# Forest Carbon Partnership Facility (FCPF) Technical Assessment of June 04<sup>th</sup>, 2019 of the ER-PD for Peru

2<sup>st</sup> Assessment – Final dated 16 October 2019

# I General Approach of the Review

This review mainly reflects the TAP's views on the March 23 updated and revised version of the ER-PD –Initial Review and the 1<sup>st</sup> assessment. The TAP team has conducted initial a desk review of the January21st version of the PERU ER-PD, remotely before the WB and TAP mission to Peru from February 11-15, 2019; held team discussions on the indicators while in Peru; and finished remotely February 24<sup>th</sup> after numerous email exchanges, revised text and discussion on Indicators. All of the TAP team members except for the country expert had participated in previous TAP ER-PD assessments and missions.

This report reflects the view and consolidates the understanding of the TAP team, of the ER-PD, integrating the discussion and the information collected during the meetings of the mission and the advanced revised version of 23<sup>rd</sup> March, 2019 (1<sup>st</sup> Assessment) dated 03<sup>rd</sup> April 2019 and the present 2<sup>nd</sup> assessment/final dated of 12 June 2019.

The report was updated to reflect the SESA's information that was submitted from MINAM on September 2019.

This Assessment is dated October, 16<sup>th</sup>, 2019

# **PART 1 OF TECHNICAL ASSESSMENT: Summary**

**Date of Current Assessment:** 16 October2019. Final Desk Review of the June, 04<sup>th</sup>, 2019 version of the ER-PD.`

# **Assessment team members:**

Ludovino Lopes, team leader, Portugal/Brasil Ken Creighton – Co-Leader, USA Agustin Inthamoussu, carbon accounting expert, Uruguay Mario Nanclares, social and safeguards expert, Argentina Ludovino Lopes, legal expert, Portugal and Brazil Valentina Robiglio, country expert, Italy/Peru

Summary Assessment of the Quality and Completeness of the FR-PD:

Summary Assessment of the Quanty and Completeness of	if the ER-PD.		
Overarching TAP comments:			
Overall, a strong and detailed Final ER-PD that describes a full paractivities that could lead to an integrated ER program within the institutional and legal framework. It describes the organizational authorous government, a significant set of activities and a complex financing plasignificant historical background on REDD+ that was developed decades of experiences and there are several important lessons constitute a critical legacy to address the future implementation of the tothe historical experience and international partnerships the count sophisticated National MRV system that will be one of the strong pillal monitoring system (the implemented system intends to continuously forest carbon stocks with accuracy and precision, enabling continuously	e country's overall ority of the national an. The country has luring the last two is learned that will ne ER Program. Due try has developed a ars of the integrated of monitor change in	1st Assessment	2 <sup>nd</sup> assessment (final)

changes in forest cover and quality within the target regions with regard to both deforestation and forest degradation, and to eventually be national in scope. The program will also seek to track changes in the indirect causes (drivers) of forest loss and degradation such as the impact of laws, policies and socio-economic trends. The national government is deeply involved in the ER-PD process at national and regional levels and within different institutional departments. The ER--PD presents a creative and well documented proposal addressing the circumstances of the Western Amazon region and responds to the specific circumstances and difficulties in governance seen in recent years related to institutional and political management of the jurisdictional regions that have been selected for the Program, Ucayali and San Martin, both of which are situated in the native Amazon rainforest biome and the eastern slope of the Andes that include 19% of the Peruvian Amazon forest and have experienced 35% of deforestation in the Peruvian Amazon over the past decade. (2008-2017).

The executive summary has been extensively revised and provides a more thorough and comprehensive overview of the project structure, objectives, activities and key national actions to achieve an effective platform for project implementation at national and regional levels and articulates the biological and ecological uniqueness of the Peruvian Amazon biome, the indigenous Peoples' traditions for land stewardship and the opportunities presented by this project to significantly change the direct and indirect drivers of deforestation and degradation, experience that may be of value to other countries in the regions with similar aspirations. Table 4.3.2. Expected impact of interventions on emissions reductions on pp 79 of the revised ER-PD provides initial estimates of the potential impact of the specific actions expressed in terms of cost per tonne of CO2e emissions reduction or increased sequestration and overall ambition and related to drivers of deforestation

55 indicators have been met; a huge effort has been done by the host country to update the quality in this final version of the ER-PD.

8 indicators have not been met, and all the 8 are challenging, major non-conformities.

15 indicators are not applicable at this stage of ER-PD development.

22 OBSERVATIONS have been made in indicators: 3.1; 3.2; 6.1; 7.1; 7.2; 8.1; 9.1; 10.2; 10.3; 14.1; 14.3; 18.1; 25.1; 26.1; 27.2,28.2and 37.3.

Major/material non-conformities include questions about the selection of activities to be implemented, reference levels, carbon stocks and relevant pools to be tracked, the legal nature of ER ownership rights and mechanisms for transferring rights have not yet been fully established and the ER Program Entity has not yet fully demonstrated its authority to enter an ER-PA with the Carbon Fund (CF). The executive summary (p8) the intention of MINAM to pursue a legal norm to establish the necessary legal authority for the ER Program Entity to sign the ERPA and transfer the rights of emission reductions to the Carbon Fund, and to establish and use its National Registry of Mitigation Initiatives (NRMI) to register emissions reductions. and the need to create specific regulations or legislative actions related to define the legal status of ERs in the country context.

Strengths include; the jurisdictional and multiple areas approach that includes a significant percentage of land in the country; the relevant national government agencies have had substantial involvement in program design and have demonstrated commitment to the Program; and the team has produced a Final ER-PD with a huge wealth of information and a thoughtfully presented rationale for the proposed program supported by a substantial amount of high quality analytical work, and documentation of broad participation from the public sector and civil society at both national and regional levels. A key strength of this ER-PD is that it is very much a locally generated effort with strong participation of the government and local experts, though one that will need further evolution to fully meet the Carbon Fund standards. The Feedback and Grievance Redress Mechanism (FGRM) proposed builds directly on an existing policy mechanism in the country but still needs further development to meet ER Program specific requirements.

Substantial efforts have been made by the host country to achieve the definition, design and future creation and implementation of the Data Management and Transaction ERs Registry systems to avoid multiple claims to ERs. As described in section 18.2 (p 242) Peru expects to have the conceptual design of the Registry delivered by the end of August 2019 and, after a period of testing, the Registry will be implemented in February 2020. Administrative procedures and arrangement models are at an advanced stage of development making Peru one of the most advanced countries in defining requirements for data management and registry systems needed to avoid multiple claims to ERs and to accommodate existing early action programs in addition to the new activities to be initiated under the ERP. These are strong elements of the ER-PD.

#### Some areas that could be improved:

The financial Plan is complex and depends on a significant amount of investment and credit/funding to be provided by the private sector and by public and private financial credit mechanisms (public and private banks). If these sources don't meet expectations, this might increase risk for program performance. Nevertheless, an analysis of sensitivity and risk has been done in a way that helps to clarify the scope of risks for each of the proposed mechanisms (see Table 6.2.3 page 132) – that summarizes the results of these analyses about sensitivity of financial and economic assumptions.

SESA and ESMF processes and documents are based on a strong institutional history of applying safeguards in development of similar programs. Section 14.2 states, "MINAM, as the national focal point for REDD+, is responsible for monitoring and reporting on how the safeguards for REDD+ are being addressed and respected at the national level, through the Safeguards Information Module (SIM). The timetable for the design and implementation of the various elements of the Safeguards management and monitoring system proposed is provided in Table 14.2.1 (pp 206-208). The National Strategy was developed through a participatory process that allowed identifying drivers or causes of deforestation and from that, formulated strategic actions to address them and reduce deforestation.

The analysis of the environmental and social problems associated with the causes of deforestation has been developed throughout the SESA and in a transversal way. Various sources of information have been used to characterize deforestation dynamics.

Although the Legal Framework adequately considers policies and regulations related to REDD +, an assessment of the existing strengths and weaknesses for the address of the identified environmental and social issues is lacking. Also, a specific and detailed proposition of what will be the concrete and effective dispute resolution mechanism will be important to include on the ERPD.

The updated SESA allows addressing the mitigation measures applicable to the respective risks detected for each REDD + action, which will be the input for the development of the safeguards instruments to be developed in the ESMF. The update of the ESMF must

include the development of specific safeguards plans in accordance with the identified risks and impacts.

The Benefit Sharing framework is under development, and options for benefit sharing are under consideration and review within ongoing simultaneous discussions and working groups. Sections 15.1 and 15.2 of the ER-PD describe the results-based payment modality through which the financial resources obtained from the FCPF Carbon Fund for emissions reductions will be distributed among the various participating actors. The description of Benefit-Sharing needs more work in order to reflect the specific ER Program requirements (especially, more detail on the FPIC procedures as these pertain to Indigenous Peoples. A specific law on FPIC may need to be established in harmony with the country's relevant legal framework. This could be an important factor affecting the robustness and strength of the final B-S Plan.. Section 15.2 provides a summary and timetable of the process of designing the benefit-sharing arrangements. This is anticipated to be completed by September 2019 although that timing seems unlikely given the complexity of issues and the range of stakeholders involved. More detail of how local and regional stakeholders and, in particular, indigenous peoples likely to benefit from the project will be involved in the development of the benefit-sharing mechanism would be useful.

Actions to facilitate the "nesting" of ongoing projects and the measures to be implemented to avoid double counting need to be clearly articulated taking into account the 4 existing REDD+ Projects and addressing how ERs generated by these projects will meet the accounting standards of this ER Program.

On Section 18.1 it is noted that a group, including MINAM and representatives of the current REDD+ Early Initiatives, is currently working to define guidelines on how to nest the REDD+ Early Initiatives within the official FREL. As this process will imply an allocation of some of the potential emissions of the FREL, it will include the involvement of other public and private stakeholders to build this "FREL map", that is an essential input for the nesting formula that will be established. A timeline for development of the benefit sharing plan over the first 15 months of project preparation and implementation is provided on p. 252 that appears practical and realistic.

Finally, the challenge of coordination among the different government institutions and levels (national, regional, local) will also be an important element for Program success. Section 6.1 (pp 133-136) describes current plans for establishing a high-level committee (the Multisector and Multilevel Committee on Forest and Climate Change Governance CMMGBCC), led by MINAM and MINAGRI-SERFOR, but including other ministries, regional and local governments, indigenous people's representatives, civil society, academia, and the private sector to be established. The mandate is to address how to achieve effective forest and climate change governance. Expected outputs are to include the generation of recommendations for the prioritization and implementation of strategic actions for the management of forests and climate change, the monitoring of those actions, and guidance for the development of technical or other instruments related to implementation, monitoring, reporting and verification. This committee should provide a useful forum for participative debates on key issues about REDD+, and to identify interventions to achieve effective institutional cooperation for governance and implementation of the National Forests and Climate Change Strategy (ENBCC). Within this entity, various sub-committees have been proposed. This process of defining forest and climate change governance should culminate in the first semester of 2019 (e.g. prior to PC consideration of this project) and is expected to produce guidance on ER Program

implementation that is aligned with the Framework Law of Climate Change and the Forestry and Wildlife Law.				
II. Level of Ambition → Criteria 1 – 2, including issues relating to legal aspects  The Final ER-PD, including the annexes, provides a comprehensive exposition of the intended program with description and documentation of the processes followed in preparation of the ER-PD including the participation of government and non-government stakeholders and general conformity of the methodology used with UNFCCC/IPCC guidance for reporting. Strengths include the development of a robust system for tracking changes in forest cover and "quality" on a national scale, the intention to develop a systematic process for managing and documenting public participation and feedback and providing a transparent process to address grievances. This builds on the experience of the PPIA in engaging stakeholders in the design process. The project focuses on two large political jurisdictions in the Peruvian Amazon, where deforestation has historically been greatest: the regions of San Martin and Ucayali. Together, both regions have a territory of 161,663 km2 (51,253 km2 in San Martín and 110,410 km2 in Ucayali), equivalent to about 21% of the total area (775,353 km2) of the Amazon and contain about 12.7 million ha (3,365,916 ha in San Martin and 9,362,764 ha in Ucayali) (18.5% of Peruvian Amazonian forests.	1.1 1.2 2.1	YES YES YES	YES YES YES	YES YES YES
The ER-PD indicates in the Executive Summary that the program seeks to reduce emissions by 26.77 million tons over the 5 year life cycle, impact more about 2.5 million ha of forest and almost 100,000 agricultural hectares, thereby benefiting directly or indirectly approximately 380,000 rural inhabitants, many with traditionally low participation in development activities: the private sector, women, small farmers, migrants/subsistence level producers, indigenous communities, producer organizations, and land speculators.				
This project demonstrates ambition both in the size of the target areas and the scale of the emissions reduction goals and also in the diversity and novelty of the strategies it proposes to deploy to address a diverse range of deforestation drivers and to engage a diverse range of stakeholders and potential beneficiaries. The analysis presented indicates that from a carbon emissions reduction standpoint, land classification and titling is the most efficient intervention, followed by conservation in ANPs, improved community governance of forests, and transitioning subsistence or migrant farmers to more commercial and sustainable agroforestry systems, sustainable forest management, and intensification of coffee and cocoa. Program design elements are expected to reduce risks due to displacement and reversions. Additional "non-carbon benefits from the program include reduction in potential land tenure conflicts by on-going titling programs, participation of indigenous peoples in this process and various institutional strengthening and coordination mechanisms as well as measurable improvement in rural economies.				
Peru estimates that approximately 30% of total emissions in the target areas of program implementation currently result from forest degradation based on an assessment using modern, up-to-date remote sensing technology and analytical methods and this				

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represents a large proportion of the emissions from deforestation and forest degradation				
from the Peruvian Amazon overall. In the absence of the proposed project interventions				
this is likely to continue and possibly increase during the term of the ER-PA if the project				
is not implemented.				
A detailed description of land tenure aspects and legal issues related to land tenure and				
A detailed description of land tenure aspects and legal issues related to land tenure and				
potential conflicts with traditional communities and indigenous peoples is included in the				
Program description. The existing prototype Citizen Attention Mechanism (MAC –				
_grievance mechanism) will be further developed during 2019. And it is noted in the				
Executive Summary that San Martin has already operational a Regional System for				
Environmental Complaints (SIREDA), with a legal basis, clear procedures and timeline, and				
transparent reports to users and the general public. SIREDA, with other platforms and the				
regional safeguards committee should be the basis of San Martin MAC and could provide				
useful experience in the design and operation of the national (MAC) system. A specific				
national law on FPIC exists and its relevance should be assessed and explained as it relates				
to implementation of the ER Program proposed here, and in particular with regard to the				
development and implementation of Safeguards and the B-S Plan.				
, , ,	3.1	YES	YES	YES
III. Carbon Accounting	3.2	YES	YES	YES
III (a) Scope and methods→ Criteria 3 – 6	3.3	NO	NO	YES
The proposed program accounts for emissions from deforestation and forest degradation.				
The average emissions for the reference level amounts to 33,787,089 tCO2-eq., 72.6%	4.1	NO	YES	YES
from deforestation and 27.4 from degradation.	4.2	NO	YES	YES
The reference level is including above and belowground biomass. Litter, dead wood and	5.1	NO	NO	NO
soil organic carbon are not included, given that there is a lack of complete data from direct	6.1	NO	YES	YES
measurements for these carbon pools and also to be consistent with National Forest	6.2	NO	YES	YES
Reference Level (FREL) and GHG Inventory.	7.1	YES	YES	YES
During 2008-2017 most (40%) of the deforestation occurred on lands without clearly	7.2	NO	NO	YES
defined titling, ownership or usufruct rights, i.e. unassigned lands or non-concessioned	8.1			YES
permanent production forests (PPF), followed by 22% in communal lands (indigenous or		YES	YES	
campesino communities + indigenous territorial reserves), titled private farms (16%),	8.2	NO	NO	NO
productive forest concessions (14%), conservation areas (4%), and other areas (4%)	9.1	YES	YES	YES
	9.2	N/A	N/A	N/A
(Figure 4.1.4) –. Analyses suggest that about 88% of deforestation occurs on a scale of less	9.3	N/A	N/A	N/A
than 5 ha) and is associated with agriculture practiced by small and medium-sized	10.1	YES	YES	YES
landholders (Figure 4.1.4). According to Robiglio et. al (2015), 90% of deforestation occurs	10.2	YES	YES	YES
as openings of areas of less than one hectare and the main direct drivers of deforestation				
are agriculture and livestock. In effect, these are micro-deforestation processes that, in	10.3	YES	YES	YES
aggregate, cause significant losses of forest cover and degradation of existing forests.	11.1	YES	YES	YES
The methodologies used are obtained from the 2006 IPCC Guidelines; however,	11.2	YES	YES	YES
deforestation is estimated with gross emission factor and gross deforestation area	12.1	NO	YES	YES
(activity data). As per TAP understanding, deforestation emissions needs to consider the	13.1	NO	YES	YES
IPCC methods, which means that in absence of Tier-2 level data on carbon stocks for the	13.2	NO	YES	YES
land use after conversions, a country may use default Tier-1 level data to estimate carbon				
stocks and finally a net emission factor (see indicator 5.1)	13.3	NO	N/A	N/A
	13.4	YES	N/A	N/A
III (h) Uncortainties -> Critoria 7 0	14.1	YES	YES	YES
III (b) Uncertainties→ Criteria 7 – 9	14.2	YES	YES	YES
Uncertainty analysis has been done with due diligence. Chapter 12 "Uncertainties of the	14.3	NO	NO	YES
calculation of emissions reductions" includes all reasonably anticipated sources of	15.1	YES	YES	YES
uncertainty associated with activity data and emission factor in the Monte Carlo analysis.	16.1	YES	YES	YES
However, the analysis should be improved with a more robust identification of systematic	17.1	NO	YES	YES
riowever, the analysis should be improved with a more robust identification of systematic	17.1	IVU	1 L3	113

and random sources of errors and their relative contribution to overall uncertainty. In	17.2	NO	YES	YES
addition, degradation uncertainty should be reported.	17.3	N/A	N/A	N/A
III (c) Reference Level→ Criteria 10 – 13	17.4	N/A	N/A	N/A
	18.1	YES	YES	YES
Reference level indicators (10.1 to 10.3) have been correctly address by Peru in the ER-	18.2	YES	YES	YES
PD. The Reference level has been estimated for the period 2008-2017 and is expressed in	19.1	YES	YES	YES
tons of carbon dioxide equivalent. The Reference Level presented in the ER-PD is	20.1	N/A	N/A	N/A
consistent with the FREL (2016) as it uses the same activity data for forest cover loss and	20.2	N/A	N/A	N/A
emissions factors for "forest converted to non-forest" in the accounting area	21.1	YES	YES	YES
III (d) Reference Level, Monitoring & Reporting on Emission Reductions → Criteria	21.2	N/A	N/A	N/A
14-16	22	NO	NO	YES
The Monitoring, Reporting and Verification section is robust and reflects the well-established capacity of the Peru team to monitor emissions removals and even reversals using up to date, IPCC compliant methods and technology. Some discrepancies with emissions factors were found between ER-PD and supporting material that should be yet explained.  The ER Program includes activities that encourage community participation in monitoring and reporting. Participatory safeguards monitoring is being included in the Safeguards		NO	NO	NO
III (e) Accounting for Displacement (leakage) → Criterion 17  The ER-PD presents the deforestation and degradation drivers that will be targeted by the Program measures. Enough evidence is provided to assess the justification of the risks identified and their estimated levels. The ER-PD proposes ad-hoc features to prevent and minimize potential displacement for each driver however more consistent descriptions should be presented across section 10.1 and 10.2. Mitigating measures aiming to identify and minimize unplanned risks of displacement are consistent with the proposed ER Program measures and with broader more systemic measures the country has recently started to implement. It should be noted that for some of the measures proposed it is still too early to reliably measure their positive impact and that some of those mitigation measures are probably subject to the same risks the proposed activities are exposed to.				

# III (f) Accounting for Reversals → Criteria 18 – 21

The ER-PD prioritizes causes of reversals that occur in the short- or medium-term and addresses threats of reversals beyond the term of the ERPA. It describes with sufficient detail how effective ER program design will mitigate significant risks of reversal apart from indicator 18.1 that requires to be addressed with more precision.

The host country has decided to use Option 2 (buffer) to address reversals – Indicator 19.1 -

# III (g) Accounting for ERs → Criteria 22 - 23

Estimation of ERs follows Meth. Framework methods. However, the potential nesting issue of how existing REDD+ projects would be accounted for in a new ER-PD Program regime is not clarified, resulting in a minor nonconformity

The carbon accounting section has been prepared with due diligence and with completeness. The proposed Program of Peru accounts for deforestation and emissions arising from degradation activities. Emissions from degradation have been estimated as a proxy and a new method is under development. As per TAP understanding, the Program is not using the IPCC method (stock-change method) in a proper way, as the carbon stock of the land use after conversion shall be considered, in order to have net emission factors				
IV. Safeguards	24.1	YES	YES	YES
	24.2	NO	NO	YES
Actions undertaken to meet WB and Cancun Safeguards→ Criteria 24-26	25.1	NO	YES	YES
The ER-PD describes how the Program is being designed considering Cancun Safeguards	25.2 26.1	N/A NO	N/A NO	N/A YES
and the World Bank Environmental and Social Framework. Safeguards instruments are	26.2	NO	NO	YES
being developed considering the scope and the requirements of both the Environmental	26.3	NO	YES	YES
and Social World Bank Standards and the Cancun Safeguards.				
The analysis of the environmental and social problems associated with the causes of deforestation has been developed throughout the SESA and in a transversal way. Various				
sources of information have been used to characterize deforestation dynamics.				
The updated SESA allows addressing the mitigation measures applicable to the respective				
risks detected for each REDD + action, which will be the input for the development of the				
safeguards instruments to be developed in the ESMF. The update of the ESMF must include the development of specific safeguards plans in accordance with the identified				
risks and impacts.				
The proposed compliance monitoring of the ER Program safeguards will feed information				
related to the monitoring of the ER Program's social and environmental impacts, environmental and social management into the Mechanism for Citizen Attention				
(grievance mechanism), the primary participation mechanisms of the Module.				
The Mechanism for Citizen Attention Mechanism (MAC) for the ER Program is based on				
discussions, feedback and experience from testing prototypes developed since 2014 for				
the national level.				
An assessment of regional government's capacities regarding FGRMs is included.				
V. Sustainable Program Design and Implementation	27.1 27.2	YES YES	YES	YES YES
V. (a) Drivers and Land Resource Tenure Assessment → Criteria 27-28	28.1	NO	YES NO	YES
Key drivers of deforestation and forest degradation are discussed at length. A table	28.2	NO	NO	YES
describes the link between interventions to address drivers' and expected results in ERs	28.3	NO	NO	NO
that helps to clarify the impact of the interventions has been inserted – see Table 4.3.2	29	YES	YES	YES
page 79.	30.1	N/A	N/A	N/A
Key drivers of deforestation and forest degradation are discussed at length. They are	31.1	N/A	N/A	N/A
multiple and complex. The major lapse in this section is a direct linkage (a more solid	32.1	N/A	N/A	N/A
explanation) between the solid drivers' assessment provided, and the specific selection	33.1 34.1	NO YES	NO YES	NO YES
of ER Program interventions to meet particular situations. While the TAP would like to see a table or figure describing the link between drivers, interventions and expected results	34.2	NO	YES	YES
in ERs, we recognize the current situation is commonly a result of multiple factors that	35.1	NO	YES	YES
must be addressed simultaneously making it difficult to achieve a "one-to-one"	35.2	N/A	N/A	N/A
correspondence between specific interventions and the overall result in terms of reduced				
deforestation and degradation, a situation where the whole is greater than the sum of the parts. Still it might be important to present the logic of each intervention in relation				
and partial of the important to present the logic of each intervention in relation				

to the driver/s addressed and the assumptions about its potential impact (also in relation to other project and programs interventions ongoing or in the pipeline).

## .V. (b) Benefit sharing → Criteria 29 – 33

Although the Benefit Sharing Plan of the ER Program is still under development, the ER PD contains definitions, to be validated through the B-SP development process, regarding benefits and beneficiaries, eligibility criteria, distribution channels, institutional and monitoring arrangements. The BSP emphasizes 3 "strategic principles, effectiveness, efficiency and equity, recognizing the importance of indirect drivers to achieving lasting results. The road map for the BSP development includes consultations that are going to be held with a wide range of stakeholders. While the range of drivers are well identified and the interventions that will be needed to address them are clearly described the current document does not clearly indicate what agencies will be responsible in addressing these or managing the process to address them. The ER-PD states (in Section 15.1) that, "At the regional level, these funds would be channeled to the fiduciary institutions of the governments of San Martin and Ucayali (FONDESAM), which have the national development bank, COFIDE, as trustee."....the entity will be responsible for distributing resources among the defined beneficiaries and will operate in accordance with the fiduciary mandate, which will be established by MINAM. This permanent financial mechanism is currently being designed, and should be established by MINAM in coordination with a public-private working group composed by representatives of indigenous organizations, NGOs, and subnational governments, among others, that has been launched in March this year, to discuss and propose the best arrangements for a financial mechanism and benefit sharing scheme.

*Table 15.1.1.* (p.218) identifies current thinking on institutional functions and responsibilities for benefit sharing

The ER Program has not yet produced a Benefit Sharing Plan, although that is not due at this stage.

#### V. (c) Non-Carbon Benefits → Criteria 34 – 35

The ER PD identifies non-carbon benefits for the ER Program (Table 16.1).p.227- based on consultations held during 2018. Among those non-carbon benefits, three priority non-carbon benefits were chosen due to their overall importance, direct relationship with ER Program activities, the ease and cost of their monitoring, and their representativeness of environmental, institutional, and socioeconomic impacts. These non-carbon benefits include: habitat conservation/fragmentation and connectivity (environmental), institutional coordination (institutional), and job creation in green industries (socioeconomic).

The ER-PD states that further consultation with stakeholders regarding the validation of these co-benefits will be carried out during 2019. On page 230 the role of local communities in the monitoring and verification of habitat fragmentation and connectivity, especially in the identification of on-the-ground processes and actors involved is noted

VI. ER Program Transactions	36.1	NO	NO	NO
VI (a) ERPA Signing Authority and Transfer of Title To ERs → Criterion 36	36.2	NO	NO	NO
	36.3	NO	NO	NO
The ER Program Entity has not yet fully demonstrated its authority to enter an ERPA with the Carbon Fund. A clear legal framework that addresses the legal nature of carbon rights	37.1 37.2	YES NO	YES YES	YES YES
and ERs require new legal procedures. Two legal options are described in the ER PD text	37.2 37.3	YES	YES	YES
to achieve the necessary legitimacy and competence of MINAM to sign the ERPA and	37.4	YES	YES	YES
transfer Title to ERs. These are major non-conformities at present until the final goal of	38.1	YES	YES	YES
the proposed roadmap to draft and enact the new legal and regulatory provisions will be	38.2	YES	YES	YES
achieved.	38.3	N/A	N/A	N/A
VI (b) Data Management and ER Transaction Registries → Criteria 37 - 38	38.4	YES	YES	YES
Peru has decided to maintain its own comprehensive national REDD+ Program and Projects Data Management System, and also the National Transaction Registry, including advanced stage operational rules and guidance. This is a strength of the ER-Program due to the advanced stage of the design of the Data base systems and ERs Transactional Registry.				
Nevertheless, the country left open the possibility that in the case if at the time of the first monitoring event the NRMM is not in place or does not have the minimum functions required by the Carbon Fund working, then Peru would use the World Bank's central registry. Additionally, steps will be taken to coordinate the design and development of the NRMM with the World Bank.				
SUMMARY SCORE and overall comment:				
From the total indicators, 55 are scored as YES, 8 as NO (8 major), and 15 as N/A or not applicable at this final version of the ER-PD cycle. 22 OBSERVATIONS have been made in indicators: 3.1; 3.2 6.1; 7.1; 7.2; 8.1; 9.1; 10.2; 10.3; 14.1; 14.3; 18.1; 25.1; 26.1; 27.2,28.2 and 37.3.				
The document is robust and contains clear, dense and quality information (approximately 250 pages). The historical experience of the country with REDD+, with environmental and social safeguards, the high-quality monitoring system, and the database project and transactional registry will certainly be a strength for the future implementation. The dedication and high technical capacity of the team will constitute also an element of strength for finishing the work that still needs to be done for the finetuning of the of the ER PD.				
Peru has prepared a robust Final ER-PD and has made strong efforts to provide clarifications and additional information concerning questions and issues raised in the initial and first TAP reviews				

This is acknowledged by the TAP team.

#### PART 2 OF TECHNICAL ASSESSMENT: DETAILED ASSESSMENT

C. 1 The proposed ER Program is ambitious, demonstrating the potential of the full implementation of the variety of interventions of the national REDD+ strategy, and is implemented at a jurisdictional scale or programmatic scale.

**Ind. 1.1** The ER Program Measures aim to address a significant portion of forest-related emissions and removals

**YES** 

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

The Final ER-PD, including the annexes, provides a comprehensive exposition of the intended program with description and documentation of the processes followed in preparation of the ER-PD including participation of government and non-government stakeholders and general conformity of the methodology used with UNFCCC/IPCC guidance for reporting. Strengths include the development of a robust system for tracking changes in forest cover and "quality" on a national scale, the intention to develop a systematic process for managing and documenting public participation and feedback and providing a transparent process to address grievances. This builds on the experience of the PPIA in engaging stakeholders in the design process. The project focuses on two large political jurisdictions in the Peruvian Amazon, where deforestation has historically been greatest: the regions of San Martin and Ucayali. Together, both regions have a territory of 161,663 km2 (51,253 km2 in San Martín and 110,410 km2 in Ucayali), equivalent to about 21% of the total area (775,353 km2) of the Amazon and together contain about 12.7 million ha (3,365,916 ha in San Martin and 9,362,764 ha in Ucayali) (18.5% of Peruvian Amazonian forests. [p37 of ER-PD], and over the past decade have experienced a disproportionally high rate of deforestation (35% of deforestation in the Amazon between 2008 and 2017).

The program is ambitious in the scale of the area covered, the amount of emissions reductions it seeks to achieve and the variety of actions to address the drivers of deforestation and forest degradation taking note of the economic and social elements of the solutions proposed. The Program covers two jurisdictions (regional governments) situated in one of the most important areas of native forests and high biodiversity value remaining in the world – throughout the central Andean region in the Amazon native rainforest.

The Indicator is met.

**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.

YES

[Ambition and strategic rationale for the ER Program – 2.2, 2.3]

Peru's Amazonian forests are important at global and national scales but although they are extensive and contain globally significant biodiversity, they contribute relatively little to the national economy in proportion to the fraction of the national territory they represent. The program is undertaken at a jurisdictional scale adopting two jurisdictional regional governments — a jurisdictional approach from the landscape point of view and a jurisdictional approach from the legal institutional and political point of view. (i.e., involves multiple land areas, landowners and indigenous groups, within several jurisdictions). The Program reflects a variety of interventions identified in the national REDD+ strategy in a coordinated manner (involving the National Government of Peru and the Regional Governments of Ucayali and San Martin). The Program also takes into account the interests of a broad variety of stakeholders (including small farmers, traditional communities and indigenous people) and seeks to generate significant non-carbon economic, social and environmental benefits while achieving the goal of sustainable emissions reductions from LULUCF. The Program aligns closely with the eight strategic actions of the National Forests and Climate Change Strategy (Figure 23.1 p32). The project areas represent a significant fraction of the Amazonian forest in Peru and the humid forests of the

Eastern Andean slope and have some of the highest rates of deforestation and forest degradation in those biomes in Peru.

The indicator is met.

# 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.

YES

[Accounting Area of the ER Program – 3.1]

The target areas are two regions (regional governments) that encompass 8.5% of Peru's Amazonian Forest and due to the elevational range they cover, include a diverse range of biotopes (habitats) that are under threat of conversion — with significant risks to biodiversity and other environmental values - throughout the central Andean region. They are also among the regions with the highest deforestation rates that are likely to continue in the absence of the kinds of interventions described in the proposal. They also differ in their demographics and population densities thus providing opportunities to find solutions to deforestation in jurisdictions with different socioeconomic characteristics and thus provide a broader opportunity for learning that may pay dividends in future projects in areas of similar characteristics.

The Indicator is met

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

**YES** 

[Description of Sources and Sinks selected – 8.1]

The ER-PD, in its section 7.1, specifies the activities that have been included and the activities that are not part of the ER Program. Activities included are deforestation, that accounts for average emissions of 23,941,389 tCO<sub>2</sub>/year, and degradation, that accounts for average emissions of 9,845,700 tCO<sub>2</sub>/year.

The Final ER-PD has shown similar deforestation and degradation emission values, from previous ER-PD versions, despite the observations and request for modification of the Reference Level in the previous TAP report.

Having taken into consideration that ER programs should be allowed flexibility in the choice of sources and sinks they will account for, the justification for the exclusion of enhancement of carbon stocks, conservation of carbon stocks and sustainable forest management is properly justified though this could be revisited as better analytical tools become available.

According to the FCPF Methodological Framework, the ER Program strives to be consistent with evolving UNFCCC decisions on REDD+, especially the guidance and principles in place at the time of ERPA signature, as relevant and feasible. Relevant principles include, for example, transparency and completeness.

**OBSERVATION**: The TAP reiterates encouraging Peru to include a larger justification for the exclusion of these activities, detailing the lack of specific information. This could be to Peru's benefit in identifying all of the positive quantitative results achieved.

The Indicator is met.

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

**YES** 

## [Description of Sources and Sinks selected – 8.1]

With technical assistance and input from a number of world-class scientists, Peru has built a state-of-the-art yet practical system for continuously monitoring change in forest carbon stocks with accuracy and precision. This will enable continuous monitoring of changes in forest cover and quality regarding deforestation. The program will also seek to track changes in the indirect causes (drivers) of forest loss and degradation such as the impact of laws, policies and socio-economic trends.

The annual deforestation activity data is based on forest cover loss registered with Landsat images, in collaboration with the University of Maryland. A forest/non-forest base map from the year 2000 has been used as a starting point and forest cover loss is being estimated annually.

As it is stated in the ER-PD, deforestation is the principle source of  $CO_2$  emissions in the accounting area. The average annual emissions for the period 2008-2017 are 23,941,389 t  $CO_2$ e/yr.

Deforestation emissions have been estimated using a gross deforestation approach, which implies accounting only the area deforested in a particular period inside the area classified as "forest" at the beginning of the monitoring and reporting period It does not take into account the area afforested/reforested or naturally regenerated and the loss of the area afforested/reforested or naturally regenerated in the same period. Considering that enhancement of carbon stocks activity has not been selected as an accounting activity in the ER Program, the TAP team understands that the activity data for deforestation has been correctly calculated.

**OBSERVATION 1**. The description of this activity and other activities sometimes refers to emissions in Mt  $CO_2e$  units, giving the chance to misinterpret the unit. Indicator 10.1 (see below) requests project proponents to express the reference level in tons of carbon dioxide equivalent, which has been done, however, to maintain homogeneity in the report, emissions and removals should always be referred in "tons of carbon dioxide equivalent  $-tCO_2e$ " and not in another unit. The TAP team reiterates the request, given there are still some values with inconsistent units that could lead to confusion.

**OBSERVATION 2**. This relates to the non-conformity in Indicator 5.1. Deforestation has been estimated following a gross emission approach, that means emission factors are considered with the carbon stock of the forest before clearing and without considering the carbon stock of the replacement land use after conversion. The National Forest Reference Level uses the same approach. However, indicator 5.1 is requesting Peru to estimate emissions considering the IPCC methods, which means that in absence of Tier-2 level data on carbon stocks for the land use after conversion, a country may use default Tier-1 level data to estimate carbon stocks. The TAP understands that this would be appropriate.

#### The Indicator is met.

**Ind. 3.3** Emissions from forest degradation are accounted for where such emissions are more than 10% of total forest-related emissions in the Accounting Area, during the Reference Period and during the Term of the ER-PA. These emissions are estimated using the best available data (including proxy activities or data).

YES

[Description of Sources and Sinks selected – 8.1]

Emissions from forest degradation account for an average of 9,845,700 tons of CO2e per year, for the Reference Level period, 2008-2017. Emissions from forest degradation accounts for 27.4% of total forest-related emissions in the accounting area during the reference period and during the term of the ER-PA.

Forest degradation has been estimated using a proxy-based approach from the GOFC-GOLD Sourcebook (2016). The proxy-based approach involves the identification of intact forest (i.e. fully stocked) and non-intact forest (i.e not fully stocked) based on the distance from a perturbation or non-forest area. Non-intact forest is classified into six forest categories of increasing amounts of spatial isolation from the "core" forest: perforation, edge, bridge, loop, branch, and islet. The buffer distance used to map the distance between the core forest and the non-intact forest categories is 210m and is based on the carbon map from Asner et al. (2014). Separate emission factors for each non-intact forest category

are based on the average carbon density from the same carbon map and then used as a scale applied to the emission factors of each ecozone.

This proxy is applied to the base year and annual forest cover loss layer individually. As it is stated in the ER-PD, to avoid double accounting Peru counts the degraded area in its non-intact category only for the year it first appears. In order to ensure that non-intact pixels do not overlap with an area that is deforested in subsequent years, if the "non-intact" pixel is registered as deforested in any year going forward, that pixel is not used in the calculation of degradation, but is included in the calculation of deforestation. Therefore, the proxy provides an annual area of six categories of non-intact or degraded forest.

The ER-PD mentions that Peru is working to monitor emissions from degradation, the methodology used in this RL will serve as a basis to develop a degradation methodology that will be used to update the national forest reference level and other international reports in the future. The Annex 14 of the ER-PD includes the description of the new direct method that is planned to be used during the monitoring period and to technically correct the GHG emissions and removals reported in the reference level.

The Indicator is met. ..

C. 4 The ER Program should account for, measure and report, and include in the ER Program Reference Level, significant carbon pools and greenhouse gases, except where their exclusion would underestimate total emission reductions.

Ind. 4.1 The ER Program accounts for all Carbon Pools and greenhouse gases that are significant within the Accounting Area, both for Reference Level setting and Measurement, Monitoring and reporting (MMR). [Description of Carbon Pools and greenhouse gases selected – 8.2]

YES

The ER Program includes aboveground and belowground biomass. Litter, deadwood and soil organic carbon are not considered in the program. This is applied consistently to the Reference Level setting and the Measurement, Monitoring and Reporting protocol.

The justifications of their exclusions are multiple and appropriate. Litter and deadwood have been measured in the NFI and preliminary results show that they represent approximately 1.3% and 2.0% respectively, of the total carbon stock. On the other hand, there is a lack of national data for soil organic carbon and the NFI is not considering measurement of this pool. The strongest argument for their exclusion is that by excluding them, it will generate conservative results. Also, it will maintain consistency with GHG National Inventory and National FREL methodologies. The exclusion of these carbon pool ensures conservative emission reductions estimates, as emissions in the reference level would be lower compared to the case in which litter is included.

The ER-PD states that only CO2 gas have been selected under the program. Methane (CH4) and Nitrous Oxide (N2O) from burning biomass were not estimated given its reduced significance. Peru did an exercise that assumes biomass burning in all deforested areas. The results show that non-CO2 emission represent 3.5% of total CO2e emissions, so they were not included in the RL. Evidence is found in Annexes to the ER-PD "Significance CH4 and N2O.xls".\

The indicator is met

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

YES

- 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 – 8.2]

Litter and Deadwood pools have been excluded from the ER Program, arguing that there is a lack of complete data from direct measurements for this category. In addition, neither the FREL (2016) nor National GHG Inventory (2012) estimates this pool.

The indicator is met because the exclusion of these carbon pool is for conservative emission reductions estimates, as emissions in the reference level would be lower compared to the case in which they are included.

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

**Ind. 5.1** The ER Program identifies the IPCC methods used to estimate emissions and removals for Reference Level setting and Measurement, Monitoring and reporting (MMR).

NO

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

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

Peru is implementing a National Forest Monitoring System, known as MMCB (Módulo de Monitoreo de Cobertura de Bosques) coordinated by the National Forest Conservation Program (PNCB) of the Ministry of the Environment. The MMCB is composed of 5 sub-modules one of which is the Degradation Module that generates forest degradation data primarily for the Peruvian Amazon. The current method used in the ER-PD is an indirect, proxy method that estimates annual forest degradation associated with new non-intact forest areas in a buffer zone extending from the non-forest-forest boundary into the forest. Activity data for forest degradation is based on the proxy-based approach presented in GOFC-GOLD Sourcebook (2016), Section 2.2.2.2: "Indirect approach to monitor forest degradation". Additional details are provided in section 8.3 of the ER-PD. A "direct approach" for tracking forest degradation using satellite imagery is currently under development with support from UN-REDD and FAO.

The Program Document states that the Reference Level has been elaborated with the 2006 IPCC Guidelines of the Intergovernmental Panel on Climate Change. Moreover, the National FREL (2016) has used the same methodology, and the activity data and emission factors for deforestation are also consistent between them.

2006 IPCC Vol. 4, Chapter 2 "Generic Methodologies applicable to multiple land-use categories" indicates that annual carbon stock changes in any pool can be estimated using the process-based approach which sets out the Gain-Loss Method or an alternative stock-based approach called the Stock-Difference Method. The last-mentioned method is used where carbon stocks in relevant pools are measured at two points in time to assess carbon stock changes, which is the case of Peru. However, the country is considering the carbon content in every pool at one point in time (before conversion). However, Peru says they are following the gain-loss method to estimate annual emissions of CO<sub>2</sub>. Gains are not calculated at this time and therefore the forest loss is considered to be gross deforestation.

If Peru considers that all land use conversion from forest land will result in a total a permanent loss of carbon, which is highly improbable to occur in reality, then this should be considered and quantified as a systematic source of error. As per what was understood during the TAP mission, the forestland converted to other land use would always result in some content of biomass. The land use change dynamics could be vast and heterogeneous, but the country has information to determine statistically the land use after conversion. These data should be used to estimate post deforestation carbon stock.

As it is expressed in Peru's National Forest Reference Level (2016), the country shares the view that IPCC's approach 3 should be used to collect activity data and that at least a Tier 2-level monitoring should be aimed at by countries reporting emissions under deforestation in the context of result-based payments. Such reported emissions should further include only net emissions from gross deforestation. As Peru also mentions in the FREL, there is no tier 2 level estimates for carbon stocks in non-forest categories, but one can use default Tier-1 level data to estimate carbon stocks, such as those offered by IPCC, and thus obtain more accurate results.

There is also a need to improve the method for estimating emissions in degradation activity, when analysing reference level and future monitoring (see indicator 14.3). It is not clear how emissions will be treated from forests that have been degraded during the reference period and subsequently deforested during ERPA. This approach proposed by Peru would imply future adjustments of the reference level as emissions from these plots have been accounted in the reference level and would imply an overestimation of emissions. The approach can be simplified by accounting only the difference between non-intact forest and non-forest for deforestation of non-intact plots (net emission factors).

The TAP reiterates encouraging Peru to use IPCC method and consider the carbon stocks in relevant pools at initial and final land use (also in degradation activity), with national statistical information and at least tier 1 level, for the reference level and monitoring periods.

This is considered as a major non-conformity.

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:

**YES** 

- I. Forest definition;
- II. Definition of classes of forests, (e.g., degraded forest; natural forest; plantation), if applicable;
- III. Choice of activity data, and pre-processing and processing methods;
- IV. Choice of emission factors and description of their development;
- V. Estimation of emissions and removals, including accounting approach;
- VI. Disaggregation of emissions by sources and removal by sinks;
- VII. Estimation of accuracy, precision, and/or confidence level, as applicable;
- VIII. Discussion of key uncertainties;
- IX. Rationale for adjusting emissions, if applicable;
- X. Methods and assumptions associated with adjusting emissions, if applicable.

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

[Description of method used for calculating the average annual historical emissions over the Reference Period 8.3] [Activity data & emission factors used for calculating the average annual historical emissions over the Ref. Period 8.3] [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]

During the country visit a large quantity of information was provided in multiple documents, in compliance with the "methodological steps being made publicly available".

The forest definition is in chapter 8.2 of the ER-PD and classes of forest (by ecozones) are also described. The forest definition used in the context of the program is a tree cover equal to or greater than 30%, with a minimum tree height at maturity in situ of 5 m, and a minimum mapping unit of 0.09 ha. It is noted that the forest/non-forest base map was developed first through spectral classification of Landsat imagery and then adjusted with feedback from regional experts, which does not exactly correspond to the forest definition.

A specific protocol is presented for the process of determining Activity Data. Emissions factors and their development process are also presented in another document. Finally, estimation of emissions and removals are described in the ER-PD and available in worksheets.

In chapter 12, the ER-PD presents the uncertainty of the calculation of the emission factor in a transparent manner and in chapter 8 each variable considered in the calculations have a short "discussion of key uncertainties for this parameter".

**OBSERVATION**: the TAP team recommends improving the uncertainty analysis with an overall qualitative discussion of key uncertainties, for example with a sensitivity analysis with Monte Carlo.

#### The Indicator is met

**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:

YES

- I. Accounting Area
- II. Activity data (e.g., forest-cover change or transitions between forest categories)
- III. Emission factors
- IV. Average annual emissions over the Reference Period
- V. Adjusted emissions

Any spatial data used to adjust emissions, if applicable.

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

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

[Activity data & emission factors used for calculating the average annual historical emissions over the Ref. Period 8.3] [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]

All five items cited in this Indicator are maintained and made available within the data management system. The system has been established as a component of the project and to meet other requirements such as UNFCCC reporting. These systems include the National Environmental Information System (SINIA), Safeguard Information System (SIS), National Forestry and Wildlife Information System (SNIFFS) and the National System for Forest Cover Monitoring (SNMCB) that are managed by MINAM and/or partner agencies in program implementation.

#### The indicator is met

# 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.

YES

[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 13.1]

Chapter 12 "Uncertainties of the calculation of emissions reductions" includes all sources of uncertainty, associated with activity data and emission factors (uncertainty of aboveground and belowground biomass, considered independently). Uncertainties of calculation methods are also included in the Monte Carlo analysis.

Standard deviation in emission factors is calculated from the variance of samples, because insufficient information was available to estimate the uncertainties associated with the applied allometric equations used to estimate the aboveground biomass of the measured trees and the model used to estimate below-ground biomass in "Estimación de los contenidos de carbono de la biomasa aéres en los bosques de Perú".

The uncertainty of historical emissions from deforestation for the period 2008–2017, reflecting the combined uncertainty of activity data and emission factors, is estimated at 14.5% at the 95% confidence interval. The uncertainty of degradation emissions was not combined as for a proxy estimate; the conservativeness factor is by default set in 15%.

**OBSERVATION 1**: If Peru continues accounting emissions from deforestation with a gross approach (not considering the carbon stock in land-use after deforestation) there is a need to identify and assess this as a systematic source of uncertainty.

**OBSERVATION 2**: TAP agrees that the uncertainty for degradation should not be combined with uncertainty for deforestation as forest degradation applies a proxy-based approach and applies a 15% discount factor. However, the TAP considers that the uncertainty related to quantification of forest degradation should be reported regardless (as in the previous version of ER-PD) as it provides useful information on the sources of error and it informs the improvement plan.

The indicator is met

**Ind 7.2** The sources of uncertainty identified in Indicator 7.1: are assessed for their relative contribution to the overall uncertainty of the emissions and removals.

[Identification and assessment of sources of uncertainty 13.3]

The sources of uncertainty identified in the indicator 7.1 above were assessed for their relative contribution of the overall uncertainty. Chapter 8.3 of the ER-PD describes the activity data and emission factors used for calculating the average annual historical emissions for the Reference Period, including the sources and magnitude of the uncertainty of every parameter.

When source of uncertainty could only be assessed in qualitative terms, they were considered in qualitative terms under "discussion of key uncertainties for this parameter" for the overall uncertainty estimation.

**OBSERVATION**: The ER-PD could be improved with an assessment of the relative contribution of each source of uncertainty to the overall uncertainty. The analysis can be done applying a sensitivity analysis, with the assistance of a Monte Carlo tool (see indicator 8.2 below).

The Indicator is met.

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

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

YES

**YES** 

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

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

Activity data is periodically calculated to estimate emissions from deforestation and forest degradation. The procedure to obtain the activity data shall follow the SOP "Protocolo para la clasificación de pérdida de cobertura en los bosques humedos amazónicos".

Quality assurance and control procedures involve a post-processing visual assessment first by the MMCB, PNCB and UMD technical team. Then, an additional review is performed by a panel of technical experts from SERFOR. Any adjustments are applied during the review period before the final co-publication of results by MINAM and MINAGRI.

**OBSERVATION**. The ER-PD states in Section 9.1 that emission factors will be updated once the data from the NFI will be available. It also states that since the emission factors for the estimation of forest emissions during the monitoring events will be identical to those used in the construction of the reference level, it is not necessary to apply a QA/QC procedure. The TAP's understanding is that QA/QC will be necessary to develop the new emission factors based on the National Forest Inventory data and that these should be reported in Annex to the monitoring report as part of the proposed technical correction. The TAP recommends Peru to consider the inclusion of the QA/QC procedures from the NFI in case the emission factors are updated.

The indicator is met

**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.

NO

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

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

[Identification and assessment of sources of uncertainty 13.1]

The ER Program has not elaborated an assessment of the relative contribution of identified uncertainties to the overall uncertainty. Neither have these sources of uncertainty been minimized to the extent practical or are under a plan to minimize them (improvement plan). In addition, there are various sources of random and systematic sources of uncertainty that have not been taken into account, such as the classification of degradation plots and assumption of 200m distance from degraded to non-degraded forest.

The assessment can be done applying a sensitivity analysis, with a qualitative and/or quantitative approach. By this means, Peru will acknowledge the main sources of uncertainty and can plan, with a cost-effective approach, where to allocate resources to minimize uncertainties.

The Indicator is not met. The TAP considers this as major non-conformity

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

YES

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

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

In relation to the uncertainty of the activity data, Peru has performed an estimation of accuracy of the 2008-2017 annual deforestation and degradation data over the accounting area following the stratified simple random sampling approach established in Olofsson et al. (2014) at the 95% confidence interval. The overall accuracy is 95.4%.

A Monte Carlo simulation was used to quantify the overall uncertainty of the deforestation activity within the reference level. The quantified errors of the activity data and emission factors in the estimation of deforestation and forest degradation were combined in estimates of uncertainty based on a 95% two-sided confidence interval. The uncertainty of historical emissions from deforestation for the period 2008–2017, reflecting the combined uncertainty of activity data and emission factors, is estimated at 14.5% at the 95% confidence interval. The uncertainty of degradation emissions was not combined as for a proxy estimate; the conservativeness factor is by default set in 15%.

**OBSERVATION**. Although uncertainty of GHG emissions from forest degradation has not been quantified under the pretext that a 15% has been applied, the TAP recommends to report it as it has been reported in previous report.

**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

N.A

[Quantification of uncertainty in Reference Level setting 13.2]

## N/A

**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.

N.A

[Quantification of uncertainty in Reference Level setting 13.2]

# N/A

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

YES

[Estimated Reference Level 9.7]

The Reference level has been estimated for the period 2008-2017 and is expressed in tons of carbon dioxide equivalent.

The TAP team has assessed the activity data, emission factor, methodology for estimation (among other variables) and agrees with the final result, although there are observations in previous and following indicators that the TAP would like to recommend.

The Indicator is met

**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

YES

[Relation between the Reference Level, the development of a FREL/FRL for the UNFCCC and the country's existing or emerging greenhouse gas inventory 9.8]

The Reference Level presented in the ER-PD is consistent with the FREL (2016) as it uses the same activity data for forest cover loss and emissions factors for "forest converted to non-forest" in the accounting area.

The same annual forest cover loss dataset is used for national and international MRV reporting for REDD+ related activities and the national Greenhouse Gas Inventory. Updates to reports submitted to the UNFCCC are scheduled to use the same methodology and carbon accounting.

**OBSERVATION**. The explanation of 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 could be improved in chapter 8.6 by describing the entities in charge of the elaboration of each document and how they share the information (Portal Geobosques or SNIFFS).

The indicator is met

**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

YES

[Relation between the Reference Level, the development of a FREL/FRL for the UNFCCC and the country's existing or emerging greenhouse gas inventory 9.6]

According to the ER-PD, the Reference Level can inform future updates to the FREL and Greenhouse Gas Inventory by providing a roadmap for the development of activity data and emissions factors for degradation of "forest remaining forest" and "forest converted to other land uses".

As it was confirmed by the TAP, all current reports submitted to the UNFCCC from Peru only use data from "forest converted to non-forest" ("forest maintained as forest" and land converted to forest") due to the extent of national data available for those submissions. The same methodology presented in the ER-PD, with adjustments suggested the evaluation process, can be scaled up to the national level as appropriate.

**OBSERVATION**: This section can be improved in chapter 8.6 with information on the National Forest Monitoring System or identifying the entities responsible for the elaboration of each report and what the existing protocols to share information are.

The indicator is met.

#### C 11 A Reference Period is defined

Ind 11.1 The end-date for the Reference Period is the most recent date prior to two years before the TAP starts the independent assessment of the draft ER Program Document and for which forest-cover data is available to enable IPCC Approach 3. An alternative end-date could be allowed only with convincing justification, e.g., to maintain consistency of dates with a Forest Reference Emission Level or Forest Reference Level, other relevant REDD+ programs, national communications, national ER program or climate change strategy

YES

[Reference Period 9.1]

The end-date is 2017, which is the most recent date prior to two years before the TAP started the independent assessment of the draft ER Program Document and for which forest-cover data is available to enable IPCC Approach 3. The Indicator is met.

**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.

YES

[Reference Period 9.1]

The start-date of the Reference Period is 2008, about 10 years before the end-date. The activity data for the year 2008 is obtained with the use of an algorithm and the use of Landsat images from the first days of the year and the last days of the same year. In the year 2008, the methodology detects the areas lost in that year. So, in the period 2008-2017 there are 10 years.

The indicator is met.

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

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

YES

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

The definition of forest used in the construction of the Reference Level is specified and consistent with the National Forest Reference Level. However, there are other forest definitions that have been used to report to other international organizations (CDM-UNFCCC, FAO-NFI), which have been presented and explained in the ER-PD.

The indicator is met.

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

YES

[Average annual historical emissions over the Reference Period 9.6, 13.2]

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

The Indicator is met.

**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:

YES

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

(ii) National circumstances have changed such that rates of deforestation and forest degradation during the historical Reference Period likely underestimate future rates of deforestation and forest degradation during the Term of the ERPA.

[Explanation and justification of proposed upward or downward adjustment to the average annual historical emissions over the Reference Period, Quantification of the proposed upward or downward adjustment to the average annual historical emissions over the Reference Period 9.6].

The reference level has not been adjusted upward above average annual historical emissions.

The Indicator is met.

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:

N/A

- 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 9.6]

## N/A

**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

N/A

[Explanation and justification of proposed upward or downward adjustment to the average annual historical emissions over the Reference Period, Quantification of the proposed upward or downward adjustment to the average annual historical emissions over the Reference Period 9.6]

N/A.

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.

YES

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

The ER-PD is clear about the homogeneity in measuring emissions by sources and removals by sinks included in the ER Program's scope with what was used to set the Reference Level.

**OBSERVATION**: There might be the need to address carefully some issues, in the future, if the circumstances materialize. Some examples might be:

- 1) there is a methodology-under- development to quantify emissions from forest degradation. If the methodology is eventually used for the establishment of the RL. Peru should document how it is also modifying the reference level or that it is a demonstrably equivalent method to the one used to set the reference level.
- 2) the National Forest Inventory is on stage 2 (out of 5) and will generate new emission factors that could be used in the ER-PD. If the new emission factors are used for the monitoring period, Peru shall update the reference level with this new information.

#### The indicator is met

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

YES

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

Activity data is estimated following good practices of GFOI (2016). Annual forest cover loss is obtained from Landsat images of 30 m spatial resolution.

The indicator is met

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

**YES** 

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

In the ER-PD, emission factors are the same for the reference level setting and for monitoring. However, when more accurate results arise from the National Forest Inventory and after being validated, the Reference level and monitoring section will use these new emission factors.

Actual emission factors are from national sources and uncertainty is reported as confidence intervals with inferior and superior limits at confidence level of 95%. Carbon stocks in the living above-ground biomass of trees were calculated using the allometric equations shown in Table 8.3.2 of the ER-PD. These equations were selected through a collaborative effort of technical experts of MINAM, the National Forest Conservation and Climate Change Mitigation Program (PNCBMCC), the General Directorate for Climate Change and Desertification (DGCCD), the General Directorate of Evaluation, Valuation and Financing of the Natural Heritage (DGEVFPN) and the National Forest Inventory (INF) of the Ministry of Agriculture. The data has been applied to the National FREL (2016) and subsequent reports to the UNFCCC

**OBSERVATION 1**: Despite the great consensus of the approach followed to estimate carbon stocks, the TAP has found inconsistencies in the values from MINAM data report "Estimación de los contenidos de carbono de la biomasa aérea en los bosques de Perú" and the values in the ER-PD. See table below.

	ER-PD EF aboveground (tCO2/ha)	ER-PD EF aboveground (tC/ha)	MINAM EF aboveground (tC/ha)	MINAM EF aboveground (tCO2/ha = tC/ha *44/12	Differ ER- PD EF and MINAM EF ence
Selva alta accesible	297.3	81.1	84.54	310.0	4.3%
Selva alta no accesible	344.9	94.1	98.06	359.6	4.2%
Selva baja	410.6	112,0	116.74	428.0	4.2%

The TAP requests Peru to explain the difference and correct the estimations if necessary.

**OBSERVATION 2**: Although the emission factor used in the establishment of the reference level is the same or will be equivalent to the emission factor used in the monitoring period, the TAP considers that there might be a methodological issue related to the consideration of GHG emissions from deforestation and forest degradation, i.e. pixels that are degraded and subsequently deforested are classified as deforested. If this same approach is used in the first monitoring period, , it is not clear how emissions will be treated from forests that have been degraded during the reference period and subsequently deforested during ERPA. The approach proposed by Peru would suggest that adjustments to the reference level will be made ex-post. The approach can be simplified by accounting only the difference between non-intact forest and non-forest for deforestation of non-intact forest areas (net emission factors, as indicated in indicator 5.1).

The indicator is met.

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.

**YES** 

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

In chapter 9 of the ER-PD there is a complete and robust explanation of the MRV system in Peru.

Peru's national forest monitoring system (MMCB) and MRV are based on IPCC 2006 guidelines. Therefore, the methodology will guarantee comparable and consistent measurements during the periods evaluated.

The indicator is met

#### C 16 Community participation in Monitoring and reporting is encouraged and used where appropriate

**Ind 16.1** The ER Program demonstrates that it has explored opportunities for community participation in monitoring and reporting, e.g., of ER Program Measures, activity data, emission factors, safeguards and Non-Carbon Benefits, and encourages such community participation where appropriate

YES

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 10.1, 10.3]

The ER Program includes activities that encourage community participation in monitoring and reporting. Those activities are mainly focused on indigenous lands.

Intervention 1.2. "Strengthened governance of indigenous forests for conservation or sustainable production", comprises community monitoring, as well as training related to improved community decision-making structures, procedures, and monitoring in the formulation of community development plans.

Intervention 4.4 "Monitor, control, and enforce land and natural resource rights and classification at the regional level." includes the promotion of on-the ground community patrols and monitoring units in the early warning system, and the promotion, training, and equipping of community forestry supervision (veedurías forestales) and forestry custodians of indigenous lands in order to enable community participation in on-the-ground monitoring, verification, and enforcement at the community level.

Regarding participatory safeguard monitoring, it is stated that it will be analyzed during the development of the Safeguards Information System, based on the participatory community monitoring models that are being used by other projects. Outputs and conclusions from this analytical process will be incorporated into the formal institutional arrangements that will be implemented by the ER Program.

Community monitoring is one of the seven overarching themes requiring further development and consultations.

The Final ER-PD states that Community monitoring will also be a component of the early warning module with images and data collected through cell phone app and drones available to communities subscribed to the PNCB. This initiative was originally piloted in the central Peruvian Amazon and is now in the latter stages of software development and enhancement to be available through GeoBosques.

Community participation and strengthening is one of the social non-carbon benefits identified for the ER Program (Table 16.1).

The Indicator is met.

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

YES

**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 11.1]

The ER-PD offers an articulated analysis of the risk of displacement. Firstly, it identifies and discusses key underlying loops potentially generating displacement as out-migration from the accounting areas. Out-migration would be caused by 1) an improved monitoring control that reduces invasions and land speculation, 2) increased land transactions in areas of interventions, 3) exclusions of farmers from interventions. The impact of Climate Change is acknowledged as an additional potential out-pushing (displacement) factor. In and out migration data from departments are presented to describe the migration pattern across regions of the Amazon and it is concluded that extra-regional displacement due to migration might not be significant based on historical data and projected improved governance conditions in migrants destination areas (such as Madre de Dios, however this is not yet substantiated by evidence due to the challenge to assess recently introduced changes).

An assessment of the risk for displacement per driver and the explanation/justification of the assessment is presented in a table including a description of the program's intervention that are expected to reduce the risk (Table 10.1.3. p. 185). Over the 10 drivers one half are deemed as "medium" (one medium-low) and the other as "low" (one low-medium).

The list of drivers of deforestation that are affected by the ER Program summarizes the drivers identified in Section 4:

- Low value of forest and illegal logging
- Small scale commercial agriculture (cocoa coffee oil palm)
- Subsistence Agriculture/migrants
- Land speculation facilitated by roads
- Limited sectorial or vertical coordination
- Contradictory policies or policy gaps
- Lands with unassigned rights
- Monitoring control and enforcement of land and natural resource use

The text and table present complementary information on the actors involved and on the magnitude and significance of the potential displacement and its nature in relation to project interventions (a shifting of activities, markets or subsistence). Nevertheless, feedback loops generated could be more explicitly integrated in the design of the ER-DP features to prevent or minimize displacement. The way in which the assumed relationship between the drivers and the risks indicated is articulated is clear and the conditions that would enable the displacement of the drivers impact outside the accounting area are sufficiently described and clear.

The justification of the risk assessment presented in the table considers, predominantly, the direct risk of activity displacement based on agroclimatic suitability for crops produced under smallholder systems (cocoa and coffee and oil palm) and large-scale plantations (oil palm). While this consideration is undoubtedly valid, a more nuanced argumentation by crop and suitability/vulnerability could be articulated to substantiate the solidity of the argument as partly done in the main text with the reference to Climate Change Scenarios.

Additional considerations related to spatial fungibility of economic pressure across the Amazon region can complete the appraisal together with information about hotspots of deforestation and trends outside the accounting area that might experience an increased pressure by changes generated by the project interventions making those areas more attractive for migrants because of more difficult colonization conditions generated in San Martin and Ucayali by the project (see for example hotspots in the MAAP project - https://maaproject.org/2017/maap-synthesis2/)

Maps are provided with buffers indicating that the potential areas of expansion are limited to maximum 20 Km from the border as a reference. Both large- and small-scale investments to acquire land in the Amazon can be very dynamic depending on local contextual factors, and proximity/accessibility is not necessarily the most relevant factor for displacement given the high permeability of the jurisdictional borders across the Amazonian regions. In the case of the ER-PD the TAP understands that maps at that scale are not appropriate since a broader definition of displacement

applies and are discussed in the text so that maps are somewhat mis-leading if compared to the scope of the articulated discussion. The attempt to provide a spatial model to predict potential areas remains valid, if the definition of buffers and the assumptions behind this is substantiated by evidence about the spatial configuration of causes that are expected to enable or drive deforestation such as closeness to roads and markets, soil quality, areas with assigned rights categories, slopes, population expansion pattern.

**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.

YES

[ER Program design features to prevent and minimize potential Displacement 11.2]

On page 170 three conditions are described, that act upon the outcome of the measures and interventions indicated by the ER-PD and are expected to affect the level of risk of displacement by preventing and minimizing it:

- i. The reduction of levels of production, income, or means of subsistence of the participating actors, either from natural or anthropogenic factors;
- ii. The rejection of the proposed mitigation measures or difficulties in adopting them on the part of the actors;
- iii. Changes in land use regulations or control that can affect the above and subsequently cause migration to other areas.

The three conditions appear reasonable to the reviewer and add insights about the overall sustainability of the program design however they appear slightly disconnected from the rest of the section. TAP reviewers noted that, for example, production decrease is expected to vary in relation to market trends (different by agricultural products, see also comments for 17.1); the assumptions about adoption of practices are expected to vary by actors in relation to local contextual conditions as well as the potential impact of regulations on that. In general, these conditions seem to refer to a general risk of sustainability of the measures suggested rather than to conditions that might generate a displacement and should be reported in the section where the Sustainability of the Program Design is assessed.

The table 10.2.1. on page 172 describes the activities that are part of the main interventions proposed by the program in section 4 - to offset the drivers and it is described why and how these will reduce the risks of displacement

The way in which this section is presented suggests that interventions to offset drivers that impact displacement are enough to minimize displacement, thanks to the transversal synergies and coordination of cross sectoral interventions the government has started to undertake (eg. assignment of lands and rights) through government programs and international initiatives. Nevertheless, a stronger correspondence and explicit references to the underlying drivers identified in Section 10.1 such as out-migration or climate change should be made, since these allow assessing the potential impact of the mitigation activities beyond the single driver taking into account the ones potentially underlying displacement. The section would gain in consistency by making the risk mitigation measures look more solid and transversal through the entire, program addressing not only displacement related to identified drivers but more solidly tackling displacement underlying factors for example considering including an adaptation and resilience component to the interventions aiming at sustainable intensification of key crops.

The Indicator is met.

The indicator is met.

**Ind 17.3** By the time of verification, the ER Program has implemented its strategy to mitigate and/or minimize potential Displacement

N.A

Only applicable at the time of verification.

**Ind 17.4** ER Programs are also invited to report on changes in major drivers in the ER Accounting Area, any Displacement risks associated with those drivers, and any lessons from the ER Programs' efforts to mitigate potential Displacement

N.A

Only applicable at the time of verification.

C 18 The ER Program is designed and implemented to prevent and minimize the risk of reversals and address the long-term sustainability of ERs

**Ind 18.1** The ER Program has undertaken an assessment of the anthropogenic and natural risk of reversals that might affect ERs during the Term of the ERPA and has assessed, as feasible, the potential risk of reversals after the end of the Term of the ERPA

YES

[Identification of risk of Reversals 12.1]

The ER-PD prioritizes causes of reversals that occur in the short- or medium-terms and does also address threats of reversals beyond the term of the ERPA. Table 11.1.1. summarizes the assessment of risk factor and the set-aside percentage based on the ER Program Buffer Guidelines, used to describe the main risks factors of the ER-PD. The table presents all the risks factors and related set-aside percentages, for a total that sums up to 24%. It seems to be a complete list and a generally fair assessment of risks and remedies (partly also validated with stakeholders) with enough precision in the description, but for D (Exposure and vulnerability to natural disturbances). Some more justification could be provided for the level assessed and the percentage assigned to D. The country should consider presenting the evidence of measures taken to reduce the climate change generated risks and to increase local resilience (see below).

Risk Factors	Resulting Reversal Risk Set-Aside Percentage
Default risk	10%
A) Lack of broad and sustained stakeholder support	Medium: 5%
B) Lack of institutional capacities and/or ineffective vertical/cross sectoral coordination	Low to medium: 3%
C) Lack of long-term effectiveness in addressing underlying drivers	Medium: 3%
D) Exposure and vulnerability to natural disturbances	Medium: 3%
Actual Reversal Risk Set-Aside Percentage:	Total = 24%

The country is recognized to have achieved relevant advancement in institutional capacity development but implementing national and international programs and policies in a coordinated multi-sectorial manner still remains a challenge due to several bottlenecks. If on one side institutional capacities and/or vertical/cross sectoral coordination

are undoubtedly advanced and a capable class of regional functionaries and technicians has emerged, this process can face challenges or even be seriously jeopardized due to the still recent change of government at the regional level. Besides that, the persistent risk of corruption due to lack of transparency should be acknowledged in order to mitigate for risks related to the forestry and agricultural sectors.

- Concerning the long-term effectiveness in confronting underlying factors through coordination and synergies across sectors, advancements are reported at the national level with a potential positive impact on the development of a framework and related capacities to operate through multi sectoral institutional spaces.
- Some concerns relate to the heterogeneity between the regions of San Martin and Ucayali on the advancements towards a sound emission reduction agenda and the level of effective enforcement capacity to control land speculation and trafficking, reduce the impact of migration and the expansion of agriculture. Implementation risks still exist in particular in Ucayali and, in the wider context, in some parts of San Martin. The two departments are treated as a single jurisdiction (page 197) but the strategy to articulate and align interventions that may differ in magnitude and focal priority across the two de facto separated territories remains unclear.

Regarding climate change and Risk Factor D: Exposure and vulnerability to natural disturbances The TAP recognizes that natural disturbance impact is difficult to assess because of the complex synergies between direct impact of natural disaster and more long-term impact of underlying factors such as climate change. Nevertheless, Peru is one of the countries that are most vulnerable to climate change and impacts can already be observed through the increased frequency of extreme events such as flooding, droughts and increased fires but also in an increased overall vulnerability of the ecosystems. This comes with potential impact on productivity of key crops (for example the coffee leaf rust) and can intensify the impact of some drivers (migrate or convert new forest in search for intact and pest free areas). The strategy to prevent and mitigate the risk of reversal could include adoption of adaptation and sustainable management practices in vulnerable areas (eg. management of riverine zones, adoption and diffusion of resistant varieties for crops etc.).

**OBSERVATION 1**: The description of the risk factor D Exposure and vulnerability to natural disturbances, could benefit of a precise justification for the level assessed and the percentage assigned, with clear references to the measures taken to prevent and mitigate the exposure and vulnerability to natural disturbances risk. .

**OBSERVATION 2:** The classification of the Risk Factor B) in relation to Resulting Reversal Risk Set-Aside Percentage is not in compliance with the Buffer Guidelines. The Reversal Risk should be assessed for each Risk Factor (A-D) separately as high, medium or low". It should either classify as Low (10% discount) or Medium (5% discount).

The indicator is met.

**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

YES

[ER Program design features to prevent and mitigate Reversals 12.2]

In preparation of the ER-PD, the authors used the Carbon Fund tool for evaluating the risks of reversals noted above. The project seeks to build and sustain stakeholder support by continuing the process of extensive local engagement in planning and decision making and recognizing the importance of assigning land rights to indigenous and local communities to achieve long term stability of land use, building on the experience of the FIP, the DCI and other donor backed programs for land-titling.

With respect to REDD+ and related activities, Peru has adopted a strategy of building inter-ministerial cooperation in program planning and implementation. At the national level the lead "co-implementers" of this program are the

ministries of Environment and Agriculture that have gained experience through their collaboration on related projects such as the FIP, the DCI and others. The ER-PD authors acknowledge the need to engage more formally with other ministries such as transportation whose activities have significant bearing on the risks of displacement, reversals and other elements of project success, and suggest making greater engagement a program priority. Throughout preparation, the lead agency (MINAM) has recognized and acted on the importance of close and continuing engagement with regional and local government institutions and plans to continue to build on these close working relationships as they are key to reducing risks of reversals by maintaining local "ownership" of the program and its results.

The Indicator is met.

# 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:

YES

- Option 1: The ER Program has in place a Reversal management mechanism (e.g., buffer reserve or insurance) that is substantially equivalent to the Reversal risk mitigation assurance provided by the 'ER Program CF Buffer' approach referred to in option 2 below, appropriate for the ER Program's assessed level of risk, which in the event of a Reversal during the Term of the ERPA will be used to fully cover such Reversals.
- Option 2: ERs from the ER Program are deposited in an ER Program-specific buffer, managed by the Carbon Fund (ER Program CF Buffer), and based on a Reversal risk assessment. ERs deposited in the ER Program CF Buffer (Buffer ERs) will not be transferred to the Carbon Fund. In the event that a Reversal event occurs during the Term of the ERPA, an amount of Buffer ERs will be cancelled from the ER Pro

[Reversal management mechanism, Selection of Reversal management mechanism 12.3]

Peru has selected option 2.

The ER-PD states (in Section 11.3 Reversal management mechanism) that:

..." in order to deal with unforeseen risks, 24% of the avoided emissions from deforestation and forest degradation will be used as buffer reserves, equivalent to 6.425.826 Mt CO2e, assuming total emission reductions of 26.777 Mt CO2e (see Section 13)" ...

The indicator is met.

C 20 The ER Program, building on its arrangements put in place during the readiness phase and during the Term of the ERPA, will have in place a robust Reversal management mechanism to address the risk of Reversals after the Term of the ERPA

Ind 20.1 At the latest 1 year before the end of the Term of the ERPA, the ER Program will have in place a robust Reversal management mechanism or another specified approach that addresses the risk of Reversals beyond the Term of the ERPA

N.A

Only applicable before the end of the ERPA term.

Ind 20.2 If the ER Program has selected option 2 under Indicator 19.1, all or a portion of the Buffer ERs of the ER Program, subject to a Carbon Fund review of the Methodological Framework and a decision of the parties to the ERPA in 2019, will be transferred to the mechanism identified in Indicator 20.1 at the end of the Term of the ERPA. If the ER Program fails to meet the requirements of Indicator 20.1, all remaining Buffer ERs in the ER Program CF Buffer will be cancelled

N.A

Only applicable before the end of the ERPA term.

C 21 The ER Program monitors and reports major emissions that could lead to reversals of ERs transferred to the Carbon Fund during the Term of the ERPA

**Ind 21.1** The ER Program Monitoring Plan and Monitoring system are technically capable of identifying Reversals

**YES** 

[Monitoring and reporting of major emissions that could lead to Reversals of ERs 12.4]

As described in section 11.4 of the ER-PD, monitoring of potential reversals will be carried out by the MMCB (National Forest Cover Monitoring System), which contains different interacting sub-modules that can register and report deforestation in the accounting area. The Deforestation, Degradation and the National Reference Line sub-modules report annual deforestation and carbon emissions from satellite data, release annual reports, and disseminates information periodically through GeoBosques. The Early Warning sub-module releases deforestation alerts, from satellite data, at least twice a month in GeoBosques, with wall-to-wall coverage over the Peruvian Amazon. The MMCB, PNCB, and SEFOR have the capability to monitor forest fires through satellite imagery.

The country also says that when reversals are detected, the Carbon Fund will be notified within the time limit described in the Methodological Framework.

The TAP has confirmed, based on the program design, the MRV team and their capacity, that these reversals can be identified.

The indicator is met.

Ind 21.2. The ER Program reports to the Carbon Fund within 90 calendar days after becoming aware of any emissions in the Accounting Area or changes in ER Program circumstances that, in the reasonable opinion of the ER Program, could lead to Reversals of previously transferred ERs by the next Monitoring event. The ER Program explains how the potential Reversals would be addressed by additional ER Program Measures or by the Reversal management mechanism described in Indicator 19.1.

N.A

Only applicable at the time a reversal occurs and at the time of verification.

#### C 22 Net ERs are calculated by the following steps:

- 1. Subtract the reported and verified emissions and removals from the Reference Level
- 2. Set aside a number of ERs from the result of step 1, above, in a buffer reserve. This amount reflects the level of uncertainty associated with the estimation of ERs during the Term of the ERPA. The amount set aside in the buffer reserve is determined using the conservativeness factors for deforestation listed in the MF. For estimated emissions reductions associated with degradation, the same conservativeness factors may be applied if spatially explicit activity data (IPCC Approach 3) and high-quality emission factors (IPCC Tier 2) are used. Otherwise, for proxy-based approaches, apply a general conservativeness factor of 15% for forest degradation Emission Reductions.

# 3. Set aside a number of ERs in the ER Program CF Buffer or other reversal management mechanism created or used by an ER Program to address Reversals

[Ex-ante estimation of the Emission Reductions 14.3]

YES

Section 13.1 of the ER-PD includes the ex-ante estimation of the ER. General conservatives' factor of 15% shall only be applied to ER obtained from forest degradation activity; however, there are no emission reductions for this activity. For deforestation activity, set aside shall be estimated using the uncertainty associated to this activity, which in this case is below 15% and thus conservativeness factor is 0%.

The reversal buffer has been calculated correctly as 21,592,158.7 ERs. This is a priori estimation of the Contract and Additional ERs

The Indicator is met.

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

The ER-PD describes that there are at least four REDD+ projects currently under execution and wholly or partially within the ER Program accounting area; the majority in San Martin. Their total estimated annual emissions reductions are  $2,870,000 \text{ tCO}_2\text{e}$ , which is about half of the emissions reductions expected under the ER Program (assuming that all the reductions originate in San Martin and Ucayali).

NO

The ER Program states that MINAM intends to align these projects under the ER Program compensation baseline in 31.12.2020. Given the projected quantity of emission reductions foreseen under the ER Program, these projects in accordance with the ER Program would be able to satisfy their contractual requirements from emission reductions remaining once Peru's commitment to the Carbon Fund is satisfied.

The potential nesting issue of how these existing projects would be accounted for in a new ER-PD Program regime is not defined. A road map to establish the future regime is included in the ER Program and several options are still open to be discussed -see Section 18.1::

- ... To accomplish the allocation, three options of differing complexity and criteria are being analyzed:
- Option 1: allocation of FREL quotas based on the initial forest area of each initiative.
- Option 2: allocation based on forest area, which would be categorized into deforestation risk strata. Up to the moment, 3 sets of parameters were combined in differently to define these strata, resulting in 18 sub-options;.
- Option 3: assignment based on a spatially explicit deforestation model for the Amazon, using a bigger set of parameters in comparison to option 2.

Peru is developing its own database and registry, which could help address this Indicator, and has taken the decision to use its own national Database and ERs Transaction Registry systems to meet the requirements of the indicators 38.1, 38.2 and 38.3 of the FCPF Methodological Framework.

The expected result of the nesting process is that beginning in 2020, a set of rules will be in place to standardize emission reduction estimates, including the required use of the national monitoring system at the local and regional levels. The limited period before nesting is applied - called "prenesting stage" (essentially the latter half of 2019) – will permit the development of the roadmap while different baseline methodologies are allowed to coexist. The Final ER-PD brings Table 18.1.1 that summarizes the milestones and expected dates of accomplishment for this process: (see Section 18.1)

The TAP considers that there are still important elements missing and considers the Indicator not met. This is a Major non-conformity, taking in consideration that if the nesting will not be addressed, this will generate double counting and significant risks related to the transfer of title to the Carbon Fund. Nevertheless, this is an issue that the host country probably can update with more relevant information once the decision on what option will be taken.

# (i) [Participation under other GHG initiatives 14.1]

NO

Within the boundaries of the Program area, there are several voluntary REDD+ projects. Some of these projects have already monitored, verified and sold carbon credits. In the near future there is a plan to nest those projects in the Program, homogenizing their reference level to the Program Reference Level.

However, this process is presently being negotiated by MINAM and existing REDD+ projects, with three preliminary options presently under consideration: i) allocating emissions reductions as a proportion of forest land affected by the initiative; ii) allocation based on geographical modelling of FREL; and iii) allocation based on mapping of different levels of deforestation risk.

The TAP requests Peru to include further evidence about the nesting process, especially the final decision made by the country.

The Indicator is not met The TAP considers this is a major non-conformity, taking into consideration that if the nesting will not be addressed, this will generate double counting and significant risks related to the transfer of title to the Carbon Fund. Nevertheless, this is an issue that the host country probably can updated with more relevant information in the near future.

# (ii) [Data management and Registry systems to avoid multiple claims to ERs 19.2]

NO

The ER Program states clearly the country's intention to establish a national database and project management system and also a Transactional ERs Registry in Section 18.2 of the ER PD. Both of the systems are in an advanced stage of design, but still in construction:

"...Reductions of emissions under the ER Program or other emissions reduction activities will be registered under the National Registry of Mitigation Initiatives (NRMI), which is presently being designed and implemented by IHS Markit, under a contract with the Ministry of the Environment. It is expected that the NRMI design will be completed by August, 2019; after a period of testing, the Registry will be implemented in February, 2020."- See Section 18.2.

Taking into consideration that the referenced systems are still under construction, the TAP considers that the Indicator is not met. This is a Major non-conformity, considering that if the nesting will not be addressed, this will generate double counting and significant risks related to the transfer of title to the Carbon Fund. Nevertheless, this is an issue that the host country probably can update with more relevant information. This should be done prior to PC consideration.

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

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

YES

[ Description of how the ER Program meets the World Bank social and environmental safeguards and promotes and supports the safeguards included in UNFCCC guidance related to REDD+ 15.1]

Section 14.1 and the tables included in that section identify the types of interventions anticipated under the Program, their potential negative impacts and risks, the ESS's that pertain and the anticipated measures and processes to mitigate the impacts and reduce the risks.

In order to comply with the social and environmental standards, safeguards instruments are being developed considering the scope and the requirements of the Environmental and Social World Bank Standards and the Cancun Safeguards.

Table 14.1.3. presents the World Bank's ESS's applicable to the Program, the national legal support framework and the institutions with competence in those aspects.

Annex 12 presents the national safeguard process and the relationship of these safeguards with Peru's legal and policy framework.

In line with what is established in the World Bank Environmental and Social Framework, before project appraisal the following should be disclosed: The Environmental and Social Assessment of the ER Program, the Environmental and Social Commitment Plan (ESCP) and the Stakeholder Engagement Plan (SEP), including the grievance mechanism of the Program.

The Indicator is met.

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

YES

[Description of how the ER Program meets the World Bank social and environmental safeguards and promotes and supports the safeguards included in UNFCCC guidance related to REDD+ 15.1]

The development of the ER Program is being done under the guidance of Cancun's safeguards and World Bank's Environmental and Social Framework.

As part of the SESA updating, workshops were held to assess possible risks and impacts of REDD + actions. The identification of environmental and social risks has considered the approach to Cancun safeguards, as well as the standards and safeguards of the World Bank and the IADB.

The analysis of the environmental and social problems associated with the causes of deforestation has been developed throughout the SESA and in a transversal way. Various sources of information have been used to characterize deforestation dynamics.

It is established that the updated SESA will be the basis for the development of the Environmental and Social Management Framework (ESMF). The ESMF will have a national scope and will be applied to all REDD + actions, regardless of the type of actor that is responsible for their execution.

The ESMF will be developed in an additional document to the SESA, including guidelines for the development of specific safeguards instruments (such as plans, procedures or others as required).

The ESMF will have a proposal for institutional arrangements necessary for its implementation, monitoring and evaluation, including an action plan for institutional adaptation and a training and technical assistance

plan for institutional representatives and stakeholders involved with responsibilities for implementation and monitoring of the ESMF.

Although it is lacking the ESMF update, the SESA allows addressing the mitigation measures applicable to the respective risks detected for each REDD + action, which will be the input for the development of the safeguards instruments to be developed in the ESMF.

The update of the ESMF must include the development of specific safeguards plans in accordance with the identified risks and impacts.

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

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

YES

[Description of arrangements to provide information on safeguards during ER Program implementation 15.2 and 6.1]

Section 14.2 states that the ER Program will use the procedures and will feed in information to the National Safeguards Information Module.

The main objective of the National Safeguards Information Module is to gather, manage, and disseminate information related to the implementation and enforcement of safeguards for REDD+ actions, in accordance with the Peruvian legal framework. In turn, the SIM will generate reports required by the UNFCCC or other programs for monitoring compliance with safeguards related to REDD+ activities.

The MINAM, as the national focal point for REDD+, is responsible for monitoring and reporting on how the safeguards for REDD+ are being addressed and respected at the national level, through the Safeguards Information Module (SIM). In this regard, the ER Program will use the established procedures for the SIM and will provide information for the Module.

The ER Program states that: "Public and private projects in the design phase will adopt the ER Program ESMF." and "... an analysis of gaps between on-going projects' environmental and social management frameworks and the ER Program framework will be carried out to identify gaps that need to be filled in order to comply with the safeguards established for the ER program.

Informs also that the collecting of the results of the Safeguard's will be performed by the Program Management Units of the Regional Governments of San Martin and Ucayali, and subsequently consolidated in a regional or supra-regional entity, directly linked and communicated to the ER Program to the national level.

This Module is a proposal and needs to incorporate institutional arrangements and indicators, which are presently being developed by MINAM, as well as the final relation with SNIFFS and SINIA. This model should also be sufficiently flexible to enable a stepwise approach for further development and improvement. It is expected that the design of the Module will be completed by December 2019 and will be implemented, after a test phase, in September 2020.

Table 14.2.1 Safeguards Road Map presents a road map and a timetable for the development of the safeguards monitoring arrangements.

OBSERVATION 1: Although it is mentioned that arrangements for safeguards monitoring are an on-going process, and the main items already included in Table 14.2.1, t is critical to adjust development to the specific ER Program needs and characteristics.

The indicator is met.

Ind 25.2 During ER Program implementation, information on the implementation of Safeguards Plans is included in an annex to each ER monitoring report and interim progress report. This information is publicly disclosed, and the ER Program is encouraged to make this information available to relevant stakeholders. This information is also made available as an input to the national systems for providing information on how safeguards are addressed and respected (SIS) required by the UNFCCC guidance related to REDD+, as appropriate.

N.A

Only applicable at the time of verification.

C 26 An appropriate Feedback and Grievance Redress Mechanism (FGRM) developed during the Readiness phase or otherwise exist(s), building on existing institutions, regulatory frameworks, mechanisms and capacity

**Ind 26.1** An assessment of existing FGRM, including any applicable customary FGRMs, is conducted and is made public. The FGRM applicable to the ER Program demonstrates the following:

YES

- i) Legitimacy, accessibility, predictability, fairness, rights compatibility, transparency, and capability to address a range of grievances, including those related to benefit-sharing arrangements for the ER Program; ii) Access to adequate expertise and resources for the operation of the FGRM
- [Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3]

The development of the Mechanism for Citizen Attention Mechanism (MAC) is still under development based on existing prototypes.

The Final ER PD in Section 14.3 (page 208-212) describes the Feedback and Grievance Redress Mechanism (FGRM) and the Mechanism for Citizen Attention Mechanism (MAC)

The ER Program MAC is an organizational system that will attend the questions, consultations and/or complaints related to the design and implementation of the Program's activities, including participation, benefit-sharing issues and the application of socio-environmental safeguards. It will allow feedback and enhance expected results, accountability, identification of negative impacts, and conflict prevention. Same objectives of the National MAC are the objectives of the ER Program specific mechanism.

The ER Program MAC will be based on existing regional platforms for citizen attention, with a logic of contributing to strengthened institutionally without the duplication of efforts. The design of the mechanism should ensure adequate channels for receiving complaints, claims, suggestions and requests for information from citizens in order to provide answers and solutions linked to the program with cultural relevance.

The Mechanism for Citizen Attention Mechanism (MAC) for the ER Program is based on discussions and prototypes developed since 2014 for the national level. During the preparation phase of REDD+ and the ER Program, MINAM has developed a process for presenting citizen feedback that has helped in identifying and improving proposed actions. This process has included fundamental tools such as the participation plans and communication plans, among others. The proposal of the multiple channels formally established for communication by MINAM's Citizen Attention Platform and shown in Figure 14.3. are: (1) a face-to-face channel, via a citizen service platform and its decentralized spaces, including the minutes of meetings and workshops where relevant information is collected directly (2) a virtual channel, based on emails and institutional Internet portals, and includes the email for complaints regarding access to

information, and (3) a telephone channel, through the use of MINAM's contact center.; (4) In the case of local and rural issues, the use of a Program complaints book in the offices of local, regional governments, indigenous organizations, or other local public entities is being evaluated.

Regarding the relation of the FGRM development and the consultation process, it is stated (section 5.1 of the Final ER-PD) that the MAC received comments and recommendations from stakeholders in the regional consultation workshops developed in March 2019. A road map has been developed for future consultations.

Table 14.3.2 (p 212) includes also a road map for the future development process of the FGRM and indicates that is expected to be implemented beginning in 2020 as an element of the MAC.

Section 14.3 of the Final ER-PD includes results of consultations that were held with regional stakeholders and specialists from the regional governments in order to diagnose the capacities of regional governments to respond to citizen consultations and/or complaints.

**OBSERVATION**: The TAP would like to mention the utility of an explanation of how the information received through these channels will be evaluated and how appropriate responses will be made and how this links with the public consultations processes that are part of the ER program implementation plan.

The indicator is met.

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

YES

[Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3]

Section 14.3 of the Final ER PD states that, in order to respond to questions, consultations and/or complaints, the Peruvian government will implement a Feedback and Grievance Redress Mechanism (FGRM), known as the Mechanism for Citizen Attention (MAC). At the national level, this mechanism is in the design phase, based on on-going discussions and existing proposals. The objectives of the Mechanism are: 1) generate tools and/or processes that contribute to compliance with the safeguards; 2) promote transparency in monitoring and access to information related to the design and implementation of REDD+ actions; 3) promote coordination, dialogue and information among stakeholders; 4) reduce conflicts among stakeholders; and 5) provide feedback on the design and implementation of REDD+ actions.

The mechanism will incorporate various channels for communication including face-to-face, virtual, email, fixed and mobile telephony contacts.

Channels for communication include:

- a face-to-face channel, via a citizen service platform and its decentralized spaces, including the minutes of meetings and workshops where relevant information is collected directly; a virtual channel, based on emails and institutional Internet portals, and includes the email for complaints regarding access to information; and;
- a telephone channel;
- in the case of local and rural issues, the use of a Program complaints book in the offices of local, regional governments, indigenous organizations, or other local public entities is being evaluated.

The sections on Benefit – Sharing and Safeguards Plans in the ER-PD contains no references to the FGRM procedures that will apply to them.

Figure 14.3.1 of the Final ER-PD established that citizen questions, consultations and complaints will be communicated through multiple channels for communication to the designated regional government's MAC office (one for each region), which will analyze the nature of consultations or complaints. Based on this analysis, the complaint/comment will be channeled to the relevant ER Program's management or project's entity, which will implement actions to

respond to the consultation. If the consultation and/or complaint are not directly relevant to the ER Program, these will be transferred to other entities with the authority to resolve them, such as the Ombudsman's Office, the Public Prosecutor's Office, and the Public Ministry, among others.

After the implementation of actions or processes, the case will be registered, closed and included for subsequent communication and reporting to the relevant entities. It should be noted that compliance times are important and that outcomes should be closely monitored in order to avoid further complaints or conflicts. The ER Program MAC will report information to the National Safeguards Information Module in order to allow national monitoring of safeguard compliance. The ER Program MAC is also linked to the national level MAC and will provide information on regional questions, consultations and complaints registered to the national MAC.

It is mentioned in Section 14.3.2 of the Final ER-PD that the Draft Structure of the Benefit Sharing Mechanism will include its relationship with the FGRM, defining the institutional arrangements through which the beneficiaries and citizens may expose claims and questions regarding the application of BSM

Table 14.3.2 includes a road map for the future development process of the FGRM.

The indicator is met

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

[Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3]

Peru is still working on a system "REDD+ MAC" that is described as "an organizational system proposed by the national REDD+ authority (MINAM) to receive and address concerns about the impact of its policies, programs and operations on external stakeholders, which can take the form of suggestions, opinions and complaints. "

Section 14.3 of the Final ER-PD includes and assessment of the capacities of regional governments to respond to citizen consultations and/or complaints

Table 14.3.2. of the Final ER-PD includes a detailed roadmap for the development of the Mechanism for Citizen Attention (MAC).

The indicator is met

## 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

YES

**YES** 

[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-PD (Section 4.1) provides a thorough assessment of the rates and drivers of deforestation within the target regions (San Martin and Ucayali) and in Amazonian Peru overall. In the Project regions, agriculture is by far the most impactful direct cause of deforestation though it is also influenced by indirect causes such as the system of land tenure and land titling that requires that land be non-forest for occupants or others to obtain ownership. Other indirect causes include poverty and migration driven principally by economic motivation. Logging (both legal and illegal) is identified as the main driver of forest degradation. The document notes a decline in certified forest (logging) areas during the reference period. Two of the main strategies to reduce deforestation in a sustainable way within and beyond the period of the ERPA are to encourage establishment of high-value perennial crops in non-forest or previously deforested land and to encourage the establishment of tree plantations. Also, recognition of land rights of indigenous people's groups and indigent communities and strengthening the management of protected areas are seen as important contributors

to reducing deforestation ad forest degradation. The project intends to deploy a range of strategies that address both indirect and direct drivers of deforestation (see section 4.3) and engage a broad range of stakeholders.

The indicator is met.

**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

YES

[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]

The Emissions Reduction Program is expected to conserve, recover, and reduce pressure on forests in order to reduce forest emissions by about 27 Mt CO2e for 5 years, via the implementation of a comprehensive protection-production-inclusion approach. This approach combines a command-and-control system for monitoring and controlling land use; public and private incentives, policies, and services promoting better governance of forests; the adoption of technical, organizational, or commercial interventions for sustainable production systems; and multi-stakeholder platforms for planning, coordinating, monitoring, attracting investments and exerting political pressure related to sustainable land use and climate change. The goal is to address the principal drivers of deforestation that include conversion of forest to agricultural land and illegal logging and to address the indirect drivers behind these. The Program's strategy is based on current strengths including rich natural capital, a good business climate, progress related to sustainable agricultural production systems and value chains, innovations by regional governments, and a host of programs and projects aimed at emissions reductions from forestry and land use. Within this context, perhaps the most important strategic component is the alignment of a host of current or planned projects and programs at the national and regional levels that address various aspects of deforestation.

Highlighted priority areas and bottlenecks for institutional strengthening to be addressed under this program are shown in Table 4.3.1. (P 76)

The principal aims are to reduce conversion of forests to agricultural land by converting existing low productivity annual croplands and other non-forest areas to more valuable perennial crops, working with local/regional governments to achieve land use classification and zoning, reducing illegal land occupation and logging, strengthening the "ownership" rights of indigenous peoples and communities, improving management capacity of protected area managers and addressing some of the indirect drivers of deforestation such as poverty-driven migration, land speculation and illegal logging.

The program seeks to combine efforts and share resources among national ministries regional governments and agencies and provide positive incentives to land holders and land stewards including indigenous peoples.

OBSERVATION 1: The TAP in the review of the previous draft ER-PD indicated it would like to see a table or figure highlighting the Drivers of Deforestation and Degradation, the Activities to be implemented and consequently the expected impacts in ERs.

Table 4.32 p79 and text in section 4.3 overall meets that request.

The Indicator is met.

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

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

YES

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

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

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

Section 4.4 p. 90-109 of the ER-PD provides a comprehensive review of Peruvian laws and policies with respect to land tenure, ownership and usufruct rights with regard to private ownership, indigenous peoples rights of "tenure" and the obligations and prerogatives of the State.

The updated SESA incorporates a Strategic Environmental and Social Diagnosis that evaluates the context facing the Emission Reduction Program regarding land use and land tenure and deforestation.

- -The ER Program describes in section 4.4 in a detailed way the elements that are identified in indicator 28.1 from the legal point of view, including among others:
- I. The range of land and resource tenure rights 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 ambiguities or gaps in the applicable legal framework, including as it pertains to the rights under customary law;
  - II. Areas within the Accounting Area that are subject to significant conflicts or disputes related to contested or competing claims or rights, and if these are critical to the successful implementation of the ER Program,
- IV. Any potential impacts of the ER Program on existing land and resource tenure in the Accounting Area.

The document for participation in the ER Program incorporates the stakeholder classification, and methodologies of the PPIA; it also includes guidelines and methodologies for participation and the chronogram of activities of the ER Program. The objective of the document is to foment inclusive stakeholder participation during the Program cycle."

The analysis of the environmental and social problems associated with the causes of deforestation has been developed throughout the SESA and in a transversal way.

The National Strategy was developed through a participatory process that allowed identifying drivers or causes of deforestation and from that, formulated strategic actions to address them and reduce deforestation. The updated SESA evaluates the context facing the Emission Reduction Program regarding forest coverage, forest loss, land use, economic context and deforestation, land tenure and deforestation, indigenous villages, land tenure and social risks.

Observation 1 – Nevertheless all the effort to describe the legal framework and the institutional mechanism to address dispute resolutions the ERPD doesn't describes in a clear way the legal mechanisms that is in place in the country to address how such conflicts or disputes have been or are proposed to be addressed. It is noted on p.112 that alternative dispute resolution mechanisms are in force in the country, such as extrajudicial conciliation and arbitration, created precisely to resolve more efficiently, quickly and definitively conflicts that, if taken to the Judicial branch, would take several years to resolve but is not clear if and if so how such mechanisms would be utilized in resolving disputes or

grievances within the ER Program. It will be important that a clear description of that mechanism could be inserted on the ERPD.

Observation 2 - Nevertheless In section 5.1 p. 121 the ER-PD discusses the Stakeholder involvement process and refers to the PPIA as the basis for how disputes or grievances will be addressed "The REDD+ involvement process is guided by PPIA that was initially formulated in 2013 and used in the FIP process and which was subsequently adapted and actualized for the implementation of REDD+ Readiness in 2014. The current version used during the design and implementation of the ENBCC was modified in December 2017 and it seems that continues to evolve and be used in the context of major initiatives related to the reduction of emissions. It will be important to consider the updating and completeness of that procedure to bring more robustness to the process.

TAP recognizes that much thought and effort for establishing effective and productive dialog and information sharing with the broad variety of stakeholders in a project like this who could be affected by land and resource tenure rights and allocation processes, a clear legally binding process needs to be defined for that element of this project which is a significant one in terms of its expected contribution to emissions reductions and project success needs. This needs to be clearly resolved and established on a strong legal basis for this project to deliver on its objectives.

#### The Indicator is met

Ind 28.2 The ER Program explains how the relevant issues identified in the above assessment have been or will be taken into consideration in the design and implementation of the ER Program, and in the relevant Safeguards Plan(s). If the ER Program involves activities that are contingent on establishing legally recognized rights to lands and territories that Indigenous Peoples have traditionally owned or customarily used or occupied, the relevant Safeguards Plan sets forth an action plan for the legal recognition of such ownership, occupation, or usage. Beyond what is required for the successful implementation of the ER Program, the ER Program is encouraged to show how it can contribute to progress towards clarifying land and resource tenure in the Accounting Area, where relevant.

[Assessment of land and resource tenure in the Accounting Area 4.4]

[Description and justification of the planned actions and interventions under the ER Program that will lead to emission reductions and/or removals 4.3]

The ER-PD also states (in Section Sec 4.4) the intention that:

The Program design elements are expected to reduce risks due to displacement and reversions. Potential land tenure conflicts are expected to be reduced by on-going titling programs, participation of indigenous peoples in this process and various institutional strengthening and coordination mechanisms will improve Land tenure security.

Also, that: Eight World Bank environmental and social standards (ESS 1-3, 5-8, and 10) apply to the potential negative impacts and risks associated with the interventions. And all of those are in accordance to the ER-PD supported by Peru's legal and policy framework.

The analysis of the environmental and social problems associated with the causes of deforestation has been developed throughout the SESA and in a transversal way. Various sources of information have been used to characterize deforestation dynamics.

The direct and indirect causes of deforestation are described in depth for the Amazon region, due to the greater proportion of forest cover in said biome and its contribution to climate change associated with the carbon content in the present biomass. In the diagnosis of forest degradation, it has been found that there is very general evidence to describe the problem, again focusing on the findings of the Amazon region. The direct causes for forest degradation do not respond to many variables, focusing mainly on the extraction of wood for commercial purposes, to produce domestic energy (coal and firewood), and fires that do not produce deforestation.

YES

The eleven REDD + actions that were identified address a set of strategic actions and priority lines of implementation of the National Strategy, which in the preliminary SESA were evaluated independently, resulting in an extensive risk matrix. Therefore, the update of the SESA included the grouping of risks and mitigation measures of the strategic actions and priority lines of implementation previously identified, and that now feed each of the REDD + actions. As a result, a comprehensive list of risks and mitigation measures was obtained for each REDD + action.

Based on the broad list obtained, a standardization process for risks and mitigation measures was carried out.

The ER-PD illustrates and documents a substantial history of and commitment to public dialog and participatory planning with stakeholders and identifies a number of plans that are intended to be produced during 2019 that address benefit sharing, private sector engagement, grievance resolution and safeguards all of which will comply with the high standards of stakeholder participation and public transparency that were evident in the preparation of the ER-PD

The Indicator is met.

**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

NO

[Transfer of Title to ERs 18.2]

The ER Program describes in a detailed way the implications of the land and resource regime assessment for the ER Program Entity's ability to transfer title to ERs from a perspective of the existing legal framework in the country and tries to address the ability of the ER Program Entity based on the national legislation and the universal right of the state to manage the natural resources arising from native forests. The legal fundaments are based on an extensive interpretation of the law, but a conceptual confusion is established when the country tries to qualify the legal nature and ownership of the ERs and the ability of the ER Program to transfer them to the Carbon Fund, based initially on the legal ownership of the forests and natural resources and simultaneously applying concepts of the new environmental ecosystem services law.

Also, the ER Program doesn't present the legal provision that establishes the competence and legal ability of the ER Program entity to transfer title.

The TAP Team would like to see in a more clear, detailed and structured way the description of the ability of the ER Program entity to transfer title to the Carbon Fund, based on the national existing legislation and specifically on the natural resource's management and ecosystem services payment legal concept.

The Project Developer (MINAM) has proposed that a legal instrument be established that would enable MINAM working with the Ministry of Foreign Affairs to transfer credits to the Carbon Fund, but such a legal instrument has not yet been established.

Taking the above in consideration the indicator is not met, and this is a major nonconformity. During the visit of the TAP team, elements were presented that offered confidence to the TAP that this issue can be updated and clarified in the future, but to date this has not occurred.

The indicator is not met

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

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

YES

Although the Benefit Sharing Plan of the ER Program is still under development, sections 15.1 and 15.2 of the ER PD describe the results-based payment modality through which the financial resources obtained from the FCPF Carbon Fund for emissions reductions will be distributed among the various participating actors.

The BSP is being designed using inputs from three different proposals developed by MINAM since 2013, consideration of the benefit distribution plans of other participating countries in the Carbon Fund, and inputs from participants in the REDD+/ER Program design process.

The benefit-sharing mechanism (BSM) establishes a results-based payment modality through which the financial resources obtained from the FCPF Carbon Fund for emissions reductions are distributed among the various participating actors. The fundamental objective of benefit sharing is to generate incentives among different actors so that they undertake actions resulting in the reduction of deforestation, forest degradation, and forest-based emissions. It is expected that the distribution of benefits will improve the sustainability of the Program through stakeholder access to these incentives, as well as the strengthening of institutional capacities.

Key aspects of the design of the benefits distribution plan include: the identification of beneficiaries, the form of benefits, the distribution of benefits among the actors, and the criteria used in order to determine eligibility and magnitude of the benefits. The benefit-sharing proposal is based on three basic principles: effectiveness, efficiency and equity. The plan for the distribution of benefits is being designed using inputs from three different proposals developed by MINAM since 2013, consideration of the benefit distribution plans of other participating countries in the Carbon Fund, and inputs from participants in the REDD+/ER Program design process.

Potential beneficiaries include: (i) Participants with direct impact - i.e., holders of titles or rights of possession of forest resources (ii) Participants with indirect impact - i.e. actors in the agricultural sector participating in interventions under the Production-Protection-Inclusion (P-P-I) approach; (iii). Indigenous Peoples - The program recognizes the central role of indigenous peoples in forest conservation by creating a separate beneficiary category. This category could recognize the effort of indigenous communities related to forest conservation and local monitoring, the implementation of community development plans (planes de vida), and community forest management for timber or non-timber products and could include financial incentives based on a forest conservation approach (TDCs) as well as results-based benefits; (iv) Political and administrative actors at different levels of government. These beneficiaries include the central, regional, and local governments or programs, and may even include the neighborhood councils of the district municipalities who actively participate in the Program.

The ER-PD contains a proposal that will be modified during the development and activation of different technical working groups.

With regards to the management of results-based payments, it is mentioned that the Peruvian government is currently working on defining the financial institution arrangements within the framework of DCI signed with Norway and Germany under which the country will manage financial contributions based on verified emission reductions.

The indicator is met

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

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

N.A

The categories of potential Beneficiaries, describing their eligibility to receive potential Monetary and Non-Monetary Benefits under the ER Program and the types and scale of such potential Monetary and Non-Monetary Benefits that may be received. Such Monetary and Non-Monetary Benefits should be culturally appropriate and gender and inter-generationally inclusive. The identification of such potential Beneficiaries takes into account emission reduction strategies to effectively address drivers of net emissions, anticipated implementers and geographical distribution of those strategies, land and resource tenure rights (including legal and customary rights of use, access, management, ownership, etc. identified in the assessments carried out under Criterion 28), and Title to ERs, among other considerations.

Criteria, processes, and timelines for the distribution of Monetary and Non-Monetary Benefits.

Monitoring provisions for the implementation of the Benefit-Sharing Plan, including, as appropriate, an opportunity for participation in the monitoring and/or validation process by the Beneficiaries themselves

[Description of benefit-sharing arrangements 16.1]

Although the Benefit Sharing Plan of the ER Program is still at an early stage sections 15.1 and 15.2 of the ER PD contain definitions, to be validated through the BSP development process, regarding benefits and beneficiaries, eligibility criteria, distribution channels, institutional and monitoring arrangements. It also includes a prototype and road map for the BSP development. Table 15.2 p 220 shows the process and timeline for completing a draft BSP and taking it forward to public consultation in September prior to finalizing it

Benefits will usually take the form of providing incentives to stakeholders to change the pattern of land use and address to regional sustainable development. Specific actions that would be eligible for funding must be based in a diagnosis of needs and interaction with those stakeholders. Preferably, the magnitude of benefits to each specific beneficiary will not be based on their specific direct contributions to emissions reductions, since it is quite difficult to attribute the percentage of contribution of each stakeholder to the aggregate emissions reduction, but rather on the size of the incentives needed in order to change beneficiaries' behavior in favor of forest protection or more sustainable land use practices. Another reason to delink the emissions reduction with the magnitude of benefits is that the emissions reductions occur in forest areas but, in some cases, as a consequence of actions implemented in the agrarian frontier and thanks to public policies. Therefore, a share of benefits should also be received by those actors, as will be described below.

In the case of nested projects there is an on-going working roundtable to establish rules to allocate quotas to these projects. These rules will be part of the final benefit sharing proposal.

### Potential beneficiaries include:

- Participants with direct impact (i.e., holders of titles or rights of possession of forest resources that promote actions to increase forest conservation or avoided deforestation).
- Participants with indirect impact (i.e. actors in the agricultural sector participating in interventions under the Production-Protection-Inclusion (P-P-I) approach, who directly or indirectly reduce deforestation.
- Indigenous Peoples.
- Political and administrative actors at different levels of government.

It is stated that specific criteria for determining eligibility will be identified. In all the cases, there must be clearly documented actions (policies or field actions) that activities reduce deforestation or forest degradation, even though the specific impact on emission reductions of each activity will not be measured. In the case of indigenous peoples, the regional and national indigenous organizations will participate in the determination of eligibility criteria. In the case of producers, forest conservation and/or sustainable agricultural intensification must be demonstrated. The financial arrangements for benefit sharing will be based on the fiduciary institutional design that is being built within the framework of the Joint Declaration of Intent (DCI) that is based on pioneering financial and institutional developments that are being promoted in the regions of San Martín and Ucayali.

Channeling of the benefits for indigenous peoples will be based on the model of the Specific Dedicated Mechanism for Indigenous Peoples model (DGM-Saweto), an initiative led by the national indigenous organizations of the Peruvian Amazon, AIDESEP and CONAP. The DGM has general guidelines for its operation and its funds are administered by the World Bank through WWF-Peru as the Executing National Agency.

Payments for results under the ER Program and its consequent relationship with the benefit-sharing mechanism (BSM) are based on the difference between the volume of emissions estimated by the so-called "compensation baseline" for the accounting area, constituted by the San Martin and Ucayali regions as a whole, during the 2008 - 2017 period; and the (potentially reduced) volume of emissions measured in the accounting area during 2020 - 2024.

This indicator is considered 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

N.A

[Description of stakeholder consultation process 5.1]

[Summary of the process of designing the benefit-sharing arrangements 16.2]

Section 15 of the ER-PD and specifically Table 15.2 outlines the process and schedule for development of a Benefit Sharing Plan and summarizes the history of activities, consultations and inputs that have contributed to the description of the process of preparation, discussion and approval of the BSP and in general terms the content. The principles, objectives and criteria for participation in a BSP for various "classes" of shareholders are clearly articulated in the EP-RD. Section 15. This basically awaits the drafting of a plan and initiating the process of consultation with all the relevant constituencies and then finalization of the plan and approval by competent authorities. It would be desirable to extend the information in Table 15.2 to identify a target date for completing the process.

The Final ER PD brings in section 15.2 a summary of the process of designing the benefit-sharing arrangements, inputs that will be considered during the process of preparation of the BSM for the FCPF Carbon Fund. The prototype design of the BSM is the result of reflection and synthesis of discussions and consultations with a wide variety of stakeholders held on REDD+ since 2013 (that are mentioned in section 5).

The following proposed schedule has been discussed and built with regional governments and has been validated with regional stakeholders:

- Step 1. Create a supra-regional working group, integrated by MINAM, GOREU and GORESAM with the mission to conduct the process of definition of a BSM. A first meeting with the recently designated delegates were carried out (separately with each) in May and the schedule above was agreed upon with them.
- Step 2. Organize bilateral meetings with regional stakeholders for initial feedback. The working group will organize and carry out bilateral meetings with key regional stakeholders, including producers' grassroots organizations, indigenous people organizations, private sector organizations (chambers or others), public entities, non-profit organizations, REDD+ Early Initiatives, among others in order to consult them regarding their expectations in terms of deforestation threats, mitigation measures, eligible actions, distribution channels, among other aspects.
- Step 3. Prepare the first draft of the Benefit Sharing Mechanism for the FCPF Carbon Fund. With the feedback of previous bilateral meetings, the working group will prepare the first public draft of the BSM proposal for open discussion with key stakeholders, including representative organizations of potential beneficiaries.
- Step 4. Participatory process for discussion on BSM proposal. The draft proposal will be available for public comments during a month and simultaneously, participatory decentralized meetings led by MINAM with the respective regional government will be carried out with key stakeholders, including indigenous people, agriculture and forest producers, the private sector, civil society, governmental entities (municipalities, environmental attorney), among others. The comments will be systematized by actor with the purpose of analyzing and preparing specific responses to each.
- Step 5. Review of comments and prepare the final BSM proposal. Based on the matrix of comments and the proposed structure, the working group will analyze the comments received and will make, if necessary, adjustments to the draft proposal, incorporating appropriate improvements. Together with the final proposal, the matrix of comments will also available for public review.

Step 6. Approval of final proposal of BSM. After concluding the design of the final proposal, both regional governments and MINAM will start the internal process of formal approval according to the current procedures and legal framework of each entity. The final version of the BSM proposal will be included in the final version of ER-PD. The working group will act as focal point for comments that this proposal could receive from the Carbon Fund Participant Committee.

A draft structure for the BSM has been discussed with regional governments and other key regional stakeholders.

These multi-level consultations will generate inputs for the final phase of preparation of the advanced draft benefit-sharing plan, that will contain the recommendations of the ad hoc committee related to the technical issues mentioned above. As a result, the advanced draft benefit-sharing plan is to be completed by September 2019 with consultations to take place subsequently and a final version of the plan taking these input into account to be prepared No date was given for the completion of this process.

This indicator is considered 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 [16.1]

N.A

Only applicable at the time of verification.

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

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

NO

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

A formalized Benefit-sharing Plan does not yet exist. The Benefit Sharing Plan as stated by the Host country is still under construction.

The ER-PD describes the "classes" of potential beneficiaries, the institutional roles of MINAM and its partners managing and providing inputs into the process of identifying and verifying tangible "results" in line with benefit payments. The ER-PD notes MINAM's intent to hold public consultations concerning benefit sharing in the target regions during 2019. A timetable for preparation of the BSP is provided in Table 15.2 on pp 220-221

The ER-PD brings a very detailed and extensive description (Section 15.2 and 15.3) of the host country legal framework and relevant applicable national laws in the context of the benefit sharing plan.

There are references on the international legally binding obligations under relevant international laws, in Section 15.2 :

"This process has paid particular attention to the participation of indigenous peoples, in accordance with national (Law No. 29785) and international standards (ILO Convention No. 169" (page 110), but the TAP was not able to find other references to these subject in order to give the TAP the ability to access the accomplishment of the compliance with international laws.

The TAP found references to the relevant international laws in Section 2.2 – Ambition and Strategic rationale (Table 2.2.2 ER Program alignment with Peru's international commitments); in Section 4.4 – Analysis of Laws,

statutes and other regulatory frameworks (in the context of Peru´s participation in international commitments to prevent further deterioration of the environment (such as the United Nations Framework Convention on Climate Change - UNFCCC); in Section 17.1 (reference to the international commitments assumed by the State before the United Nations Framework Convention on Climate Change); in Section 18.1 Data Management Registries (in the context of international carbon markets to avoid double counting), but not in the context of the Benefit Sharing Plan.

Taking into consideration that the BSP is still under construction, and further analysis of the compliance with international laws in the context of the design and implementation of the benefit sharing plan will be needed, is not possible at this moment to assess if the Indicator is met.

The TAP considers that the Indicator is not met. This is a minor non-conformity, since the country can update and increment this in the future. .

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

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

YES

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

Peru has identified non-carbon benefits for each of the mitigation measures included in the NDCs for the LULUCF sector and for the ER Program via meetings with experts and multi-stakeholder workshops organized by MINAM during 2018.

The Final ER PD identifies three categories of non-carbon benefits for the ER Program: Environmental, Social and Economic (Table 16.1, Page 227). Three priority non-carbon benefits were chosen due to their overall importance, direct relationship with ER Program activities, the ease and cost of their monitoring, and their representativeness of environmental, institutional, and socioeconomic impacts and the overall "health" of these sectors. These non-carbon benefits include: habitat conservation/fragmentation and connectivity (environmental), institutional coordination (institutional), and job creation in green industries (socioeconomic). Further consultation with stakeholders regarding the validation of these co-benefits will be carried out during 2019 in the context of the continuing validation of the ER Program and the development of local monitoring systems.

The Final ER PD identifies interventions that will generate those benefits. Habitat connectivity and fragmentation will be impacted positively by the majority of the interventions of the Program, most importantly intervention 1.2 (forest governance in indigenous communities), 1.3 (conservation in ANPs,), 1.4 (MFC), 1.5 (MFS), 2.2 (intensification of commercial agroforestry systems), 2.3 (Strengthen familiar agriculture from a subsistence level to a level that generate surplus for market), 2.4 (commercial reforestation), and indirectly by 3.1 (investment and off-farm employment creation), and 4.3 (monitor, control, and enforcement of land and forest use).

Increased off-farm employment in green businesses, created by the investment and employment promotion strategic line of the Program, is specifically included in the ER Program as a mechanism to reduce pressure on forests by absorbing migrants and marginal farmers. Off-farm employment is expected to be increased by interventions 3.1 (promotion of investment and off—farm employment creation by green businesses), 1.5 (management of riverine forests), 2.4 (commercial reforestation by business-community associations), and the strengthening of agencies for the promotion of investments and low emissions development such as the OPIPs of the regional governments, the Public-Private Coalition, the ARDs, and ALD.

Institutional coordination is a transversal process within the ER Program and is directly addressed through intervention 4.1 of Strategic Line #4, as well as the governance mechanisms and structure mentioned in section 6.1 Currently, a number of entities (e.g. the MIC and the Forest and Climate Change Commission of MINAM/MINAGRI) are addressing problems of institutional coordination and alignment at the national and regional levels and these results and recommendations with be incorporated in the governance of the ER Program.

The indicator is met.

**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

YES

[Description of stakeholder consultation process 5.1]

It is stated in the Final ER PD that the identification and prioritization of the non-carbon benefits of the Program is the result of a consultation process.

The ER PD contains references to experts and multi-stakeholder workshops organized by MINAM during 2018 where identification of non-carbon benefits was done. Section 5 of the Final ER-PD and Table 5.1. of the Advanced ER-PD identifies validation and local monitoring of non-carbon benefits between themes included in the stakeholder consultation process. It is also mentioned that the subject of biodiversity and its loss has been raised by local stakeholders during the consultation workshops, due to their concern regarding the reduction of useful species important for subsistence and their habitats.

Table 5.1 (p113) shows the actors and themes of the participation dialogues, /section 5.2 (p114) summarizes the methodological support tools utilized in the consultations /participation event.

Table 5.13 (p 115) summarizes participatory event held in 2018 and Table 5.1.4 (p116) documents consultations held in 2019.

Section 5.2 and Table 5.2.1 (p 117) provide a summary of comments received and discuss how they have been taken into account in the design and implementation of the ER Program. Additional information on these processes is provided in Annex 10.

The Indicator is met.

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

YES

[Approach for providing information on Priority Non-Carbon Benefits 17.2]

Section 16.2 (p 229) states that habitat fragmentation and connectivity will be measured annually using the methodologies, based on the interpretation of satellite imagery, used to estimate forest degradation. This methodology will generate information on habitat fragmentation and connectivity (especially patch size, patch isolation, and the area of edges and will enable the construction of an index of habitat fragmentation based on a combination of size, shape, and edge area of forest fragments, and connectivity. These estimations will be validated and related to local processes and actors causing deforestation, forest degradation, or forest enhancement via the use of local monitors. The results will enable a more profound understanding of the processes and actors involved in forest dynamics and the impacts of the Program interventions on these dynamics. Local communities will receive training and will be involved in the monitoring and verification of habitat fragmentation and connectivity, especially in the identification of on-the-ground processes and actors involved (p 230).

With regards to the creation of off-farm employment in green businesses as a result of promotion by the Program, annual estimates of off-farm employment associated with agricultural or forestry businesses will be based primarily on data provided by the regional government OPIPs and the Public Private Coalition. Program management will coordinate with these entities in order to design methodologies for capturing data on both formal and informal employment created by new investments, and employment of women or indigenous people.

MINAM will have overall responsibility for the gathering, systematization, analysis of data, and reporting related to these non-carbon benefits. Sources of data include the PNCB/GeoBosques Program for habitat fragmentation and connectivity, the regional government OPIPs and the Public-Private Coalition for off-farm employment creation, and the Coordination Group for inter-institutional cooperation.

The indicator is met.

Ind 35.2 Information on generation and/or enhancement of priority Non-Carbon Benefits will be provided in a separate annex to each ER Program monitoring report and interim progress report, and will be made publicly available

N.A

Only applicable at the time of verification.

# C 36 The ER Program Entity demonstrates its authority to enter into an ERPA and its ability to transfer Title to ERs to the Carbon Fund

**Ind 36.1** The ER Program Entity demonstrates its authority to enter into an ERPA with the Carbon Fund prior to the start of ERPA negotiations, either through:

NO

- i. Reference to an existing legal and regulatory framework stipulating such authority; and/or
- ii. In the form of a letter from the relevant overarching governmental authority (e.g., the presidency, chancellery, etc.) or from the relevant governmental body authorized to confirm such authority.

[Authorization of the ER Program 18.1]

The ER Program Entity in accordance with the ER Program is MINAM (Ministry of Environment).

The ER Program Entity doesn't demonstrate its authority to enter into an ERPA with the Carbon Fund prior to the start of ERPA negotiations, neither through:

- i. Reference to an existing legal and regulatory framework stipulating such authority; and/or
- ii. In the form of a letter from the relevant overarching governmental authority (e.g., the presidency, chancellery, etc.) or from the relevant governmental body authorized to confirm such authority

Section 17.2 addresses the issue of transfer of titles to ERs. Under the heading Title transfer on p234 the ER-PD states, spite of their importance and the repeated mention of compensation mechanisms for carbon sequestration and storag should be noted that:

"... no regulations have been developed in the country that expressly regulate the nature of titles that represer emission reductions resulting from REDD+ projects. Thus, in order to consolidate this interpretation, legal regulations that consolidates the competencies of the National Registry of Mitigation Initiatives (RNIM) and the transfer of titles from rights holders to MINAM are needed".

The ER-PD Section 17.2 (p234) states "With regards to the power of MINAM to sign the ERPA "on behalf of the Peruvian State", there are no specific rules or regulations to such effect."

Article 2, paragraph 2.2, of the Law on the Creation, Organization and Functions of the Ministry of the Environ (Legislative Decree No. 1013) recognizes MINAM as "a legal entity under public law and constitutes a budgetar document". However, article 6(c) of the Law (which recognizes as one of MINAM's functions "To promote and inter-institutional collaboration agreements at the national and international levels in accordance with the law and Article 7(j), which recognizes that MINAM can "implement international environmental agreements and preside over the respective national commissions" do not constitute an authorization for MINAM to sign this k of agreement with the FCPF.

Taking this in consideration the ER PD expressly states that, further enabling regulations are needed.

The TAP has done an extensive assessment to legal framework of the country and was not able to find any legal provision that establishes that ability for MINAM. The closest provision that gives to MINAM powers to interact and collaborate with international agreements is related to the ability (not to sign) but to collaborate on the implementation of international agreements as refereed above (Law on the Creation, Organization and Functions of the Ministry of the Environment (Legislative Decree No. 1013), - Article 7, paragraph j))

### On Section 17.2 the ER-PD states:

"Using the specific character of the environmental matter, we have projected the development of a normative proposal that explicitly powers the Ministry of Environment the subscription of international instruments as the ERPA, as well as the power to transfer emission reduction."

The ER-PD provides on p 236 a table that outlines the process and timetable for "activities for approval of a regulation that requires the power to transfer and sign the ERPA" and indicates an intended completion date for this process of October 2019.

Activities for approval of a regulation that requires the power to transfer and sign the ERPA	June 2019						August 2019				S	September 2019			October 2019			eı	Nover 201				
Technical meetings for coordination and consulting with related public institutions and experts on the subject.	х	х	x :	x																			
Project preparation by the competent entity (MINAM). It is attached by a legal formula, statement of reasons, reports, studies and consulting carried out.			x i	x 2	x 2	ĸ																	
Stakeholders' participation. Includes posting in the electronic portal, posting in the official newspaper <i>El Peruano</i> , civil society participation and indigenous peoples' organizations and review and acquittal of citizen contributions.						х	x	x	x	x	х												
Consulting to the Vice-Ministerial Coordination Commission virtually, as well as meetings with involved sectors.												x	x	x	x								
Heading by the President of the Republic and referendum of the Ministers (MINAM, MINAGRI and eventually the Presidency of the Council of Ministers).																х	x	x	х				
Regulation posting in the Official Newspaper El Peruano																				3d		T	

The indicator is not met. This is a Major non-conformity, taking in consideration that if the ER Program entity will not be able to demonstrate the ability to transfer title to ERs, the success of the Program could be jeopardized. Nevertheless, the host country can demonstrate the ability if the mentioned normative could be in place/enacted before the future signature of the ERPA.

Ind 36.2 The ER Program Entity demonstrates its ability to transfer to the Carbon Fund Title to ERs, while respecting the land and resource tenure rights of the potential rights-holders, including Indigenous Peoples (i.e., those holding legal and customary rights, as identified by the assessment conducted under Criterion

28), in the Accounting Area. The ability to transfer Title to ERs may be demonstrated through various means, including reference to existing legal and regulatory frameworks, sub-arrangements with potential land and resource tenure rights-holders (including those holding legal and customary rights, as identified by the assessments conducted under Criterion 28), and benefit-sharing arrangements under the Benefit-Sharing Plan

### [Transfer of Title to ERs 18.2]

The ER Program Entity and the ER Program describes in a detailed and clear way in Section 4.4 the land and resource tenure rights of the potential rights-holders, including Indigenous Peoples in the Accounting Area. The ER-PD however doesn't address clearly how conflict resolution will be managed. A brief explanation of some of the existing mechanism is set in pp 138 but it's not conclusive on how and what mechanism will be recommended and/or adopted under the specificities of the implementation of the ER-PD:

"There are different mechanisms for resolving disputes and conflicts. ...

If disputes escalate and become conflicts, the authorities in charge of resolving those conflicts will be the civil or mixed judges in their respective jurisdiction.

However, it should be remembered that alternative dispute resolution mechanisms are in force in the country, such as extrajudicial conciliation and arbitration, created precisely to resolve more efficiently, quickly and definitively conflicts that, if taken to the Judicial branch, would take several years to resolve".

The concept of Carbon Sequestration is already inserted in the national law for ecosystem payments – Article 3 of the Ecosystem Services Compensation Mechanisms Act, No. 30215. This legal text defines as ecosystem services "those direct and indirect economic, social and environmental benefits that people derive from the proper functioning of ecosystems, such as water regulation in watersheds, maintenance of biodiversity, *carbon sequestration*, landscape beauty, soil formation and the provision of genetic resources, among others."

The ER-PD adopts also the conceptual approach in relation to carbon sequestration included in the broader concept for natural resources as a "heritage of the nation" -. patrimony of the Nation (and in consequence that cannot be an object of property by individuals).

But when it comes to defining the legal nature and the ability to transfer title, the ER-PD clearly states that there are not yet legal and/or regulatory procedures enacted by the country: :

"...In the case of carbon emission reductions (i.e. carbon sequestration and storage), MINAM is responsible for supervising, promoting, and regulating their retribution and for developing and defining the rules of a compensation of ecosystem services registry."

However, the process of transferring these rights is not completely defined.

Taking in consideration the unclear definition of the legal procedures of ERs and of the ability to transfer ERs, the TAP considers that the indicator is not met. This is a major non-conformity, but the country can update and clarify it in the future by drafting and enacting the adequate legal provisions as stated on the roadmap – see Section 17.2.

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

[Transfer of Title to ERs 17.2]

NO

The ER Program Entity doesn't demonstrate its ability to transfer Title to ERs prior to ERPA signature.

The competence to sign international agreements is not clearly assigned to MINAM.

The signing of international agreements is a function of the Ministry of Foreign Affairs. According to the Law on Organization and Functions of the Ministry of Foreign Affairs, No. 29357, the Ministry of Foreign Affairs has among its governing functions

Also, the legal nature and regulatory procedures that will be necessary to transfer Title to Emission reductions as expressly stated on the ER PD are not clear:

The Peruvian Laws already include important legal and policy concepts that address issues related to climate change, environmental services and carbon sequestration: The National Constitution, The Forestry and Wildlife Law, The Framework Law on Climate Change and the Law on Mechanisms of Retribution for Ecosystem Services (MRES) are examples of those conceptual legal definitions and provisions. The Peruvian legal framework adopts the conceptual approach of the national patrimony and ecosystem services, by stating that:

..." the benefits of forest ecosystem services, including those of carbon, are part of the national patrimony but can be handed over to the holders of forest rights. Since the ecosystem services are the heritage of the nation, the State can not only regulate and register them, but can also determine the participation of individuals in the benefits that they bring by their actions for the maintenance of such services." ...

The general approach of Ecosystem Services (and legal conceptual definition) in accordance to the extensive interpretation adopted by the ER-PD includes the right to regulate "carbon emissions reductions trough an ecosystem services registry:

With regard to carbon emission reductions (i.e. carbon sequestration and storage), MINAM is responsible for supervising, promoting, and regulating their compensation and for developing and defining the rules of a compensation of ecosystem services registry. Registration in the National Registry of Mitigation Initiatives (RNIM) would confer Emission Reduction Rights which could enable their eventual transfer by holders of REDD+ projects and others (Article 55.2 of the regulations draft to Climate Change Act).. See Section 17.2 - page 308.

The regulatory procedures and legal provisions related to the legal nature and effective transferability of the Emission Reductions as stated in the ER-PD are still in the process of design and discussion (in draft mode): .

"".. However, the process of transferring these rights is not completely defined" ... (see Section 17.2 - page 308).

Taking into consideration the unclear definition on the legal procedures related to the ability to transfer ERs, the TAP considers that the indicator is not met. This is a major non-conformity, but the country can update and clarify this in the near future by executing the roadmap to draft/enact the legal text with the specific legal/regulatory provisions.

C 37 Based on national needs and circumstances, the ER Program works with the host country to select an appropriate arrangement to avoid having multiple claims to an ER Title.

**Ind 37.1** Based on national needs and circumstances, the ER Program host country has made a decision whether to maintain its own comprehensive national REDD+ Program and Projects Data Management System, or instead to use a centralized REDD+ Programs and Projects Data Management System managed

YES

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]

The ER Program host country has made a decision to maintain its own comprehensive national REDD+ Program and Projects Data Management System. Peru has chosen to use its own national REDD+ Program and Projects Data Management System operating under the National Registry of Mitigation Initiatives (NRMI)

The Registry will form part of the national MRV system and will contribute to the bottom up compliance of the NDCs as well as the monitoring of progress of NAMAs. MINAM will be responsible for the Registry and within MINAM the DGCCD will validate the contents of the registry and will manage and make public information on the reductions of GHG emissions. Information contained in the Registry will be used by MINAM to prepare National Communications and Biennial Reports.

### The indicator is met.

**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:

**YES** 

- 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 System is still under construction:

..." The National Registry of Mitigation Initiatives (NRMI), which is presently being designed and implemented by IHS Markit, under a contract with the Ministry of the Environment. It is expected that the NRMI design will be completed by August 2019; after a period of testing, the Registry will be implemented in 2020. (see Section 18.2).

The description on the ER-PD is significantly detailed including information related to the future intention of the registry to cover REDD+ projects, NAMAs, NDCs, ITMO, and other GHG mitigation initiatives, and to include several functions.

The future structure it seems it will be a complex and very detailed structure including attributes that goes beyond the requisites of the Indicator in analysis:

... The NRMI will track emissions reduction for NDC compliance, local carbon markets and international markets that could be regulated under the UNFCCC, voluntary standards or other international compliance systems as CORSIA. Thus, it will include REDD+ projects, NAMAs, NDCs, ITMO, and other GHG mitigation initiatives. Its purpose is to assure quality, transparency, and traceability of the registration, approval, transfer and retirement of emission reductions, and avoid double accounting. The NRMM will form part of the national MRV system, as seen in Figure 14.2.1, and will contribute to monitor the bottom up compliance of the NDCs as well as to provide information for corresponding adjustments for international transfers of ITMOs.

A detailed description of the attributes of the Database is set on the ER-PD (see Section 18.1)

Taking this in consideration the Indicator is met.

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

YES

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

The information contained in the national REDD+ Programs and Projects Data Management System is already partially available to the public via the internet in the national official language of the host country. Nevertheless, because the national REDD+ Programs and Projects Data Management System is still under construction, and it is expected that the NRMI design will be completed by August, 2019; (see Section 18.2 page 321.).

The ER Program states the clear intention to make public the information:

... "MINAM, through the DGCCD, will be responsible for the management of the NRMM and will validate the contents of the registry and manage and make public information on the reductions of GHG emissions through a digital platform. Information contained in the Registry will be used by MINAM to prepare National Communications and Biennial Reports."

(see Section 18.2)

- "...The information accessible to the public will include general information on mitigation measures in Peru, reductions of emissions achieved, general information related to the program or projects, documents, a list of eligible entities, and a registry page containing information related to the creation, transfer, and retirement of emissions reductions credits, as well as associated documentation. It is important to mention that the verifications will be mandatory for the mitigation measures that seek to carry out transactions, and their reports will be public..."
- ".... The capacity to export information in downloadable reports regarding projects, emission reductions, credit holders, transfers, and retirement is of vital importance. As a result, the NRMM will offer a variety of report options to project developers, credit buyers, and program administrators. The reports will enable users to track activities in the registry and evaluate the state of their projects or properties. The reports will also enable account audits— "Section 18.2"

OBSERVATION: The TAP considers the Indicator is met but would like to see a more detailed description of the availability of information to the public via the internet in the national official language of the host country.

The Indicator is met.

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

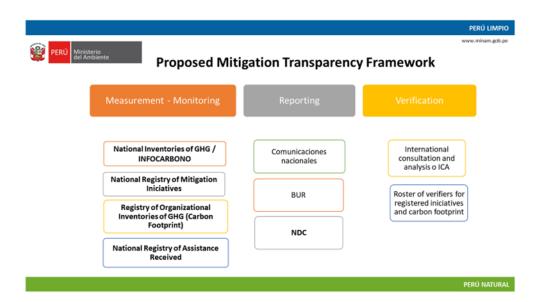
YES

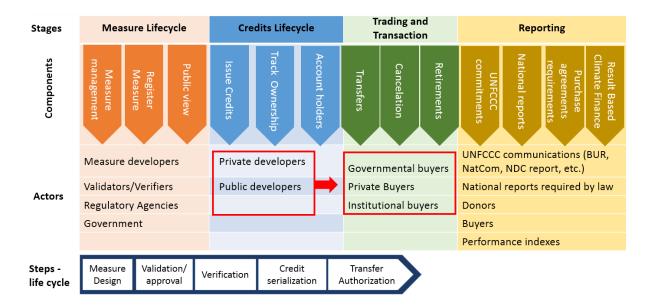
[Data management and Registry systems to avoid multiple claims to ERs 18.2]

The ER-PD states the intention to create in the near future the national or centralized REDD+ Programs and Projects Data Management System, and describes several functions of the future database structure such as:

... The central component of the NRMI will register projects, emission reductions, and transactions of the same. It will enable the monitoring of mitigation projects or activities during their life cycle, from the design and registration of the project, the approval of the emissions reduction credits (including the steps of the approval process), and the transfer and eventual retirement of the credits, thus enabling traceability...." and others (see Section 18.2).

Also, two detailed figures of the future arrangement are presented by the ER-PD including the multiple institutions involved in the procedures (see Figures 18.2.1 and 18.2.2 - p.322):





A significant effort is being made by the host country to create the future structure for the national REDD+ Programs and Projects Data Management System.

From the ER Program description is clear that administrative procedures are being defined for the operations of the system.

Also, the ER Program states that it will be possible to manage an audit of the operations in the section designated as Reports: (see Section 18.2)

..." The reports will enable users to track activities in the Registry and evaluate the state of their projects or properties. The reports will also enable account audits..."

Four types of information as stated by the ER-PD will be possible to found in the registry:

- 1. Government mitigation measures
- 2. Carbon credits in Peru origination in external systems of certification (CDM, VCS, GS, and SDM)
- 3. The National Standard of Peru
- 4. International transactions (ITMOs/CORSIA/others)

The Indicator is met.

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

YES

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

The ER Program host country has made a decision to maintain its own national ER transaction registry.

Significant efforts have been made by the host country to achieve the definition, and future creation and implementation of the Transactional Registry. The country intends to have the conceptual design of the Registry delivered by August 2019.

Nevertheless, the host country clarifies that if:

"...at the time of the first monitoring event the NRMM is not in place or does not have the minimum functions required by the Carbon Fund working, then Peru would use the World Bank's central registry. Additionally, steps will be taken to coordinate the development of the NRMM with the World Bank.

The Indicator is met.

**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

YES

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

The ER Program states the intention to design and implement in the future a national ER transaction registry that will use multiple methodological approaches and will manage multiple aspects of ERs programs and projects (including REDD+ projects, NAMAs, NDCs, ITMO, and other GHG mitigation initiatives).

It is explicit in the ER Program document that among those multiple approaches will be included the accounting methods and definitions described in the MF.

"...The NRMM will contain all relevant information from the mitigation measures registered, such as the description of the initiative (project document), location, standard applied (if any), methodology and

baseline, among others. Additionally, the emission reductions generated under the ER Program and other emissions reduction activities and their traceability will be registered under the NRMI. This registry will also link information on carbon sequestration and storage with the Sole Registry of Retribution Mechanisms for Ecosystem Services (MERESE, see section 17.2), created by Supreme Decree No. 009-2016-MINAM in July 2016.

The NRMM is presently being designed and implemented by IHS Markit, under a contract with the Ministry of the Environment. It is expected that the NRMI design will be completed by August, 2019; after a period of testing, the registry will be implemented in February, 2020. The preliminary proposal described below is aimed at providing an integrated registry that will consolidate all mitigation measures and reductions of emissions achieved in Peru in a central platform, as well as the capacity to emit reports and provide transparent access to the public. All NRMM's documentation will be in Spanish and in other languages if required later.

...." Reductions of emissions under the ER Program or other emissions reduction activities will be registered under the National Registry of Mitigation Initiatives (NRMI)

..." As seen in Figure 14.2.1, the NRMI is one of a number of registries related to MRV. It includes REDD+ projects, NAMAs, NDCs, ITMO, and other GHG mitigation initiatives. Its purpose is to assure quality, transparency, and traceability of the registration, approval, transfer and retirement of emission reductions, and to avoid double accounting"

The Indicator is met.

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

N.A

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

The ER PD doesn't address in the text whether it will be possible for an independent audit report certifying that the national ER transaction registry performs the required functions can or will be made public.

A brief reference to the ability of performing an audit is referred in the Reports Section on the context of the "... capacity to export information in downloadable reports regarding projects, emission reductions, credit holders, transfers, , retirement and accounts audit..."- see Section 18.2:

..." the Registry will offer a variety of report options to project developers, credit buyers, and program administrators. The reports will enable users to track activities in the Registry and evaluate the state of their projects or properties. The reports will also *enable account audits*. Users can export descriptions of projects, emission reduction credits, transfers, retirements, or activities in .XLS and .PDF file formats. Users will also have a page designed specifically to allow the preparation of reports with a period of time defined by the user. Users will also have access to a registry of activities that will allow them to see all the activity of their account within a specific time period.

This issue should be addressed in the future. Considering that the host country has decided to use a national ER transaction registry, or the World Bank's central registry (if at the time of the first monitoring event the NRMM is not in place or does not have the minimum functions required by the Carbon Fund working), the TAP considers this Indicator as not applicable at this time. Nevertheless, this issue should be taken in consideration in any case scenario in the future.

**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.

YES

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

The ER-PD explicitly describes the existence of a formal working procedure with an advanced stage of preparation of the operational guidance. The operational guidance includes the roles and responsibilities of entities involved in the national or centralized ER transaction registry:

"...MINAM will be responsible for the Registry and within MINAM the DGCCD will validate the contents of the registry and will manage and make public information on the reductions of GHG emissions.

, as well as rules for operation of the registry:

"...The central component of the NRMI will register projects, emission reductions, and transactions.

It will enable the monitoring of mitigation projects or activities during their life cycle, from the design and registration of the project, the approval of the emissions reduction credits (including the steps of the approval process), and the transfer and eventual retirement of the credits, thus enabling traceability.

It also includes the capacity to indicate if the project/emission reduction credit has a commercial purpose, including eventual transfer or retirement, or is solely for monitoring purposes (e.g. the NDCs).

The Project Registry ID 00100424/System for the Accreditation of Mitigation Actions includes the capacity to capture projects listed on other international registries and include them in the central platform, thus creating a clearinghouse of information on all relevant emissions reductions projects in Peru.

The NRMI will contain the following principal components (as more described in more detail in the ER Program):

- (i) Account administration
- (ii) Registry of information
- (iii) Emission of credits
- (iv) Transfer of credits
- (v) Retiring credits
- (vi) Cancelation of credits
- (vii) Project administration dashboard
- (viii) Reports

Taking into consideration the advanced stage of the design of the operational guidelines the TAP considers the Indicator is met.

Observation: The country has left an open door/option in the case that:

"...at the time of the first monitoring event the NRMM is not in place or does not have the minimum functions required by the Carbon Fund requirements, if so then Peru would use the World Bank's central registry. Additionally, steps will be taken to coordinate the development of the NRMM with the World Bank..."

# Annex 1 to the TAP technical assessment