed. Detailed fire data are available at least from 1998 onward.

The ER-PD indicates that the proposed policies are still subject to a consultation process; therefore, they may change in the future.

The ER-Program includes information on the potential beneficiaries (Public Institutions; Private Landowners and Indigenous People), the monetary and non-monetary benefits and a summary of the process of designing the benefit sharing arrangements (including gender and inter-generational inclusion) and it also deals with land and resource tenure rights. There is evidence that the Plan is prepared by consulting relevant stakeholders, including indigenous communities, using a participatory process. There is no evidence that the Plan is actually disclosed in any form.

The ERPD outlines potential Non-Carbon Benefits, identifies priority Non-Carbon Benefits, and describes how the Program will generate and/or enhance such priority Non-Carbon Benefits. However, the ER-PD needs to clarify if the stakeholders in the engagement process have been informed about the priority non-carbon benefits.

#### **VI ER Program Transactions**

- VI (a) ERPA Signing Authority and Transfer of Title To ERs → Criterion 36
- VI (b) Data Management and ER Transaction Registries → Criteria 37 38

Costa Rica has an excellent track record of experience with Data Management Platforms of its national programs, such as:

- a) 'Registry of the National Natural Patrimony' http://www.sinac.go.cr/competencias/ASP/Patrimonio/Paginas/default.aspx
- b) Program `Payment for Environmental Services (PSA)' http://www.fonafifo.go.cr/psa/index.html
- c) Program 'Investments' (Inversiones). http://www.fonafifo.go.cr/inversiones/index.html

The first program manages the Public Natural Protected Areas (Areas Silvestres Protegidas) and addresses different protection and management programs (such as illegal logging and fire prevention) on a national scale;

The second program manages the Land Owners who have contracts with the Program `Payment for Environmental Services ´ (Pago por Servicios Ambientales, PSA). It is a platform to manage the Environmental Payment Services Program in Costa Rica (including the identification of the land owner, the total land area in (ha), the land area to be submitted to the PES project; the PES modality; Limitations and geographical localization of the area, and others). This platform manages the execution and performance of the PES Program.

The third Program manages the voluntary projects to be certificated under the methodological standard of PES and C-Neutral Program, it is a registry for internal/national purposes (including the land registry number, the geographical localization, the land area and administrative localization, the project area, and the carbon reductions achieved by

36.1 Yes

36.2 Yes 36.3 Yes

37.1 Yes 37.2 No

37.2 No

37.4 No 38.1 Yes

38.2 NA

38.3 NA

38.4 NA

the project). This registry allows the national transfer/transaction of carbon reductions to voluntary buyers.

The ER-Program tends to transfer (part of the) credits generated by the PSA program (p 160 ER-PD-Spanish version).

None of the above mentioned data management platforms fulfills the requirements of a carbon credit registry, as referred to in the methodological framework, particularly in relation to indicators 37.2, 37.3, and 37.4, as they do not contemplate a harmonized management and registry of all the national Programs (REDD+ Programs). The "Payment for Environmental Services" registry is not designed to be an international transactions registry (it does not include Carbon Pools and Reference Level) and does not address all the potential programs and carbon reductions in a way that avoid in the future potential multiple claims and assure that double counting ERs on a national scale will not be possible. The voluntary program "Investments" is not mentioned in the ER-PD, so it is not clear how the data of this program will be managed to avoid double counting, nor how the credits, sold in this program, will influence the reference level. There is no possibility to track the tonnes of GHG-reductions geographically, and to attribute these to specific areas, this needs to be taken into account also in the technical criteria of the methodological framework.

#### **SUMMARY SCORE and overall comment:**

The general idea of the ER-PD is interesting and proposes novel ideas of how to develop a national REDD+ program. The ER-PD is envisioned to be part of an overall REDD+ program, but it builds mainly on already existing very successful programs and strategies and does not include new mechanisms that are directed towards the main drivers that are causing deforestation, as identified in the ER-PD. There are a series of important issues that needs to be resolved in many of the sections of the ER-PD, in order to comply with the criteria and indicators of the methodological framework.

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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

X yes Y no

[Ambition and strategic rationale for the ER Program – 2.2]

The ER Program aims to reduce forest-related emissions and increase forest-related removals. The calculations of the forest-related emissions and removals show that the forestry sector of Costa Rica has been virtually CO<sub>2</sub> neutral this century, with a net removal of about 770,566 Mg CO<sub>2</sub>-eq during 2001 and 2013. This contrasts highly with the net emissions of 159,133,954 Mg CO<sub>2</sub> during 1987-2000. This is a direct result of the policies and actions that Costa Rica put in place to reduce emissions and increase removals long before the discussions about REDD+ were started (2005) and these policies and actions have had very positive impacts that are demonstrated with the data presented in the ER-PD. However, the estimations of the emission reductions in the ER-PD are based on a reference level that does not follow the methodological framework (see indicator 11.1 and 11.2) and do not agree with the observed emissions/removals for the last 13 years (see Figure 1 in this report). As such, the ER Program is intended to maintain or improve the current emission/removal level based on two REDD+ activities (emission reductions from deforestation and stock enhancement) and at the same time to collect more information about the two potential REDD+ activities related to emission reductions from forest degradation and sustainable forest management. The ER Program intends to work on a national scale.

**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

X yes Y no

[Ambition and strategic rationale for the ER Program – 2.2]

The ER program proposal is considered ambitious in terms of the total emission reductions it intends to achieve and is developed at a national scale. It intends to enhance existing programs related to conservation of nationally protected areas and the PSA program, but the government is negotiating with indigenous groups and private landowners to celebrate new PSA agreements and develop new instruments (subarrangements) under the ER-Program rules that will facilitate the access of other land use types to the ER-Program benefit sharing mechanism.

The ER program proposal is focused on the combination of two REDD+ activities, namely emission reductions from deforestation and stock enhancement in new forests. It does not involve reduction of emissions from degradation, even though the proxy data that are available indicate that forest degradation may be a very important source of emissions. Although Costa Rica estimated the potential of carbon stock conservation, this will not be negotiated within the framework of the ER program. Information about the impact of forest management is not available at the moment, as such, sustainable forest management is not considered. The REDD+ activities are not spatially segregated, but only the net effect of the ER Program on the total balance of emission reductions from deforestation and increase in removals from stock enhancement will be accounted for.

## 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.

X yes

[Accounting Area of the ER Program - 3.1]

Y no

The accounting area is of significant scale (4.98 million hectares) or 97.4% of the territory of Costa Rica. The ER Program activities will have a national scope, but the accounting area is smaller than the total territory of the country. The Accounting area of the ER-Program is consistent with the one used by other instances, for example the "The National GHG inventory Costa Rica".

The accounting area is clearly defined, it includes urban areas, and "paramos", and the ER-PD presents a clear statement for the definition of forest that will be used for the implementation of the ER-Program. The definition of forest is identical to the one reported by the country to the UNFCCC, and the adopted definition allows the use of remote sensing techniques to estimate forest cover in the future, therefore it will be possible to monitor land use changes during different MRV events.

The section presents clear rules to identify the accounting area currently and in the future. The accounting area may change in the future; some areas may be excluded, due to lack of information at any given reporting event, or due to non-anthropogenic causes, such as volcanic or river disturbances. The area excluded now and in the future will be accumulated, until a new historic sequence of maps of the accounting area can be prepared. That is, no new areas will be included in the accounting area until a new series of maps allows it, and, if the accumulated difference is more than 5% of the current accounting area, it will trigger a modification of the present reference level.

The accounting area is therefore transparently defined from the beginning to avoid possible conflicts in the future. For example, it presently excludes 115,364 hectares due to clouds and cloud shadows identified in the current forest cover map, and this area will be excluded in the future. Care will be taken that cloud gaps in the satellite information will be filled with global data sources, such as the Global Forest Change project (Hansen et al 2013). Excluding the areas covered by clouds in any year from the whole analysis is considered the best available solution to treat areas covered by clouds in a particular year.

Environmental and social conditions in the Accounting Area of the ER Program are distinguished, using both the life zone ecological classification of the country, and the MIDEPLAN (Ministry of Planning and Development) socio-economic zones. Key aspects are mentioned, such as biodiversity values (500,000 terrestrial species or 6% of global biodiversity), and differences in the socio-economic conditions in the MIDEPLAN regions (for example overall unemployment close to 8.5%, and poverty rate of 20%)

Data of forest cover in the accounting area for the year 2007/2008 presented in this section indicate a forest cover of 59.4%, distributed in 44.3% primary forest, and 15.1% new forests (forest plantations + secondary forests). These data should be reviewed, since previous forest cover maps estimate a total forest cover close to 30% for the year 1991, therefore, these data are not consistent with an estimation of 44.3% of primary forest for the year 2007/2008. It seems that there is an overestimation of 14.3% for the primary forest cover class, and an underestimation of the new forests cover class. SINACs 2013 National Forest Inventory (NFI) official forest type map estimates a total forest cover of 51.7%, distributed in 31.8% of primary forest, and 18.4% of secondary forest and 1.5% of forest plantations.

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

X yes Y no

[Description of Sources and Sinks selected – 7.1]

The ER Program identifies all anthropogenic sources and sinks that will be accounted for, particularly the emission reductions from deforestation and increase in removals due to stock enhancement in new forests. Although proxy data indicate that emissions from forest degradations may be very significant, these will not be considered in the ER Program until better data are available concerning the amount of emissions from degradation and the main drivers behind the degradation process. As such, also excluded are the possible impacts of sustainable forest management on emissions or removals. Emissions from natural deforestation are excluded from the reference level and accounting area, but will be reported transparently in future reports and will be excluded from the results of the ER Program.

Forest degradation is an important issue in Costa Rica that needs to be considered accordingly, both in terms of area that is degraded or being degraded (34% of total primary forest remained degraded between 2001 and 2013), and the gross and net emissions derived from the degradation process (gross emissions from degradation is estimated to be about 35% of total gross emissions). This is particularly important since the amount of degraded forest may significantly influence the emissions factors currently used to estimate the emissions derived from deforestation, both for the reference level as well as for the expected emission reductions of the ER Program.

Although Costa Rica tried to estimate the potential for stock conservation, it is not clear how efforts to conserve the stocks will be separated from those that are directed towards the reduction of emissions from deforestation, as both will have the same end result.

Sustainable forest management is excluded in the ER Program due to lack of information and methods to detect the impact of management alternatives on emissions and removals. However, it is important to generate the information, as the stakeholders involved in forest management are requesting their participation in the ER Program (see section on stakeholder consultation).

**Ind. 3.2** The ER Program accounts for emissions from deforestation.

X yes Y no

[Description of Sources and Sinks selected – 7.1]

The  $CO_2$  emissions from deforestation are accounted for in the ER Program. The ER Program also transparently separates anthropogenic emissions from natural emissions, which are excluded from the Program. However, the non- $CO_2$  emissions from forest fires that cause deforestation are not yet included. Since these gases have a much higher global warming potential than  $CO_2$  (CH<sub>4</sub> around 25 times and N<sub>2</sub>O 300 times, taking a 100-year time horizon) it is important to include in the carbon accounting the emissions of these gases derived from forest fires, even though these estimations may create high levels of

uncertainty. The latter is particularly important as part of the strategies and actions designed to reduce emissions from deforestation are directed towards the control of forest fires.

Aboveground dead wood and litter are included in the estimations of emissions from deforestation, which are the most important sources of information required to estimate the non-CO<sub>2</sub> emissions from forest fires. Detailed forest fire statistics are available at least from 1998 onward, separated for type of forest burned, geographic location, and type of fire.

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 ERPA. These emissions are estimated using the best available data (including proxy activities or data).

X yes Y no

[Description of Sources and Sinks selected – 7.1]

Emissions from forest degradation are not accounted for in the ER Program, even though the estimations presented in the document indicate that these may be very significant. The ER-PD indicate that data will be collected in the short term to improve the estimations of this source. The implications of not including degradation as a source of emissions are particularly important in relation to the possible impact of degradation on the emission factors of deforestation. Now it is assumed that the EF factors do not change over time, neither for the reference level nor during the ER Program. This may cause an overestimation of the amount of emissions for each hectare deforested and as such also for the hectares for which deforestation has been avoided. This will be also treated in indicator 6.1.

C. 4 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. 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).

X yes Y no

[Description of Carbon Pools and greenhouse gases selected – 7.2]

All carbon pools are included in the carbon accounting, except for soil organic carbon (SOC), due to lack of confident information to estimate the changes in carbon stocks under different land-use transitions. The exclusion of SOC can be considered conservative, except for those cases where forests grow under high levels of water and/or accumulated litter carbon (wetlands such as mangroves and peat soils). The exclusion of SOC may also create differences with the national GHG inventories (INGEI), as the fluxes from SOC are included in the INGEI reporting.

Methane (CH<sub>4</sub>) and nitrogen oxide (N<sub>2</sub>O) emissions are included as part of burning in shifting cultivation, although emissions of CH<sub>4</sub> and N<sub>2</sub>O from forest fires are excluded in the reference level, as no spatially explicit data are available for the whole time series.

See also the response in indicator 3.2 in relation to non-CO<sub>2</sub> emissions from forest fires. The argument that there are no spatially explicit data is not valid, as there are a lot of spatially referenced data available on forest fires, at least from 1998 onward. According to Costa Rican National Commission on Forest Fires (Conifor), the average area burned each year is about 35,000 hectares, of which about 50% belong to grasslands. The expected non-CO<sub>2</sub> emissions from these fires will be in the same order of magnitude as the emissions derived from slash-and-burn.

Ind. 4.2 Carbon Pools and greenhouse gases may be excluded if:

X yes

Y no

- 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]

SOC is excluded due to lack of confident information to estimate changes in SOC-stock under different landuse transitions. See also comments in indicator 4.1.

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 forestrelated 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).

X yes Y no

[Description of method used for calculating the average annual historical emissions over the

Reference Period – 8.31

[Measurement, monitoring and reporting approach for estimating emissions occurring under the

ER Program within the Accounting Area -9.1]

Precise references to IPCC guidelines, including chapter and page numbers are included in the ER-PD, particularly in the section of the Forest Reference Level.

Furthermore, the methodology used to estimate the FRL is well explained in the ER-PD and can be understood without reading the various annexes, where detailed information or models are presented to verify the calculations and to test assumptions (see also indicators 11.1 and 11.2).

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 8.2]

[Description of method used for calculating the average annual historical emissions over the Reference Period 8.3]

[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]

Key data and methodological steps are either publicly available or made available to the TAP reviewers. Below is a short description and comments on information derived from the available documents.

#### I Forest Definition:

Costa Rica provides a clear definition of forest and takes care to ensure coherence vis-à-vis other similar processes such as GHG accounting for the Convention.

# II Definition of classes of forests, (e.g., degraded forest; natural forest; plantation), if applicable;

Costa Rica used the land use category of IPCC-2006 and considered the Holdridge life zone to sub-categorize forest types. The ER-PD includes an additional stratification that is not used in IPCC terms, that is "new forests", to deal with forest regrowth and stock enhancement and to allow increments in forest carbon stock to be considered as a land use change category during the calculation of the reference level. This category merges secondary forest and plantation and Costa Rica indicates that, in the future, efforts will be deployed to separate both categories. One of the shortcomings of the methodology used by Costa Rica to define forest and "new forest" is the fact that the same land area can be deforested and return to "new forest" several times in a relatively short time span (one cycle every 5-10 years, depending on the type of forest), and as such it will be difficult to report the outcome of the 5 REDD+ activities separately. Only net total emission reductions or removals can be reported, since deforested areas are allowed to be considered "new forests" between 4-8 years after clearing (which is the time required to detect "new forest" in the satellite imagery).

Y no

#### III Choice of activity data, and pre-processing and processing methods;

The ER-PD includes a section on the REDD+ activities to be considered that provides the clarity needed to understand construction of the reference level. The ER-PD provides a thorough explanation of the processing of activity data. Costa Rica indicates that three land use changes will be considered for activity data: deforestation, enhancement of forest carbon sink and conservation, although these activities will not be separated into specific areas. As such it is not clear how the results from the stock conservation activity will be separated from the activity to reduce emissions from deforestation, as both are currently highly correlated.

#### IV Choice of emission factors and description of their development;

The choice of emission factor is summarized in the ER-PD with additional details being provided in the annex of Carbon Decisions International "Reference Forest Emission and Removal Level of Costa Rica submitted to FCPF Carbon Fund: Methods and Results". Because the data from Costa Rica forest inventory are not completely available, Costa Rica complemented with published data obtained from a meta-analysis. It will be important for Costa Rica to get better insight into the effect of forest degradation on the emission factors used for deforestation, as the lower C-densities in degraded forests compared to intact forests may overestimate the reference level and ER Program outcome.

#### V Estimation of emissions and removals, including accounting approach;

The ER-PD indicates that in the case of conservation, or forest land remaining forest land, changes in emissions was set to zero. The ER-PD further indicates that the low level of confidence in data on harvested wood products led the country to decide to exclude these from the calculation of emission factors. The accounting approach currently excludes degradation from the accounting procedure, as Costa Rica will take a "stepwise approach" that contemplates the estimation of emissions due to degradation in a later stage. As the proxy data indicate that forest degradation may be a very important issue, it is highly recommended to take early steps in order to detect the impact of degradation on the emission factors used in the calculation of the emissions from deforestation and to delimit the areas affected by degradation.

#### VI Disaggregation of emissions by sources and removal by sinks

Emissions by sources and removals by sinks are calculated separately on a national scale, but forests (primary, degraded and new) that are deforested are not set aside and can be converted to "new forest" from one reporting period to the next. As such, the impact of REDD+ activities cannot be calculated separately.

# VII Estimation of accuracy, precision, and/or confidence level, as applicable

All data sources that are used in the carbon accounting include estimations of error (90% confidence levels), which in turn are used as the basis for the uncertainty analysis, which is treated in criteria and indicators of section 7 to 9.

#### VIII Discussion of key uncertainties

The ER-PD has a separate section dedicated to the uncertainty analysis of the FRL, and will be discussed under criteria and indicators of section 7 to 9.

## IX Rationale for adjusting emissions, if applicable

Costa Rica does not apply an adjustment to the estimated emission in the FRL, and as such it is not applicable.

X Methods and assumptions associated with adjusting emissions, if applicable Not applicable (see above).

**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:

X yes Y no

- 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 8.2] [Description of method used for calculating the average annual historical emissions over the

Reference Period 8.3]

[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]

Section 8 explains how spatial information on land use changes has been developed to generate the reference level. Costa Rica adopts a pixel-to-pixel approach in which each pixel is followed from one time interval to the next. The resulting matrices are the basis used to calculate the reference level. The data available are spatially explicit, although Costa Rica does not assign REDD+ activities (reducing deforestation, stock conservation, etc.) to different zones of the country.

The reference level is estimated for the entire country and can only be used as an estimate of total emission and removals (see also indicators 6.1 II, VI) but cannot be separated into individual REDD+ activities.

It was not possible to import the available spatial information to Arc-GIS, so it was not possible to verify which data sets are publicly available.

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.

X yes Y no

[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]

The ER-PD in section 12 provides a detailed explanation on how uncertainties have been addressed. Material has been provided that allows understanding how uncertainties around estimates of emissions factors have been calculated.

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.

X yes Y no

[Identification and assessment of sources of uncertainty 12.1]

The ER-PD provides information on uncertainties pertaining to the reference level. It is noteworthy that Costa Rica did Monte Carlo simulations to test for the contributions of uncertainties due to activity data and emission factors separately.

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.

X yes Y no

[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]

Section 8 shows that measures were taken to improve quality at the data collection stages. These measures were successful to different degrees. Changes in land cover during the reference periods were assessed from Landsat images providing methodological consistency. In addition a systematic rule to date the images was adopted and applied to the whole time series. It addresses the fact that the time interval between images of a certain date varies by a few months to over a 14-month interval. The methodological decisions contribute to lowering uncertainty at the data collection time for activity data.

The data suggest that quality control did take place allowing an estimate of accuracy of the different land

cover maps. The results from the evaluation are reported in Tables.

IPCC methodology and equations have been applied where required.

**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.

X yes Y no

[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]

The ER-PD acknowledges that measurements contain random and systematic errors with random errors being associated with tree measurements. The discussion is well informed by appropriate scientific evidence. The ER-PD concluded that the measurement errors at the tree level average out at the plot level and need not be corrected for. In addition, see **Ind 7.1** for information contained in Section 12.

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

X yes Y no

[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]

See indicator 7.2 for discussion

**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

X yes Y no

[Quantification of uncertainty in Reference Level setting 12.2]

This indicator is met, see indicator 7.2 for discussion

**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.

X yes Y no

[Quantification of uncertainty in Reference Level setting 12.2]

Degradation is not included in the ER-CR- Program; therefore, no estimation of uncertainty of ER associated with forest degradation is made.

Uncertainties in the calculation of emission reductions are calculated using two sources: uncertainty in the activity data, and in the emission factors. Both sources were associated with deforestation and stock enhancements.

Regarding uncertainty related to activity data the evaluation of deforestation and enhancements was made partially for maps of the periods corresponding to 1986/87, 2001/02 and 2012/13, and the accuracy of the transition matrix only for the 2002-2012 period. It concludes that: deforestation for the 2002-2012 period was underestimated by 26%, and that in the case of forest enhancements (new forests) they were also underestimated by 51%.

There is no consistency between the data used in the evaluation of uncertainty of the activity data (Table 12.2.1) and the map of spatial distribution of the control points (Fig. 12.2.1). It could be a typo in the legend of the map presented in Figure 12.2.1.

Regarding uncertainty related to emission factors, the text is not clear on how it was calculated and in addition the results of the estimation are not properly presented. The text indicates that the results are presented in Table 8.3.22 and 8.3.23 (note: there is a typo in the text. It assumed that the correct reference is Table 8.3.23 see page 216). However, these two tables do not exist in section 8, and there is no other table in section 8, in which one can find the results of the evaluation. It could be another mistake in the document, and the results presented in Table 12.2.15 may be the correct reference for the presentation of this evaluation. However, Table 12.2.15 is confusing: it is five pages long, and should be summarized to present the required information to evaluate this indicator.

The overall evaluation of uncertainty of the reference level is made using a Montecarlo simulation procedure. It considers the two sources of uncertainty mentioned above. The procedure was made using a verifiable tool (FREL TOOL CR. Vr1), and under three simulation conditions that is, considering both sources of uncertainty, and taking one of them out at a time. The final results indicate that the major proportion of uncertainty for the Reference Level estimation comes from uncertainty in the activity data (57.09% - 57.58% considering a confidence level of 90%), while for the emission factors the uncertainty was estimated as being between 14.12% and 14.16% (90% confidence level). The authors concluded (see also the evaluation of the Indicator 2.1) that to improve precision in the estimation of emissions and reductions of the ER Program, the most appropriate strategy is to increase the accuracy of the land use change maps.

The overall evaluation of the indicator is that uncertainty of emissions reductions associated with deforestation, and stock enhancements was made, but the process used to estimate uncertainty coming

from activity data is partial, and the process to estimate uncertainty from emission factors is not clear, and in this last case the results are not properly reported.

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]

X yes

The reference level is expressed in tonnes of CO<sub>2</sub>-equivalent for each year.

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

X yes

Y no

[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]

The ER-PD indicates that the reference level used is preliminary and will be adjusted to make it consistent with the National GHG inventories that in turn will be submitted soon. The reference level may also be adjusted, once the UNFCCC approves the FRL to be submitted in January 2016. Costa Rica indicates that the FRL presented in the current version of the ER-PD may change in the next version, according to the outcome of the previously mentioned documents.

**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

X yes Y no

[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]

The ER Program explains in various sections that the FRL presented in the current version of the ER-PD is preliminary and may be adjusted according to the outcome of the revised GHG inventory, expected at the end of 2015. Adjustment may also occur once the FRL- submission to the UNFCCC will be accepted. It does not explain what steps will be taken in order for the reference level to achieve consistency with the GHG inventory. It is particularly important to indicate how the yearly reporting of GHG emissions and removals in the inventory will be transferred to a historical reference level

#### C 11 A Reference Period is defined

Ind 11.1 The end-date for the Reference Period is the most recent date prior to 2013 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

X yes Y no

[Reference Period 8.1]

Costa Rica has forest-cover data available for December 1986, 1991, 1997, 2000, 2007, 2011 and 2013, from which deforestation and reforestation matrices can be estimated for the periods 1987-1991 (the change of 1986 cannot be calculated; this is an error in the data presented in the ER-PD), 1992-1997, 1998-2000, 2001-2007, 2008-2011, and 2012-2013.

Choosing 2009 as the end date, as proposed by Costa Rica implies that forest-cover data will only be available to enable Approach 2 for the years 2009 and 2010, as the changes that occurred between 2007 and 2011 cannot be spatially assigned to each year within this period. As such, it is not possible to spatially reference any emissions or reductions that occur between 2009 and 2010. Therefore, the proposed end date of the FRL does not meet the requirement pointed out in the methodological framework. The end-dates for the reference period for which forest-cover data are available to enable IPCC Approach 3 are 2013 or 2011. If Costa Rica selects December 2011 as the end date, this date will coincide with the start of the 2011-2020 National Forest Development Plan and is in accordance with indicator 11.1.

Proxy data on degradation of forests, based on percent canopy cover, are available for 2013 and 2000. Selecting 2013 as the end date will thus have the advantage that preliminary forest degradation data available for that year can be readily improved with auxiliary 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.

X yes Y no

#### [Reference Period 8.1]

Taking into consideration the points raised in the previous indicator, the start date for the reference period should be January 2001, for which forest cover data are available. This date coincides with the start of the 2001-2010 National Forest Development Plan. Also, the period between 2001 and 2011 or 2013 shows a clear change in deforestation rate of primary forests, compared to deforestation rates between 1987 and 2000. The deforestation rate of primary forest varied between 0.73 - 1.96% per year (av. 1.20%/yr) during 1987-2000 and dropped to 0.36 - 0.43% per year (av. 0.40%/yr) during 2001-2013. The land cover change data also indicate that the net annual increase in new forests has a positive trend between 2001 and 2013, whereas the net increase in "new forests" varied between 1991 and 2000 (see table below).

Table 1. Deforestation rates of primary forest and net increase in "new forests" from 1987 to 2013, according to the outcome of the land cover maps.

		Average	
Period	deforestation	deforestation	Net increase in
	rate of primary	rate of primary	"new forests"
	forest (%/yr)	forest (%/yr)	(Ha/yr)
1987-1991	-1.96%		41,171
1992-1997	-0.73%	<b>1.20%</b>	13,928
1998-2000	-1.18%		21,920
2001-2007	-0.43%		4,933
2008-2011	-0.36%	<del>-</del> 0.40%	13,425
2012-2013	-0.39%		47,193

These tendencies in land-use change are also clearly reflected in the tendencies of emission and removals (Figure 8.3.7 of the ER-PD), showing that net emissions between 2001 and 2013 are more or less stable (small increases in emissions are compensated by small increases in removals). Summing the net emissions and removals over the whole period shows that Costa Rica has been virtually CO<sub>2</sub>-neutral in the forestry sector during 2001-2013, with a net removal during this period of about 770,566 Mg CO<sub>2</sub>-eq. This contrasts highly with the net emissions of about 159,133,954 Mg CO<sub>2</sub> during 1987-2000. In fact, the proposed FRL is higher than the emissions between 2001 and 2013, due to the fact that it includes the period between 1998 and 2000, with much higher emissions than both the period before those years (1992-1997), and the years after (2001-2013). See also indicator 13.1 and 1.2.

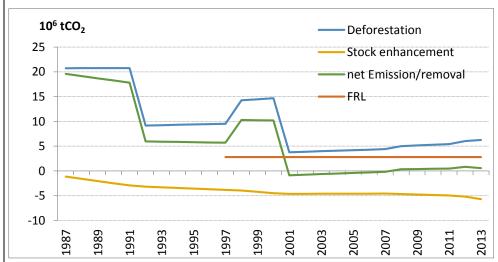


Figure 1. Emissions from deforestation, removals from stock enhancement and net emission/removal from 1987 to 2013, compared to the forest reference level (, proposed by Costa Rica.

As such, choosing 2001 as the start date and 2011 or 2013 as the end date (indicator 11.1) is more consistent with the methodological framework; these data reflect very well the outcome of national policies and actions implemented through the 2001-2010 National Forest Development Plan, and address the FRL with a conservative approach to ensure environmental integrity.

# 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.

X yes Y no

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

The definition of forest used in the construction of the reference level is specified. The definition is consistent with those used in the Clean Development Mechanism and the definition that will be used in the upcoming GHG inventory, but is different from the legal definition of forest and the definition used for the FAO Global Forest Assessments.

Costa Rica also uses the concept of "new forest", which has no national or international equivalence. The definition of "new forest", as it has been defined in the ER-PD, makes it difficult to spatially separate the REDD+ activities directed towards reducing emissions from deforestation and degradation from those directed towards stock enhancement due the fact that a pixel classified as "New Forests" can change from forest (new or primary) to non-forest and back to "new forest" within a time span of 4-8 years, depending on the forest type.

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

X yes Y no

[Average annual historical emissions over the Reference Period 8.3]

The document "Forest Reference emissions and removals for Costa Rica submitted to FCPF Carbon Fund: methodologies and results" provides key technical information allowing an understanding of Costa Rica's basic calculation to estimate the reference level using the following equation:

$$NRF = (\sum_{t=t1}^{t2} E_t) * (t2 - t1 + 1)^{-1}$$

(Ec.10)

where:

NRF level of reference; tCO<sub>2</sub>-e yr<sup>-1</sup>

 $E_t$  Emissions or absorptions in year t; tCO<sub>2</sub>-e yr<sup>-1</sup>

t year between t1 y t2

- t1 1996
- t2 2009"

A summary of this technical information is provided in the ER-PD document with adequate information on the calculation of the reference level. Figure 8.3.7 shows downward trends in emissions and upward trends in removals between 1987 and 2013 (period for which data are available) or 1996 and 2009 (reference period). Figure 1 of this report presents the FRL proposed by Costa Rica (1996-2009), compared to historical emissions, removals and net emissions/removals. Net emissions/removals between 1987 and 2013 or 1996 and 2013 show a downward trend (Figure 1 of this report). Furthermore, the FRL is constantly above the net emissions/removals from 2001 onward, with higher emissions than the FRL occurring only during the first three years (1998 – 2000).

**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:

X yes Y no

- (i)Long-term historical deforestation has been minimal across the entirety of the country, and the country has high forest cover;
- (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]

# Not applicable

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:

X yes Y no

- 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]

#### Not applicable

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

X yes Y no

[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]

## Not applicable

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.

X yes

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

Y no

The ER-PD in Section 9 indicates that the methods used for measurements, monitoring and reporting will follow exactly the same approach as the one used to develop the reference level (p. 3), therefore the discussion above also applies to MMR as well.

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

X yes Y no

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

Section 9 provides information on the proposed periodicity of monitoring. It is indicated that land cover maps will be created every two years and matrices of land use changes will be compiled every two years. The frequency of "monitoring" is also indicated to be performed every two years but it is not clear what "monitoring" implies for Costa Rica.

The frequency of forest mapping is ambitious. Section 8 suggests that Costa Rica is now producing one land cover map every two years, but that the national forest inventory is not finalized, although it began in 2013 (Section 8). The proposals in Section 9 will require a more agile forest monitoring system than the current system, in order to comply with the proposed scheme. The feasibility of the MMR scheme needs to be revised, taking into consideration the experience the various institutions have in their respective tasks, including data collection, data management, and data sharing.

**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

X yes Y no

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

The ER-PD in Section 9 indicates that the methods used for measurements, monitoring and reporting will follow exactly the same approach as the one used to develop the reference level (p. 3), therefore the discussion above also applies to MMR as well.

#### 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.

X yes Y no

[Relation and consistency with the National Forest Monitoring System 9.3]

As indicated in Section 9.1, Costa Rica is currently developing its national forest inventory and monitoring system. It expects to build coherence between the MRV processes for REDD+ and the national forest inventory.

This is made explicit in Table 9.2.1. In addition Costa Rica is searching for coherence with the national GHG inventory (also mentioned in Section 7). This raises concerns since information provided in Section 9 and in Section 8 suggests that difficulties exist in executing the national forest inventory as well as difficulties related to data sharing. Data collected in 2013 are still not available, nor the methodology applied in the inventory (see section 8, emission factors). The organigram proposed for the MMR (Table 9.2.1) involves 5 different governmental organizations, all of which have additional duties and it is not clear how these additional duties for MRV will be incorporated. The proposal for MRV is still very preliminary, based on a reference level that is also identified as preliminary, and only defines very general tasks of the MRV system.

C 16 Community participation in Monitoring and reporting is encouraged and used where appropriate the community participation in Monitoring and reporting is encouraged and used where appropriate the community participation in Monitoring and reporting is encouraged and used where appropriate the community participation in Monitoring and reporting is encouraged and used where appropriate the community participation in Monitoring and reporting is encouraged and used where appropriate the community participation in Monitoring and reporting is encouraged and used where appropriate the community participation in Monitoring and reporting is encouraged and used where appropriate the community participation in Monitoring and reporting is encouraged and used where appropriate the community participation in Monitoring and reporting is encouraged and used where appropriate the community participation in the community participati	iate			
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]				
Costa Rica indicates that the National Forest Monitoring System will likely become the institution in charge of MRV. It also clarifies the role of other governmental agencies such as the National Geographical Institute and the National Institute for Statistics and Census. The ER-PD indicates that community participation would be through a number existing of voluntary organizations whose role would probably focus on the forest protection rather than on MRV per se.				
C 17 The ER Program is designed and implemented to prevent and minimize potential Displacemen	nt			
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]	X yes Y no			
Since carbon accounting in Costa Rica is done at the national level, displacement is not a concern				
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]	X yes Y no			
Since carbon accounting in Costa Rica is done at the national level, displacement is not a concern				
Ind 17.3 By the time of verification, the ER Program has implemented its strategy to mitigate and/or minimize potential Displacement	X yes Y no			
Not applicable at this stage				
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	X yes Y no			
Not applicable at this stage	1			

# 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

X yes Y no

[Identification of risk of Reversals 11.1]

The definition of Reversals needs to be clarified, as does information used to support the "Reversal Risk Factors".

The following points are suggested to improve the Reversal section:

- A citation is recommended for the definition of Reversal used at the beginning of the section. If the definition is not supported with a proper citation, then the whole idea turns into a weak assumption.
- Item 11.1 needs to improve the referencing of the relevant information. References need to be properly cited with any preferred style that facilitates finding the information (i.e. page included). An important consideration is that, according to the above-mentioned citation the exclusion of non-anthropogenic emissions in the reference level is based on VCS recommendations and not from CDI as cited in the ER-PD (see below). If not, please clarify.

"The JNR requirements of VCS (version 3.2 of October 30, 2014) explicitly stipulates that emissions and removals are excluded from the reference level when these can be attributed to natural disturbances with large scale impacts (>1000 has), derived from geological or meteorological events (section 3.11,12, 5). In Costa Rica, between 1996 and 2009 the non-anthropic losses of forests amounted to 8,342.ha has (18,273.96 has between 1986 and 2013), which is significant for Costa Rica. Many of these losses are associated to volcanic activities and flooding with a period of return of more than 10 years, as such the exclusion of the emissions from the reference level are consistent with the JNR of VCS. The Methodological Framework of the Carbon Fund does not address the non-anthropic emissions and removals and only refers to "the program identifies the IPCC methodology to estimate reductions of emissions and removals (Indicator 5.1). Costa Rica considers it important to exclude non-anthropic emissions from the reference level and MRV due to the high risk of Costa Rican forests to be disturbed by natural phenomena, which in turn may affect seriously the country if these have to be accounted for as anthropic emissions".

**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

X no Y no

[ER Program design features to prevent and mitigate Reversals 11.2]

The ER-PD properly defines "Reversals", but does not demonstrate how the ER Program will diminish these.

It is proposed that Forestry Law 7575, which includes a restriction for land use change, is by itself the principal approach to avoid reversals. It also proposes that to reinforce the Forestry Law, the ER Program will include policy, actions and activities to support the SINACs illegal logging control program, and participation of local committees to control illegal logging. It should be noted, however, that illegal logging is essentially forest degradation, and that forest degradation was not included in the proposed ER-Program.

Section 11.2, that is, *ER Program design features to prevent and mitigate Reversals*, is just one paragraph long, therefore, there is no demonstration of how effective the ER Program design and implementation will be in mitigating significant risks of reversals, or how it will address the sustainability of ERs.

# 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:

X yes Y no

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 11.3]

The ER Program selects Option 1.

The ER PD proposes to assemble a buffer reserve that comes from the ERs the country already produced, assuming that Costa Rica started the ER program on January 1, 2010. It indicates that the country has already accumulated 8.9 million tonnes of CO2-e in ERs since the year 2010 (see section 2.2). In order to decrease any risk, the ER-PD further suggests assembling the buffer reserve using only emissions generated by the country via REDD activities within its public lands between January 1, 2010 and December 31, 2012. These ERs are estimated as 2.04 million tonnes of CO2-e after discounting for uncertainties in the estimation.

The ER-PD also establishes a set of rules to manage the proposed reversal management mechanism.

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

X yes Y no

# Not applicable at this stage

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

#### Not applicable at this stage

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

X yes Y no

[Monitoring and reporting of major emissions that could lead to Reversals of ERs 11.4]

# Not applicable at this stage

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.

X yes Y no

#### Not applicable at this stage

#### 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 13.1]

X yes

Y no

Table 13.1.1 presents ex-ante estimated emissions. The table follows the steps outlined in C22. Costa Rica further proposes to set aside all emission reductions that occurred in 2010-2013 for the buffer. The calculation is coherent with data presented in Table 2.2.2 (Section 2.2, p. 8).

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

#### [Participation under other GHG initiatives 18.1]

X yes

Y no

The description inserted in 18.1 (page 257) is clear about the existence of "Carbon Sequestration in Small and Medium Farms in the Brunca Region, Costa Rica" as a Clean Development Mechanism Project. The Project expects to generate 176.050 tonnes of  $CO_2e$  in a 20 year period (2006-2026). Costa Rica has already transferred the CERs with the serial numbers CR-6-961312-1-1-17572 to CR-6-984395-1-1-1-7572 (according to the Monitoring Report of August 2006 to December 2012). Costa Rica states that it will exclude those tonnes from their National Inventory of GHG in due time.

However, the description under 18.1 does not address the potential conflict/double counting situation related to the national activities financed by the Environmental Services Law (Environmental Services Payment Program) managed by FONAFIFO and the emission reduction achieved under that Program. The country should clarify how it is going to deal with this potential conflict, taking into consideration that CR has formally expressed the intention to transfer emission reductions achieved under the Environmental Services Program (coming from the Private Landowners) to the Carbon Fund (as stated in section 4.4 – page 60). At least a significant percentage of those tonnes are already being sold/transferred to internal and/or external buyers (companies) under the national voluntary carbon program. The registry already in place partially attends the stipulations of indicator 37.2 (in the registry the Carbon Pools and Reference Level are missing). As such, there is no carbon registry and/or Data Management System, with an harmonized methodological procedure to distinguish between the different Data Management Systems (CERs, PES, others) in order to be able to assign a unique serial number to be attributed/issued to all the tonnes in a way that the national accountability can reach the level of certainty required to avoid double counting and/or multiple claims to ERs arising from the different Programs/Projects.

[Data management and Registry systems to avoid multiple claims to ERs 18.2]

The registry/data management system already existing under the "Payment for Environmental Services (PSA)" — expressly states that it does not include two requisites of Indicator 37.2 (Reference Level and Carbon Pools), section 18.2 page 257. The country assumes the responsibility to adapt /adjust the registry database to achieve this.

The Registry described as "The National Registry of Natural Patrimony" is not a registry that guarantees the data management of carbon reductions and therefore cannot be used to account for the Carbon Fund emission reductions (although it could be used to geographically manage the different areas of the ER-Program).

Also the "Updated Biannual Reports to the Convention" (though it could be considered robust and transparent), will most likely not be prepared to produce/manage the information in a way that can guarantee the serialization of each ton of emission reduction, in order to avoid double counting with other Programs and consequently avoid multiple claims to ERs.

Finally, the ER-PD mentions that the "Registry of the Domestic Carbon Market" is under development to attend the internal carbon market; however this registry doesn't clarify if it will be applicable to the REDD Program designed under the Carbon Fund Methodological Framework (especially if it will be able to register all kind of lands included under the program and not only the Private Land Owners already included under the Program).

The country needs to adapt/adjust the existing database and carbon registry to match the requirements of this criterion.

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

X yes Y no

[ 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]

The item presents a very detailed description of the safeguards triggered in the ERPD. These safeguards respond to the needs identified for the program and are also aligned with the ISDS. There is also alignment with the categorization of the environmental impact assessment and a description of the potential impact that Category B projects may have on the environment.

The indicator also pays attention to the Cancun safeguards (Decision 1/CP.16 and its Appendix I as adopted by the UNFCCC), describing the way in which these safeguards are taken into account in the ERPD and how these are related to other supplementary documents, such as the ESMF.

Finally, there is a recommendation to provide more clarity in the reading: The footnote citations 134 and 136 mention "ibid" as "in the same place". This type of citation is commonly

used to "save space in textual references to a quoted work which has been mentioned in a previous reference". It is not clear if the previous reference -133- provides information related to safeguards. It is recommendable to review and explain the citation.

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

X yes Y no

[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]

The information in the item is aligning the safeguards identified in 24.1 with complementary documents to reinforce and further support the ERPD. ESFM has information that reflects alignments with the ERPD, indicating the abundant material produced and ground work done on this regard in the country over the past years. The safeguard plans include social and environmental topics and mitigation measures for the social and environmental impacts identified during the national process of preparation for the SESA and ESFM, derived from the implementation of the REDD+ strategy. ESFM reflects on the safeguards identified and also on the latest version of the ISDS.

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

X yes Y no

[Description of arrangements to provide information on safeguards during ER Program implementation 14.2]

It is suggested to pay particular attention to the information requested in the indicator "<u>Appropriate monitoring arrangements</u> for safeguards referred to in <u>Criterion 24</u> are included in the Safeguards Plans". The indicator provides plenty information in the form of risks analysis with actions and specific tasks to tackle them. It mentioned the strengthening of the forest monitoring as an action to mitigate the potential environmental and social impacts. Nevertheless, it fails to provide information regarding the <u>monitoring</u> arrangements for the safeguards identified in Criterion 24.

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)11 required by the UNFCCC guidance related to REDD+, as appropriate

# Not applicable at this stage

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:

X yes Y no

- 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]

The text for 14.3 has achieved to mainstream the information requested by the indicator. The texts indicated that the National Forestry Fund is currently piloting a specific mechanism for REDD+, which has been developed along with a procedure guideline addressing the main objectives, legitimacy and role of the emission reduction program in conflict resolution and attention to grievances.

There is an explanation of the guidelines stating that one of the main objectives is to have a mechanism that is accessible and "information transparent" favoring the stakeholders participation and dialogue during the implementation of REDD+ in Costa Rica. There is also a description of the FGRM operation process, which describes, among others, the different options and channels available to place a potential complaint. There is reference to the SIS and the MGAS, to support the information provided. The pilot information is public and is currently being evaluated to respond to a comprehensive social approach that has taken into account language and other potential barriers that stakeholders can face.

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

X yes Y no

[Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 14.3]

The ER-PD provides details about the FGRM process to follow, filter, monitor, and report the complaints. It describes several channels of communications such as telephone lines, online formats, emails and open office access to the public. The program mentions the incorporation of information and feedbacks to the SIS. It also includes actions for the improvement of the FGRM to facilitate a better access for stakeholders.

**Ind 26.3** If found necessary in the assessment mentioned in Indicator 26.1, a plan is developed to improve the FGRM

X yes Y no

[Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 14.3]

There is a pilot that is described in 26.1. The pilot is presented as a proposal to improve the FGRM and is intended to be complementary and more specific than the current ombudsman. The pilot function and benefit is well described.

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.

X No Y no

[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]

The ER Program identifies the key drivers of deforestation. The section presents a description of the deforestation process in Costa Rica using the map series used to establish the reference level. Historical data show that the highest deforestation rates occur in privately owned lands, then in indigenous territories, and that it is low in national parks-biological reserves. Proposed ER Program measures should agree with this finding.

The section also explains how deforestation rates change according to land ownership category in the country. There is a good analysis of the drivers for each land category. The section identifies the general drivers, and also the specific drivers for each land use category. The ER-PD indicates that: higher rates of deforestation are observed on private lands; therefore, in addition to reinforcing the control of illegal logging, the ER-Program will increase the value of the lands, and generate additional incomes for landowners by expanding the scope of the program of payments for environmental services (page 39).

Both deforestation and reforestation are identified as spatially concentrated in the country. From 2001 to 2011, one third of the total deforested hectares was located in the northern and Caribbean lowlands (Huetar Norte and Huetar Caribe zones), and two thirds in the north pacific zone (Chorotega zone). This finding should be used in the ER-program to propose geographically specific measures, but there is no indication that this information will be used as such.

The ER-Program does not identify opportunities for carbon stock enhancement; at least it is not presented in section 4.1. For example, supporting documents prepared during project preparation show that improving efficiency in the private forestry sector is an appropriate opportunity for carbon stock enhancement (see for example: "Market study of woody products and substitutes to improve the conditions to increase the carbon pool in long-term woody products", prepared by Oscar Santamaría, 2015).

There are no data of forest fires or illegal logging, that is: when do they occur, where, and which are the possible causes that should be addressed. Forest fires they are not identified as an important deforestation driver, and the ER-Program does not propose any measure to reduce their impact, because it is assumed that they do not lead to deforestation, but to forest degradation. This assumption should be tested, since supporting documents (sea also page 48) reveal that from 1998 to 2014; nearly 208,000 hectares of mature and secondary forests have experienced forest fires: 87% of this area is located in private lands outside protected wildlife areas (PWA), and 13% inside a PWA.

The ER-Program presented in section 4.1 identifies the key drivers of deforestation, but it does not identify opportunities for carbon stock enhancement, one of the activities that are included in the reference level.

**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

X Yes Y no

[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]

Historical data show that the highest deforestation rates occur in privately owned lands, then in indigenous territories, and that it is low in national parks-biological reserves. The ER-Program proposes measures only for deforestation, conservation, and regeneration of forests.

It declares that "considering that the REDD strategy will be implemented in phases, the ER-Program will focus on REDD+ activities to reduce emissions due to deforestation and stock enhancement through regeneration of forest and that the start date is the year 2010. The other REDD activities (forest degradation, stock conservation and sustainable forest management) will be gradually incorporated in the REDD strategy, starting the year 2016 (according to the compilation of information, see page 51).

The ER-PD proposes six policy guidelines, with specific actions for each of them, and activities for each action, excluding apparently those actions related to forest degradation (for example forest fires). However, illegal logging control, typically a driver for forest degradation<sup>1</sup>, is included in the actions. The ER-PD indicates that the proposed policies are still subject to a consultation process (page 52) and, therefore, may change in the future.

There is no clear indication in this section of the relationship between the drivers identified in section 4.1 and the proposed measures. The Costa Rica REDD secretary needs to clarify these relations using a table with drivers, barriers and proposed measures for each driver. Currently, it is difficult to assess if all the key drivers are properly addressed by the planned ER-Program measures. In addition, there is no indication which of the proposed policies and actions will be excluded from the first phase of the ER-Program. According to section 2.2 of the ER-PD, actions related to forest degradation will not be included during the first phase of the ER Program.

<sup>&</sup>lt;sup>1</sup> in the context of the National Strategy REDD+ of Costa Rica, forest degradation is considered as a statistically significant reduction in the size of the carbon stock in areas with forests considered as mature, while the reduction is due to anthropogenic actions (fires, illegal logging, unsustainable agricultural practices and others), which can be quantified and monitored with remote sensing and field data (PRCC, 2015).

To understand the ER proposed measures, and to determine both the relationship of the measures with the identified drivers and the proposed polices, and also to determine which policies and actions are not considered during the first phase of the ER Program, the reader must read the activities listed in the section 6.1 (Institutional and implementation arrangements). After conducting this analysis, it is concluded that:

- a) Proposed measures or actions do not address all key drivers identified in Indicator 27.1.
- b) Forest fire control activities are not included in the first phase of the program because according to the degradation definition forest fires are causing forest degradation, and forest degradation is not included in the first phase of the ER-Program.
- c) Illegal logging is identified as an activity that causes forest degradation, but it is included in the first phase of the ER-Program.
- d) There are no activities programmed for Policy No.3, which is the policy related to one of the major barriers to REDD+ according to the ER-PD: "the most important barrier to attend the drivers of deforestation is the opportunity cost of private land that is covered by forests and the lack of an efficient and successful forestry sector in terms of production, industrialization, and commercialization of wood and other products derived from forest management" (see page 48).
- e) There are no activities defined for action 5.4 that was included in policy no. 5.

In section 4.1, relevant information is presented regarding the geographic distribution of deforestation, indicating that this occurs mainly in private lands, and regarding drivers of deforestation for each land ownership category, but all these findings are not used to define the ER-Program measures.

# 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:

- X Yes Y no
- 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.

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

[Land Tenure, section 4.4 (28.1.I-IV); description of stakeholder consultation process, section 5.1 (28.1.V)]

Regarding Indicator 28.1 Items I and II, in section 4.4 the range of land tenure rights and categories of rights-holders existing in the Accounting Area is presented. Similarly, section 4.4 also presents many of the ambiguities that exist in the applicable legal frameworks (see section 4.4 pages 58 to 64).

Regarding Indicator 28.1 III and IV, there is no mention of areas within the Accounting Area that are subject to significant conflicts or disputes related to competing rights, or how such conflicts have been or are proposed to be addressed. The issue is addressed in general in section 4.4, but there is no mention of any specific dispute related to competing land claims between Indigenous People and non-indigenous people, for example, the conflicts in the "Salitre" Indigenous Territory, or the fact that some indigenous territories are included within a National Park, such as in the case of the "Cabecar de Chirripó" and "Cabecar de Tayni" indigenous territories (see Figure 2.2.3 of the ER-PD).

Regarding indicator 28.1.V, section 5.1 describes the stakeholder consultation process in a transparent manner.

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.

X yes Y No

[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]

A complete description of the land tenure regimes in the accounting area is presented in section 4.4.

Legal status of Indigenous People lands is clearly defined, and it is concluded that: "In the case of indigenous territories, the legislation is very clear, the main problem relates to the fact that this has not been taken up by the corresponding national government and the National Commission of Indigenous Affairs has no financial resources, required by law, to enable the implementation of necessary actions to reclaim the lands and to make these available to the Indigenous People, as mandatory by law".

In this section a description of the proposed actions is also presented, including how the ER-Program can

contribute to clarify land tenure in the accounting area.

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]

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, based on the national legislation:

- Article 45 of the National Constitution, and articles 3 k), 46 and 47 of the Forest Law (Payment for Environmental Services).
- According to the national legislation the ability to manage and transfer the title of ERs under the country's legal framework is the responsibility of the National Forest Administration
- The National Forest Administration will be able to transfer the ERs under the following situations:
  - A) as legal land owner of the emission reductions (Public Lands Natural Protected Areas)
  - B)as legal and contractual owner of the right to transfer emission reductions coming from private landowners (the state will own the rights to titles by contractual transfer of private land owners)

The ER Program limits the transfer of titles of ERs to the Carbon Fund from areas where the National Forest Administration has the legal legitimacy/ability to transfer those titles (see 17.2 – page 255):

- The percentage of the territory that will be able to transfer title will be attached to the Public Lands (Natural reserves) and Private Lands that will represent in total 32.2% of the territory and total amount of emission reductions (32% and 1,645,173 Ha).
- The ER Program also states that if and when in the future other lands will be able to enter into the program (new contractual arrangements) the Country will make a pledge to the Carbon Fund to include those tonnes in the transferrable titles to the credits.

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 [15.1]

X yes
Y no

ER Program provides almost three pages (page 245 to 247) of description of the future benefit sharing agreement to be implemented under the National REDD+ Strategy.

The future Benefit Sharing Program will be based in two principal criteria:

- 1) payment for performed results and
- 2) benefit distribution (according to the national circumstances).

The benefit distribution will be destined to the Public Landowners, Private Landowners and Indigenous People(who will be able to demonstrate their legal rights to the land and/or possession rights), and

contribute/execute the actions towards the reduction of emissions.

The main actions to be financed are those that could reduce emissions coming from:

- Public Protected Areas
- Other State Institutions that owns forests
- Private landowners that have already signed contractual agreements
- Community or Indigenous Landowners.

The ER-Program at this phase has not yet defined the scale, criteria, procedures and timelines of the monitoring and benefit distribution mechanism, but the country intends to apply the resources through the following financing mechanisms:

- Robustness of the Environmental Services Payment Program;
- Designing new financial modalities
- Identification of investment opportunities (monetary and non-monetary)
- Robustness of the investments made in public lands

The ER-Program includes the information specified under Indicator 30.1, especially:

- the potential Beneficiaries (Public Institutions; Private Landowners and Indigenous People)
- Monetary and non-monetary benefits and the summary of the design process of benefit sharing arrangements (including the concern of gender and inter-generationally inclusion)
- The geographical distribution and attachment to reduction emissions results
- Also deals with land and resource tenure rights (15.2 –page 247) and (15.3 page 248/249).

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:

X yes Y no

- I. 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.
- II. Criteria, processes, and timelines for the distribution of Monetary and Non-Monetary Benefits.
- III. 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 15.1]

#### Not applicable at this stage

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

X yes Y no

[Description of stakeholder consultation process 5.1]

[Summary of the process of designing the benefit-sharing arrangements 15.2]

The Benefit-Sharing Plan is in preparation. Section 15.2 states that "Costa Rica has not yet defined the type, scale, criteria, processes, timelines and mechanisms to monitor the benefit distribution".

Section 15.2 describes general guidelines to prepare the Plan. It will include a) payments against results, and b) non-monetary benefits.

There is evidence that the Plan is being prepared in consultation with relevant stakeholders, including indigenous communities, using a participatory process.

There is no full agreement between the proposed plan for benefit sharing and the "description of actions and interventions to be implemented under the proposed ER Program" presented in section 4. This is an issue that should be resolved when the plan is ready.

There is no evidence that the Plan is actually disclosed in any form.

Not applicable at this stage

#### 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

X yes Y no

[no reference to template]

Not applicable at this stage

### 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

X yes Y no

[Description of the legal context of the benefit-sharing arrangements 15.3]

The design and implementation of the Benefit-Sharing Plan described under section 15 (page 245 to 249, especially 15.3) explains the ER-Program's intention to conform to all relevant applicable laws, including national laws and legally binding national obligations under relevant international laws.

The ER-Program describes and takes into consideration in different sections the declared intention to act in accordance with National Laws especially those related to future beneficiaries:

- A) Public Land (Protected Areas) and other State Institutions that own forests Ley Forestal no 7575 of 14/4/1996 and the Decree n 25721 – MINAE 17/10/1996 (Section 4 – Table 4.5.2 page 66 - and Section 15.1 page 245)
- B) Private Landowners Private landowners that have already signed contractual agreements and those that will enter into new contractual arrangements with the State in the future Executive Decree no 38323 MINAE, La Gaceta no 72 14/2/2104 (Section 4 Table 4.5.2 page 66 and Section 15.1 page 245)
- Community or Indigenous Landowners that have already signed contractual agreements and those that will enter into new contractual arrangements with the State in the future-Indigenous Law No 6172 de 29/11/1977 and Executive Decree No 848726/04/1978, Executive Decree No 13568 30/04/1982 (Section 4 Table 4.5.2 page 66 and Section 15.1 page 245)

Additionally, the intention to accomplish the legally binding national obligations under relevant international laws such as the Agreement 169 de la OIT (Section 14 .1 – Safeguards – page 233 and 234)

Finally the ER Program describes the intention to create additional arrangements, if necessary, to be able to incorporate new financing modalities under the existing legal framework.

#### 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 intergenerationally inclusive, as relevant

X yes Y no

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

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.

The item adequately describes the requirements and includes the most relevant related to gender. The ERPD mentioned the existence of a pilot with indigenous communities that will serve as a reference for scaling up initiatives that can mainstream gender and culturally appropriate concepts. The document continues by providing information on the plans to develop a gender strategy to ensure that this crosscutting issue is included in the ERPA implementation.

**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

X yes Y no

[Description of stakeholder consultation process 5.1]

It is not clear from the text how the stakeholder engagement processes carried out for the ER Program design and for the readiness phase <u>inform the identification of such priority Non-Carbon Benefits</u>. In the ER-PD there is information related to "co-benefits among others" but it is not clear if they included non-carbon co-benefits. If that would be the case the paragraph discusses the inclusion, discussion and participation of only one particular group, the IPS, and not all the stakeholders identified in the ER-PD.

The item mentions that the "consultation process is considered a non-carbon benefit" which is an interesting finding; however the indicator requests specific information related to how the <u>stakeholder engagement</u> <u>process carried out informs the identification of such priority Non-Carbon Benefits.</u> That is, it requests clarification of whether the stakeholder process has informed stakeholders about the non-carbon benefits identified in the ER-PD, i.e.

- a) Water Protection (co-benefit)
- b) Biodiversity Conservation (co-benefit)
- c) Scenic Beauty (co-benefit)

It is recommended that Costa Rica respond to this specific requirement or clarify it in the item text, or indicate where the information is provided or if it is included in any other complementary document of the ER-PD

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

X yes Y no

[Approach for providing information on Priority Non-Carbon Benefits 16.2]

The indicator describes that the parameters to determine the priorities for the environmental services and non-carbon benefits are derived from the proposed Land Management Plan for Biodiversity Conservation in Costa Rica. The aim is to invest in areas have been identified as important to fill biodiversity conservation gaps, taking into account biological corridors and natural protected areas, by assigning funds to areas that have not been attended before by the government.

**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

X yes Y no

Not applicable at this stage

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:

X yes

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.

Y no

[Authorization of the ER Program 17.1]

The ER Program Entity demonstrates its authority to enter into an ERPA with the Carbon Fund prior to the start of ERPA negotiations, through the Reference to an existing legal and regulatory framework stipulating such authority.

The ER Program Entity – Ministry of Environment and Energy- bases its legitimacy on the National Constitution – article 28 - Law of Public Administration 2/5/1978 to manage public forest land resources, and the legitimacy to act in representation of the private landowners under the National Constitution - Art 45 and article 5 of the Forest Law No 7575, the Executive Decree 25721 – MINAE and the contractual arrangements established under the country national law.

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

X yes Y no

## [Transfer of Title to ERs 17.2]

The ER Program Entity demonstrates its ability to transfer to the Carbon Fund Title to ERs, and respects 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),

The ER Program is considering the inclusion in the initial phase of the Program of only two specific types of land and resources tenure rights (17.1 – page 255):

- a) Public Land (Protected Areas) and other State Institutions that own forests, and
- b) Private Landowners Private landowners and Indigenous Groups that have already signed contractual agreements (PSA).

That statement demonstrates the ability of Costa Rica to transfer Titles of ERs to the Carbon Fund, once the carbon rights arise from the National Legal Framework put in place in the Country:

- National Constitution
- Forest Law No 7575 of 14/4/1996 and the Decree no 25721 MINAE 17/10/1996
- Executive Decree no 38323 MINAE, La Gaceta no 72 14/2/2104

The ER-Program doesn't consider at least in its initial phase (in terms of legal transference of ERs) all the other types of land and resource tenure rights that will be able to enter in the future, if they sign new contractual agreements with the State- under the Forest Law – Decree no 25721 – MINAE 17/10/1996; Indigenous Law No 6172 29/11/1977, the Executive Decree No 8487 26/04/1978, and the Executive Decree No 13568 30/04/1982;

The ability to transfer Title to ERs is demonstrated through the existence of legal and regulatory frameworks and creates the opportunity in the future to establish new sub-arrangements with potential land and resource tenure rights-holders (including those holding legal and customary rights).

In addition, the ER-Program is able to establish new benefit-sharing arrangements in the future (including the different land and resource tenure rights) under the Benefit-Sharing Plan. This will be achievable, using the legal framework already in place in the country (subjected nevertheless to some adaptations and regularization of land tenure rights – especially on the land types where the possession model is still the model).

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

X yes

Y no

[Transfer of Title to ERs 17.2]

The ER-Program Entity already demonstrates its ability to transfer Title to ERs prior to ERPA signature as expressed above in 36.2.

The ER-Program doesn't consider the inclusion at least in its initial phase (in terms of legal transference of the ERs) the potential ERs that could be in conflict, unclear or contested under the national legal framework, such as:

- Lands administered by the Harbor Administration and Economic Development,
- The border zone
- The titling projects of the Institute for Economic Development
- The land property rights on those lands that are considered National Natural Patrimony
- The Terrestrial-Maritime Zone

This clarifies that the legal ability to transfer Titles to ERs, once they will be exercised, only for those land types for which the ER Program Entity has the ability to transfer ERs title to the Carbon Fund.

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.

X yes Y no

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]

Based on national needs and circumstances, the ER Program host country has made a decision to maintain its own comprehensive national REDD+ Program and Projects Data Management System and to adopt a Centralized National Registry to be located at the Climate Change Directorate (17.2 – page 257).

X yes

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]

The national REDD+ Programs and Projects Data Management Systems that already exist in the country do not provide all the requested attributes of the ER-Program.

The national REDD+ Programs and Projects Data Management Systems only provides attributes "i) and partially the attributes "ii) and iii)" of the Indicator 37.2:

- i. The entity that has Title to ERs produced;
- ii. Geographical boundaries of the ER Program or project;
- iii. Scope of REDD+ activities.

There is no possibility to track the tonnes of GHG-reductions geographically, and to attribute these to specific areas.

The national REDD+ Programs and Projects Data Management System that already exist do not provide the following attributes that need to be implemented in the existing registry or built under a new registry:

- iii) Carbon Pools; and
- iv) The Reference Level used.

**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).

X yes Y no

[Data management and Registry systems to avoid multiple claims to ERs 18.2]

The information contained in the future national or centralized REDD+ Programs and Projects Data Management System should be available to the public via the Internet in the national official language of the country.

At this phase, the ER Program describes the existence of a national or centralized REDD+ Programs and Projects Data Management System that could be adapted to include the missing attributes.

The system and the information registered is only partially available to the public in the national official language. The ER Program needs to adapt the national registry and data management system to deal with the ER Program attributes and clarify what information (nature and extension) will be available publicly via the Internet.

**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

X yes Y no

[Data management and Registry systems to avoid multiple claims to ERs 18.2]

The ER Program does not demonstrate that the administrative procedures are defined for the operations of a national or centralized REDD+ Programs and Projects Data Management System.

Additionally, the ER Program does not demonstrate that an audit of the operations is carried out such that the information and audit procedure are able to avoid double counting (even though it states that the Biannual Update Report will be developed, according to UNFCC Secretary guidelines).

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

X yes Y no

[Data management and Registry systems to avoid multiple claims to ERs 18.2]

Based on national needs and circumstances, the ER Program host country has made a decision to adopt a Centralized National Registry to be located at the Climate Change Directorate (17.2 – page 257).

**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

X yes Y no

[Data management and Registry systems to avoid multiple claims to ERs 18.2]

# Not applicable at this stage

**Ind 38.3** An independent audit report certifying that the national or centralized ER transaction registry performs required functions is made public

X yes Y no

[Data management and Registry systems to avoid multiple claims to ERs 18.2]

# 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]

Not applicable at this stage