Forest Carbon Partnership Facility (FCPF) Technical Assessment of an Advanced Draft Emission Reduction Program Document (ER-PD) submitted by Vietnam

I General Approach of the Review

This report emanates from the first formal assessment of an Advanced Draft of Vietnam's ER-PD (Vietnam ER-PD Version 1.2 of July 2016) by members of the Technical Advisory Panel (TAP) appointed by the World Bank FCPF. It comes after a desk assessment of an informal draft which was prepared by Vietnam as a Working Document that was discussed with the TAP Team during a Country Visit which took place between July 10 and 15th 2016. The main purpose of the report is to provide a written record on which Vietnam could base the revision of the current Draft of its ERPD. It is important to note that the observations listed and briefly described herein have been raised directly with the Vietnam REDD+ Team. The role of the TAP is primarily to read the documents provided and to assess their compliance with the criteria of the Carbon Fund Methodological Framework. The TAP Team which was composed of five members, organized itself around four main components of the ER-PD which are; Program Design, Carbon Accounting, Social and Environmental Safeguards and Legal Issues

Prior to the Country Visit, the TAP had prepared key questions and comments on an informal Draft ERPD. To start off the in-country assessment process, the TAP Team made a formal presentation of its early impressions on the ERPD. This was followed by a general presentation by the Vietnam Country Team, which gave the context on how the main components of the ER-PD had been developed and on updates that had not been included in the informal draft and which would be incorporated into the advanced and final drafts of the ERPD.

As prescribed in this assessment template that was used by the TAP, the bulk of the reporting is in the areas of carbon accounting, reference levels and reference emission levels (RL/REL). Two members of the TAP specialized in carbon accounting engaged with their Vietnam Counterparts in parallel discussions to understand how the ER-PD complies with both IPCC guidelines and the Methodological Framework used by the Carbon Fund and which was approved by the Carbon Fund Participants (based on a set of guiding principles adopted by the broader Participants Committee). Similarly on Program Design, which covers sections of the ER-PD dealing with the analysis of drivers of deforestation and forest degradation, two members of the TAP held discussions with the Vietnam Team and several other organizations (e.g., UN-REDD and the JICA Teams) and other specialists. In addition to reading a number of background documents on Vietnam, the country consultations enabled the TAP to assess the comprehensiveness and logic of the program design and to assess the extent to which the analyses of drivers have influenced the design of, or are reflected in the mitigation or emission reduction options. In addition, further clarification on the legal aspects of the ER-PD on aspects such as title to ERs and land tenure, as well as issues on participation and safeguards were assessed from a desk review of key documents and incountry discussions with representatives of stakeholders in Vietnam.

PART 1 OF TECHNICAL ASSESSMENT: Summary

Date of Current Assessment: August 15th 2016

Date of Current Assessment: Vietnam ER-PD Version 1.2, July 2016

Name of Assessment team members:

- 1. Conway, Darragh (Legal Expert): Program transactions, data management (section 6, part of section 4)
- 2. Kojwang, H.O. (Lead reviewer and Social and Environmental Safeguards Expert): Safeguards, non-carbon benefits, general coordination, contributions to the program design section and text editing
- 3. Lee, Donna (Carbon Accounting Expert): Carbon accounting (section 3)
- 4. McNally, Richard (Country Expert): Ambition, Program design (section 1, part of section 5)
- 5. Waterworth, Robert (Carbon Accounting Expert): Carbon accounting (section 3)

Assessment

Indicators

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

General Remarks from the TAP

The TAP Team read the Vietnam DRAFT ER-PD with much interest and commends the Country Team for the effort to put together a document which is quite rich in information on Vietnam's Forest Sector, its participation in REDD+ as a global process alongside its own national aspirations. The national consultations that preceded the development of the ER-PD has been clearly expressed, as have the key challenges that implementing REDD+ will have to contend with. The description of national and sub-national entities that will manage the REDD+ are clear, despite the appearance of complexity that can be expected in the presence of 'layers' of institutions and interactions across sectors and the functioning of special committees created in the context of REDD+. The TAP nonetheless is not clear on the degree of ownership of the program by the Government of Vietnam. During the TAP visit the Government expressed strong commitment to the ER program, but it appears that much of the documentation and design to date has been done by external parties. It is also not clear how the ER-PD will fit into the current institutional set up in Vietnam, given that currently it is under a department created for international projects, which may or may not be entirely mainstreamed into the current institutional structure of the country. In addition, it is not clear to what extent the government owns, or has accepted the emission reduction options that have been proposed in the program. Furthermore, the TAP understands that the Provincial REDD+ Action Plans (PRAPs) have also been developed though the support of international projects. It appears that the expectation is that most of the funds to implement them will come from international projects, beyond what the government supports under the Forest Protection and Development Plan. It therefore brings to question how the ER-PD will be funded and really become a sustainable program to which long-term performance based payments will apply.

The analysis of drivers of deforestation and forest degradation and the proposed actions to tackle the drivers make interesting reading even though more work still needs to be done. In the advanced draft, an attempt has been made to separate underlying causes from barriers to REDD+. Despite some improvements after the country visit, a special focus to address drivers outside the remit of the forest sector and which would normally require cross-sector mechanisms and policy level actions to tackle, is still needed. The key drivers and underlying causes and barriers need to be clearly linked to the intervention areas and activities and clear actions that will address underlying causes are still needed.

While the TAP also finds the volume and quality work on the reference levels, carbon accounting and MMR to be considerable, there are still a number of questions and comments that have been raised during the country visit and also in this report. Of critical importance is that the methods used to estimate forest cover change in setting the Reference Level are different than those proposed for future monitoring (and measurement of results, or estimating ERs). As a result of interactions with the TAP during the country visit, Vietnam is reviewing its originally proposed reference period and as a consequence, it is also going to review its RL and REL.

The description of safeguard measures and how Vietnam meets safeguard policies set by the World Bank is quite clear, even though there are still issues that need to be considered. These include the legal empowerment and poverty reduction programs for ethnic minorities and measures to halt further conversion of natural forests among others. Hence the TAP expects a program which given Vietnam's circumstance, would ensure that the program will eliminate or significantly restrict any further conversion of the remaining natural forests and ensure it provides basic needs of local communities, which cannot be achieved by simply protecting the forests.

The same applies to benefit sharing mechanisms which have yet to be concluded. Similarly legal aspects of carbon rights, transfer of titles to emission reductions, allocation of forest land and how to handle communal tenure still need more clarity and plans to overcome current difficulties.			
II. Level of Ambition → Criteria 1 – 2, including issues relating to legal aspects	1.1 1.2	YES NO	
The ER-PD proposes the use of 8 models that cover aspects of avoided deforestation, enrichment planting to enhance carbon stocks, longer rotation plantations and use of indigenous species in mixed plantations which will be the core of its emission reduction program. The document further asserts that the six North Central Coast Provinces (the NCC Region) is at the core of this ambition since it has the largest expanse of the remaining broadleaved evergreen forests, which are also significant repositories of the country's remaining biodiversity hotspots. Within the NCC to ER program aims to reduce emissions/increase removals by approximately 25Mt CO2-e over the eight years. This is around 17% of the current reference level estimates. However, these numbers will change with revisions to the RL and ER estimates. On a national scale, the ER-PD has clearly expressed its national ambition to manage 13.4 million ha of forest and increase that forest cover to 14.3 million ha by 2015 and to 15.1 million by 2020. However it is not clear what has been achieved by 2015.	2.1	YES	
By themselves the six NCC provinces constitute a well-defined Jurisdictional Area for the purposes of carbon accounting. The total ERP accounting area is over 5 million hectares, and the ER-PD target area for implementation of activities is 224,930 ha which represents 8% of the total forest land in the NCC Regions.			
The challenge is to overcome the barriers to REDD+ that have been described, notable of which is to tackle issues regarding the constructive and long-term participation of ethnic minorities who live within or adjacent to forest areas and whose status in the context of land ownership and access to investments may still be encumbered by inadequate legislation, including the outstanding issues of carbon titles. Even more important, will be the socio-economic benefits that will accrue to ethnic and other rural communities as a result of the program. Furthermore the extent to which the ER-PD will tackle or address the underlying causes of deforestation and forest degradation and most of which are outside the remit of the forest sector is critical among the other challenges and does not seem to have been amply reflected in the current version.			
III. Carbon Accounting	3.1	NO	
III (a) Scope and methods→ Criteria 3 - 6	3.2 3.3	YES YES	
III (b) Uncertainties → Criteria 7 - 9	4.1	YES	
III (c) Reference Level → Criteria 10 - 13	4.2	YES	
	5.1	NO	
III (d) Reference Level, Monitoring & Reporting on Emission Reductions → Criteria 14-16	6.1 6.2	YES NO	
III (e) Accounting for Displacement (leakage) → Criterion 17	7.1	NO	
III (f) Accounting for Reversals→ Criteria 18 – 21	7.2	NO	
III (g) Accounting for ERs → Criteria 22 - 23	8.1	NO	
	8.2	YES	
The TAP found that Vietnam had a high level of expertise available in the areas of forest	9.1	NO	
monitoring. Unlike many other countries they also have a long history of collecting forest inventory data and developing forest cover maps. This experience can be brought to bear on the	9.2 9.3	N.A N.A	
development of the RL and MMR for the proposed Emissions Reduction Program.	10.1	YES	
In reviewing the carbon accounting aspects of the ER-PD the TAP found a number of issues that	10.2	YES	

need to be addressed to be consistent with the Methodological Framework and IPCC guidelines.	10.3	NO	
The key issues identified were the:	11.1	YES	
• Lack of consistency between the methods applied to develop the reference level, the	11.2	YES	
proposed MMR program and the ER estimates,	12.1	YES	
 This makes it difficult to determine if changes in emissions and removals are due to 	13.1	NO	
the proposed activities or due to changes in the method of estimating emissions and	13.2	NO	
removals.	13.3	NO	
Assumption that all removals due to enhancement (reforestation and restoration) occur in	13.4 14.1	NO	
the year the activity occurs	14.1	NO YES	
This will lead to over estimation of removals during the RL period and is not	14.2	YES	
consistent with the accounting approach used in the ER estimates	15.1	YES	
 Methods applied to remove the effects of past reforestation programs (the 661 program) from the reference level 	16.1	YES	
 The methods as applied are not consistent with the Methodological Framework, 	17.1	NO	
which was primarily designed around deforestation emissions.	17.2	NO	
Estimation of uncertainties, including bias correction for activity data.	17.3	N.A	N.A
 The ER-PD does include a section on estimating uncertainties and the results of 	17.4	N.A	N.A
some uncertainty calculations, but does not include all of the information required	18.1	YES	
in the Methodological Framework.	18.2	NO	
	19.1	YES	
Some of these issues may be addressed by considering changes or exceptions to some of the MF	20.1	N.A	N.A
criteria in light of the removals aspect of this ER-PD. To address other issues will likely require	20.2	N.A	N.A
recalculations or changes to the methods being used. However, as noted above it appears that	21.1	NO	
Vietnam has considerable capacity to achieve this as required.	21.2	N.A	N.A
	22	NO	
	23	NO	
IV. Safeguards	24.1	YES	
Actions undertaken to meet WB and Cancun Safeguards→ Criteria 24-26	24.2	NO	
	25.1	NO	21/2
So far, the ER-PD has presented a short but clear account of safeguard issues relevant to their ERP		N.A	N/A
and have actually shown how the key tenets of the World Banks Safeguard Policies and Guidelines have been taken into account. Furthermore gaps between what Vietnam has proposed in relation	26.1	YES	
to those World Bank Guidelines have also been identified, as have been the expected positive and	26.2 26.3	YES	
negative impacts of the ERPD.	20.3	YES	
There is however more that needs to be done with respect to the facilitation of participation by			
ethnic minorities of which the NCC Region has many and their legal empowerment which are a			
critical Social Safeguard Issue. The TAP has noted that there is a real risk of the remaining degraded			
natural forests being converted to other uses, such as plantations and Cassava. Depressed global			
prices have reduced the impact of rubber as a deforestation driver since 2014, but other land uses			
could quickly takes rubber's place as a key driver and would further erode the rich biodiversity of the NCC Region. The TAP would like to see evidence that a strong Safeguard against such exists in			
the accounting area. Furthermore, poverty reduction efforts among the rural poor and with a focus			
on ethnic minorities needs to be explicitly addressed. It is also important for the ER-PD to comment			
on the risks arising from the often insecure land tenure of ethnic minorities, including those			
associated with the unclear status of communal tenure under the current law.			

٧.	Sustainable	Program	Design and	d Implementation
----	-------------	----------------	------------	------------------

- V. (a) Drivers and Land Resource Tenure Assessment → Criteria 27-28
- V. (b) Benefit sharing → Criteria 29 33
- V. (c) Non-Carbon Benefits → Criteria 34 35

The TAP commends Vietnam for its effort to describe the direct drivers and its proposed array of actions to reduce emissions. In general, the Tap has noted that drivers of deforestation and forest degradation have been described but with little or no quantitative data attributed to each of them, and also without any maps showing where changes in forest cover have occurred particularly areas that could be described as deforestation / degradation hotspots. To illustrate the current concerns, the TAP had asked a few questions and comments in an attempt to generate discussions with a view to improving the analysis of both direct drivers and their underlying causes.

27.1

27.2

28.1

28.2

28.3

29

30.1

31.1

32.1

33.1

34.1

34.2

35.1

35.2

NO

NO

NO

YES

NO

YES

NO

NO

N/A

NO

YES

YES

NO N/A N/A

N/A

The TAP has also observed that to understand the drivers of deforestation and forest degradation and barriers to REDD+' it would be important to provide a historical perspective of forest/land use changes. This would help to understand the land use dynamics and the current drivers and barriers. In addition a clear linkage between the drivers and barriers assessment could be improved. The key issues behind the drivers, which in the ER-PD is referred to as the indirect drivers, need to be clarified, and where possible the share of each driver should be quantified, and spatial maps where they apply could also be provided. In its present state, the current assessment is limited and should further link more clearly to the proposed intervention areas and present a more convincing case that the stated proposed interventions actually respond to the direct and indirect drivers.

It will be useful to clearly state the barriers to sustainable forest management in general (SFM) in general and then tie that up with barriers to REDD+, to show where differences occur if any. This is important since SFM is a key aspect of REDD+ in general and certainly in this ER-PD. So far, an attempt has now been made to separate barriers to the successful implementation of REDD+ as a national program from factors that can be described as underlying causes of deforestation and forest degradation. Despite that, the TAP is also of the opinion that the output from the drivers and barriers assessment under the Provincial REDD+ Action Plans (PRAP) development should still be cross checked with more in depth analysis. From our readings, the PRAPs do not examine the casual links of direct and indirect drivers so have limited connection to key policies and plans and general governance which are the core issues behind forest/land use change. In order to address the drivers and barriers these core issues have to be tackled and would justify need to invest further into the assessment of forest/land use change. It is the view of the TAP, that a more sophisticated and better articulated drivers assessment; which links direct drivers with the barriers is needed. This would then clearly inform the program design and intervention areas and activities. Although the PRAP exists there is also a lack of funding for activities identified so there also needs to be some clarity on how the intervention areas and activities will be supported.

The TAP has also observed that the planned emission reduction actions, though detailed are not always directly linked to the key drivers of deforestation and forest degradation and also to the identified barriers to REDD+. Furthermore, the key interventions to reduce emissions are within the remit of the forest sector, when in actual fact some driver such as those in the energy and agricultural sectors and other drivers such as global commodity prices operate from outside the forest sector. Chapter 5 of the ERPD could for instance, state how it will deal with such external drivers. For instance in Chapter 18, describes Vietnam's Renewable Energy Strategy till 2030 and an outlook till 2050 is interesting but its likely effects or impacts on the ER-P has not been provided

and should be linked to Chapter 5. The ER-PD should include links to other strategies and plans that could affect the proposed interventions. In general policy level actions to reduce emissions needs to be strengthened in the ER-PD. In particular, the ER-PD would benefit from an analysis of ongoing polices and plans that could support the proposed interventions and could help to scale the impact of the ER program. This could improve the ER program by showing the current project-type approach could be scaled into a Government program to could affect the NCC and possibly Vietnam more broadly.

In summary the key issues, relevant to criteria 27 and 28 (an also to 29-35) are listed herein as follows:

- A clear illustration of how proposed interventions are acting on the identified drivers
- The general lack of a historical perspective on past tends of deforestation and forest degradation (some measure of magnitude or quantification could help here)
- The assessment of barriers to SFM which is the key component of the (+) in REDD+ should come out more clearly than is currently the case
- The models described in Chapter 4 of the ER-PD while impressive, need to be put into the country's overall land use perspective and indications on their individual feasibility assessed based on the current drivers of deforestation and forest degradation, and current Government policies and plans.
- Most of the proposed actions are within the remit of the forest sector and there is hardly any mention of how drivers from outside forest sector will be addressed
- While the move from short-rotation (lower risk) forestry to longer (higher risk) rotations is commendable, the section is not quite clear on how this change will be made to work i.e. how the risk aversion tendencies of individual farmers and larger firms will be overcome. This should also include production practices, processing capacity and markets.
- It may also be useful to indicate appropriate financing mechanisms for each of the proposed ER actions. This does not necessarily need to be very detailed but there needs to at least be some description of the source of funding. Be it, domestic finance from bank, public expenditure, donors projects (e.g. new World Bank one and other development support such as JICA and others).
- The land tenure assessment, while highlighting many important issues, is not complete. It
 will be important to provide a more comprehensive analysis of the types and status of
 tenure in the accounting area, the risks that conflicts and uncertainties pose for the ER
 Program, and how these risks have been integrated into Program design.

VI. ER Program Transactions	36.1	YES	
	36.2	NO	
VI (a) ERPA Signing Authority and Transfer of Title To ERs → Criterion 36	36.3	NO	
VI (b) Data Management and ER Transaction Registries → Criteria 37 - 38	37.1	YES	
The ER-PD does demonstrate the authority of MARD to enter into the ERPA. It does not, however,	37.2	NO	
provide an adequate analysis of issues of Title to ERs, nor does it appear there is a strategy in place		YES	
for ensuring that title to ERs can be transferred to the Carbon Fund.	37.4	NO	
There has been an initial decision to build a national data management system; however, there is	38.1	NO	
no evidence that there are any plans in place to build such a system, and as such it is not possible to		N.A	
assess whether it will comply with the criteria of the MF. No information is provided on whether	38.3	N.A	
Vietnam intends to create its own or use an existing ER transaction registry	38.4	N.A	

SUMMARY SCORE and overall comment:

The TAP Team was impressed with the level of effort that was put into preparing the ERPD. Vietnam has over the years also generated forestry related data that the TAP Team found to be useful, even though it has challenges in setting RL/RELs largely because of the nature of its various data sets that make it difficult to do so. In addition, and based on the discussions that ensued during the TAP's visit to Hanoi, a new Reference Period, which will necessitate the recalculation of RL/RELs, is now being considered. Fortunately, the TAP has noted that and the technical capacity and experience of national staff working on the ERPD, particularly in MRV, Reference Levels and Reference Emission Levels is quite good, so improvements can be made with minimal external help. The TAP also believes that the Vietnam Team has had sufficient inputs that should enable it to revise its Program Design, address underlying causes of deforestation and degradation, link these to the proposed interventions and review its Legal Framework to support the ERP. All in all, the TAP is confident that the Country Team has sufficient capacity to improve the document.

Based on the methodological framework, there are 78 criteria and indicators, of which 9 were non applicable (N.A) at the time of the assessment. The indicators that are not met are outlined in various sections of the review and essentially refer to carbon accounting, safeguards, sustainable program design, and program transactions, which includes legal issues. The symbols used in the assessment are YES, NO where a criterion or indicator is met or not met, respectively. Where a criterion or indicator is almost met, a YES/NO is indicated. In summary, the criteria / indicators that are met are 30, a total of 35 are not met and 13 are not applicable at the time of assessment. Of the 35 which are not met, 19 are under the carbon accounting section of the ER-PD and the rest are shared among program design, safeguards, legal issues and program transactions.

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]

Within the NCC to ER program aims to reduce emissions/increase removals by approximately 25Mt CO2-e over the eight years. This is around 17% of the current reference level estimates. However, these numbers will change with revisions to the RL and ER estimates. The areas proposed under the interventions are in some cases ambitious, in particular the proposed reductions in forest degradation. The program also covers a range of interventions, including forest protection, restoration activities, reforestation and improved forest management. However, while the program appears ambitious, until revisions are made (as noted in other parts of the review) it is not possible to assess the true scale of the ER program.

On a national scale, the ER-PD has clearly expressed its national ambition to manage 13.4 million ha of forest and increase that forest cover to 14.3 million ha by 2015 and to 15.1 million by 2020, but since we are already in 2016 there should be clarity if the target for 2015 was actually achieved. The ER-PD further asserts that the six North Central Coast Provinces (the NCC Region) is at the core of this ambition since it has the largest expanse of the remaining broadleaved evergreen forests, which are also significant repositories of the country's remaining biodiversity hotspots.

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.

NO

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

As already stated under 1.2 above the ER-PD has stated its emission reduction ambitious despite the fact that the TAP is of the opinion that it is still not well coordinated with the National REDD+ Actions Plans (NRAP). However, the new NRAP is currently being developed and this will be based on a much more detailed drivers (and indirect drivers) assessment to develop appropriate policies and measures (PaMs). The NRAP process provides an important opportunity for the ER Program to fit with the new NRAP. In addition, the TAP also notes that although implemented within a jurisdictional region (the NCC) the proposed interventions are very specific and appear more project-like. There is little analysis of the broader issues of longer-term transformational change and that could drive the ER program and also how the ER program could also help drive change at a policy level. For example, these is little description of how the planned interventions could lead to changes in Government policy, and private sector and community management of forests. The TAP notes that this is a conservative approach for estimating the ERs, but does make the program appear less ambitious and not programmatic.

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]

By themselves the six NCC provinces constitute a well-defined Jurisdictional Area for the purposes of carbon accounting. The total ERP accounting area is over 5 million hectares, and the ER-P target area for implementation of activities is 224,930 ha which represents 8% of the total forest land in the NCC Regions. Since the NCC is a designated government agroecological zone containing 6 provinces of the country, its meets this criterion.

PART 2 OF TECHNICAL ASSESSMENT: DETAILED ASSESSMENT

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

NO

[Description of Sources and Sinks selected – 8.1]

The TAP were unable to answer "yes" to this indicator due to the inconsistency between the sources & sinks represented in Chapter 13 (Calculation of the emission reductions) and those included in the Reference Level (RL). Currently the proposed RL (and MMR system) do not appear able to detect several of the proposed activities and resulting ERs under the ER-PD, in particular those related to changes in plantation management.

The RL approach in the draft ER-PD includes emissions and removals from degradation and enhancement when lands transition between forest classes and deforestation and reforestation when lands move to and from the non-forest category. Carbon stock changes within a forest class that remains the same forest class are not estimated in the RL.

The expected ERs are estimated using specific "models" that can be mapped to the various forest transitions (Table 1). Models 2 and 3 aim to reduce the area subject to forest degradation. In Annex 4 of the ER-PD (page 22), calculations of the expected ERs notes that "avoided degradation" also includes some carbon stock enhancement using an assumed annual growth increment in forest areas that would have otherwise been degraded. Models 6 and 7 would fall under "plantations remaining plantations" and are not included in the RL estimations (i.e. all yellow squares are assumed to be "zero"). This may be justified if none of these types of management changes represented by the models occur during the RL period, but they will still need to be detectable during the accounting period.

Table 1: Example land use matrix used for the reference level showing where the ER-PD models apply. The yellow boxes are not estimated in the current RL.

Year X	Year X+5					
	Evergreen Rich1	Evergreen medium2	Evergreen poor3	Other forest4	Plantation	Non- forest6
Evergreen Rich		Model 1				
Evergreen medium		Model 2	Model 2			
Evergreen poor			Model 3			Model 3
Other forest						
Plantation					Model 6, 7	
Non-forest					Model 4, 5, 8	
Forest degradation Afforestation						
	Deforestation Unchanged					
Forest quality enhancement						

The total percentage of expected ERs not included in the RL is 8% for an 8-year period and 10% for a 10-year period—with the larger portions coming from Models 2 and 3.

Other differences between the RL (and proposed MMR) and how ERs are calculated are included in the assessment for Criterion 22.

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

YES

[Description of Sources and Sinks selected – 8.1]

Emissions from deforestation are included in the RL. Policies and actions to reduce deforestation are included. The MMR system should detect deforestation. The calculation of ERs also includes an estimated area for reduced emissions from deforestation.

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]

The ERPD calculates that emissions from degradation comprise ~60% of total gross emissions; therefore they should be (and are) accounted for in the ER-PD. The analysis of drivers is consistent with this expectation, as unsustainable wood extraction (legal and illegal) is identified as a key driver, including as the top driver of emissions in at least two of the provinces in the NCC region (Table 4.3).

Degradation is included based on forest class changes detected through remote sensing. However, the TAP identified two issues that could affect the estimated amount of emissions from forest degradation.

- 1. It is unclear how well such changes can be detected using Landsat 30m resolution images (typically this is very difficult). The accuracy assessment was unable to use higher resolution images to verify the accuracy of detecting the transitions. As such the estimates may be highly uncertain.
- 2. Further, it is unclear what the changes between forest classes represent. While the changes may be degradation, there could be multiple other causes, both human induced and natural, causing these changes. There is no documentation showing that all changes in land cover and forest class are related to REDD+ activities or land use.

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).

YES

[Description of Carbon Pools and greenhouse gases selected – 8.2]

Vietnam has excluded emissions and removals from dead wood (DW), Litter (L), Soils (S), and harvested wood products (HWP); it also excludes non- CO_2 gases. The two reasons for exclusion available are that such pools/gases are insignificant (<10%) or exclusion would be conservative (per Indicator 4.2, the TAP combines the assessment here).

On exclusion of pools:

• Exclusion of DW, L and S is conservative for deforestation and forest degradation. However, this is not necessarily the case if a country is measuring *net* emissions/removals and including carbon stock enhancement (e.g. reforestation or SFM). This is because omission of pools is nearly always conservative in the case of positive performance of *either* (avoided) emissions or (increased) removals (due to the fact that, e.g. forests → cropland has lower biomass in these pools; or vice-versa for NF→F). However, the opposite occurs if a country underperforms, i.e. estimations of results are *not* conservative if there are higher emissions or lower removals (than the baseline). Since countries only receive "credits" and not "debits", if only one side (emissions or removals) is estimated, then exclusion is conservative (for crediting only), but a two-tailed "net" calculation may have a positive overall performance, but not be conservative on one or the other end (e.g. emissions or removals), e.g. if removals are lower than the baseline but avoided emissions outperform the loss in net removals.

- A Tier 1 analysis by the TAP suggests that soil carbon could be a significant source (i.e. >10%) of emissions/removals, so its exclusion under the reforestation scenario may not be conservative (depending on whether performance in the monitoring period is above or below the reference level for removals). In addition, the MMR system does not include any process to estimate soil carbon change. The TAP notes that detecting and reporting changes in soil carbon under reforestation and restoration is difficult and could require a detailed research/sampling program. Given the complexities with soil carbon measurement, the TAP believes its exclusion may be considered part of a stepwise approach that is consistent with UNFCCC approaches for REDD+.
- HWP: The ER-PD suggests that consideration of Harvested Wood Products is not required by the MF; the TAP believes the MF is actually unclear on this issue, although HWP is considered a pool in IPCC guidance and for this reason should be considered. However, in the case of Vietnam, the exclusion of HWPs is likely conservative as the proposed ER-PD activities include moving plantations to longer rotation periods leading to increasing timber volume over wood chip.

On exclusion of non-CO₂ gases:

- Vietnam's latest GHGI submission (BUR 2014) provides CH₄ and N₂O estimates for emissions in 2010 but do not disaggregate figures for the NCC region or forest-related emissions. However, Vietnam provided to the TAP a calculation of non-CO₂ emissions in the NCC region in 2010 (based on 836 ha of burned forest) of 140,384 tCO₂eq. As a percentage of estimated forest-related emissions from 2005-2010, this would be 1.9% or less than 10% (as a test of significance).
- To verify the level of significance of fire, the TAP compared data from FAOSTAT¹ (which draws from an independent source, i.e. burned forest area from GFED4² overlaid on FAO-FRA ecological zones). According to this data, tCO2e from biomass burning from 2000-2010 was on average 174.45Gg/yr = 174,450 tCO₂/yr. Using Vietnam's estimated forest-related emissions in NCC (only) for the same period (~8.6MtCO₂e) suggests *national* non-CO₂ biomass burning is less than 2% of NCC forest-related emissions, or well below the threshold of significance as defined in the MF.

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

YES

- 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]

The assessment of this indicator is merged with 4.1 above.

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]

¹ A full description of the methods used in the FAOSTAT database can be found at: http://faostat.fao.org/Portals/_Faostat/documents/pdf/BurningBiomass.pdf

² A description of the Global Fire Emissions Database v.4 can be found at: https://daac.ornl.gov/VEGETATION/guides/fire_emissions_v4.html

The ER-PD describes the methods applied for setting the RL and MMR. The emissions estimates are made using Tier 2 emissions factors and Approach 3 representation of lands.

However, the methods are not always applied in a way that is consistent with the IPCC guidelines and guidance. The main examples are:

- Assumption that all cover change is land use change (deforestation or enhancement) or a REDD+ activity (degradation or restoration) to develop Approach 2 type land area matrix for calculating GHG fluxes from forests. Many developing countries use this proxy approach in absence of having land use change data; for most tropical forest countries, particularly those whose GHG forest fluxes are overwhelmingly from deforestation, it can provide good estimates. However, in the case of Vietnam—with more dynamic land use changes occurring—this can result in overestimations of both emissions and removals as well as incorrect allocation of lands. It is also unclear that all the changes in cover relate to human activities or REDD+ related activities. Analyzing the maps as a time series rather than differencing may help to determine if changes are due to harvest or misallocation. Doing so can help Vietnam be compliant with Indicator 21, which requires a country to be technically capable of monitoring reversals (see assessment under Indicator 21).
- Removals factors for enhancement activities (both reforestation and restoration) are applied fully in the
 year/period that the activity is detected. In reality this uptake occurs of a number of years. Applying this
 method leads to an overestimation of removals in the reference level, particularly for reforestation and
 restoration of natural forests. This method is not consistent with IPCC guidelines. This may be accepted by CFPs
 if the same method is applied in the crediting period including a discount for the survival / success rate (87%);
 doing so would front load the credits provided (i.e. overestimate the actual amount of increased removals in
 the year of detection in the MMR system). However, this could lead to the estimates for the ER program to
 differ to those used for UNFCCC or other reporting.
- Application of an average carbon stock approach to estimating emissions and removals in harvested plantations (per explanation in Annex 4 of how models 6 and 7 would be calculated for increased removals). Again, CFPs may determine that this is an acceptable approach in this instance.

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]

Much of the information required to be compliant with this indicator is contained in the ERPD itself. The TAP's expectation is therefore that the methodological steps for this Indicator will be made publicly available on the FCPF webpage. In addition, we note the following (including information that is public beyond the ERPD):

- **Forest definition**: The forest definition used in the ERPD is the same as that used in the FREL/FRL submission to the UNFCCC³ and can also be found in Circular No. 34/2009/TT-BNNPTNT on criteria for forest identification and classification.
- **Definition of classes of forests**: Land use classes and a stratification system are provided in Section 3.2 and Annex 2 of the ERPD. They are the same as those in the FREL/FRL submission (although collapsed into fewer categories, see Indicator 10.2). Forest classes are based on the same (publicly available) circular as above.
- Activity data, and pre-processing and processing methods: A description of methods used to generate activity data can be found in the ER-PD document (in particular, Annex 2, Section 1) however, see Indicator 6.2 with regard to making public spatial information, maps, etc.
 - Further information on the development of AD at the national level (on which the NCC data is based) can be found at: http://vietnam-redd.org/Upload/Download/File/Report AD En 13102015 (ai) P 4911.pdf
- Emission factors and description of their development: This can be found in the ER-PD document (in particular, Annex 2, Section 2). Further detailed description of NFIMAP Cycles I to IV plot measurement data can be found at: http://vietnam-redd.org/Upload/Download/File/VN_EmissionFactorReport_5028_2130.pdf
- Estimation of emissions and removals, including accounting approach: Notwithstanding the issues identified in this assessment regarding estimation of ERs, the ERPD does make clear the intended accounting approach (particularly ERPD Annex 2, Section 3).
- **Disaggregation of emissions by sources and removal by sinks**: Annex 2, Section 3 of the ER-PD provides disaggregated estimates of emissions and removals in the reference period. These can be replicated with information from the ERPD (combining information provided on AD + EF). However, during the TAP in-country visit, the TAP was provided with a useful spreadsheet of the calculations.
- **Estimation of accuracy, precision, and/or confidence level**, as applicable; Annex 2, section 6 of the ER-PD provides a detailed analysis of the methods applied to estimate uncertainty. However, the TAP found that improvements to the process are required.
- **Discussion of key uncertainties**; Annex 2, section 6.29 includes a discussion of the key uncertainties. However, the TAP found that some uncertainties were missing, in particular those relating to assumptions such as growth rates and the effects of moving between forest classes.
- Rationale for adjusting emissions: A rationale is provided for the proposed Program 661 adjustment; this same rational is provided in the FREI/FRL submission to the UNFCCC.
- **Methods and assumptions associated with adjusting emissions:** These are provided in the ERPD; we also note that the report on the success/survival rate of plantations (an assumption made for the Program 661 adjustment) is publicly available at: http://vietnam-redd.org/Upload/Download/File/661SuccessRateReport-240716 2206.pdf

As noted above, most of the information to comply with this Indicator is in the ER-PD itself. There are also other documents – such as Circular 34 and reports that are available on the Vietnam UN-REDD website. In the longer term, it

³ http://redd.unfccc.int/submissions.html?country=vnm Version 2, 20 May 2016

would be preferable for all the information (including from future monitoring and the publication of results) to be stored and made publicly available in a single web portal. The ERPD suggests the FORMIS system will be used as a hub for all the information of the ERPD, which is encouraging.

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:

NO

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

Any spatial data used to adjust emissions, if applicable.

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

While an explanation is provided in the ER-PD on how elements of the RL were derived from spatial information, the underlying data sets are currently not publicly available.

Section 9.9.2 suggests that if the ER-P is approved, Vietnam will "give priority to integrate forest-related data of the provinces in the Accounting Area into the FORMIS system and use FORMIS as the information system of the ER-P". FORMIS (Forest Management Information System) is a system that aims to support forest governance by providing accurate information for decision making in the forest sector. It is currently in Phase 2 of development.

The TAP held a meeting with a responsible person for the FORMIS system and assesses it to be an extremely suitable platform on which make spatial and other data publicly available. Following the TAP mission, it was suggested that Vietnam could demonstrate more clearly *how* such data and information will be made transparent; for example, exactly what data/information will be publicly available, to whom, and on what timeframe. It was also suggested that the Government may wish to begin a dialogue with FORMIS on what this will require to accomplish this in the FORMIS system (e.g. building a module, agreeing on management of public access, etc.)—as of the time of the TAP mission, there had not yet been discussions with FORMIS directly on these matters.

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.

NO

[Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period 8.3]

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

[Identification and assessment of sources of uncertainty 13.1]

The ER-PD does provide a list of assumptions applied in the development of the RL. However, not all assumptions that may affect the estimates have been clearly identified, including

- Uptake rates in reforestation and forest restoration, including the number of years to reach the new carbon stock and the total carbon stock
- Effects of boundary issues due to method of mapping (vectors through visual interpretation) that can lead to inconsistencies as to where boundaries are drawn that results in slivers (small areas that occur when differencing two maps where the boundaries differ slightly) and other discontinuities that can result in false change when comparing the maps
- Changes in carbon stock within forest classes due to human activity but do not cause areas to move between forest categories
- Missing areas of change, or misallocation of change due to the 5-year period between each remote sensing
 map. Five years is a long period in such a dynamic landscape and the effect of this assumption is not
 considered. This may or may not have an effect of overall emissions estimates. Many other countries have
 also made this assumption in the past.

The proposed MMR method does have good systems in place for estimating uncertainty. Although not specified in this criteria, the TAP also notes that growth rates used in calculating the ERs are not backed by any references and, while within known ranges, appear high in some cases. The ER estimates do not include an estimate of uncertainty.

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]

NO

The ER-PD does provide an assessment of the relative contribution to overall uncertainty for the sources identified in the ER-PD. However, as the TAP notes some key assumptions have not been included in the assessment as noted in Indicator 7.1.

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.

NO

[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]

The RL uses existing data for both the activity data (forest type maps from previous inventories) and emissions factors (2010 National Forest Inventory). The existing forest maps have been subject to further improvement through a series of donor-supported projects, including the removal of areas of illogical changes. While the maps have been developed using the same methods, they were developed independently of each other. This greatly increases the chances of systematic errors due to differences in the way operators interpreted the procedures and the data. While overall systematic errors are assessed to be low (i.e. ~95% accuracy for both the 2000-2005 and 2005-2010 periods), bias was detected particularly for deforestation and forest degradation (i.e. for these change classes, in the 80-90% accuracy range). The area adjustment was calculated, but could not applied to the RL calculation due to the method of summarizing the activity data for the purpose of uncertainty analysis.

The emissions factors are based on the 2010 forest inventory cycle, which is considered the best data available. This includes standard procedures for measurement and storage of data. Further work has been conducted to clean and improve this data. However, the application of the emissions factors for enhancement activities (reforestation and restoration) as occurring entirely in the year the activity occurred will lead to systematic errors in the final results.

The proposed MMR program includes standard operating procedures and a detailed set of processes for QA/QC in the data collection and analysis process. However, as the methods change between the RL and the MMR it is unlikely the results will be comparable or consistent.

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 random errors and uncertainties for the RL identified in the report were minimized to the extent possible using the existing data. However, as noted in Indicator 7.1, there are potential issues with key assumptions (Indicator 7.1) and this could lead to increased error that is not accounted for. Further, random errors due to creating change maps from different manually map products (slivers, see also Ind 7.1) are not considered.

Until the MMR system is operating is it not possible to assess if all errors and uncertainties have been minimized. The proposed methods do include processes for minimizing errors and for calculating uncertainties.

As noted in Indicator 7.1, there is no error or uncertainty assessment for the ER estimates.

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

NO

[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]

For the RL the uncertainty estimates for the activity data and EFs are quantified. However, the area bias correction has not been applied in the emissions estimates. The methods for estimating uncertainty in the MMR program appear to be appropriate, but this cannot be assessed until the system is in place and operating. Although the uncertainties are high monte carlo methods are not appropriate for the methods currently being applied by Vietnam.

There are no uncertainty estimates provided for the ERs directly. For the ERs expected to come from avoided deforestation and degradation the uncertainty estimates developed for the RL could be applied. However, there are no uncertainty estimates provided for other ER actions, in particular those due to changes in plantation management and the growth of natural forests following protection.

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]

Monte Carlo methods were not applied for the estimation of Emissions Reductions. However, the TAP noted that Monte Carlo methods may not be needed given the relatively simple methods applied.

The ER-PD does include total uncertainty estimates by each overarching category (deforestation, forest degradation, reforestation and restoration). It does not include the total combined uncertainty for all the emissions and removals from all activities. The ER-PD does not provide a transparent description of the process that would allow the TAP to assess if the uncertainties reported are at the two-tailed 90% confidence interval. The activity data uncertainty estimates use 95% confidence intervals (assuming two-tailed). The TAP does note that the ER-PD does provide a description of the process of calculating uncertainty and this indicator may be addressed by updating the text to include the information required in this indicator.

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]

The estimates are made through a single system and do not currently use proxy data.

Annex 2 includes separate uncertainty estimates provided for each broad intervention for the RL (deforestation, degradation, restoration and reforestation). However these do not include bias corrections (see Indicators 8.1 and 9.1)

C 10 The development of the Reference Level is informed by the development of a Forest Reference Emission Level or Forest Reference Level for the UNFCCC

Ind 10.1 The Reference Level is expressed in tons of carbon dioxide equivalent per year [Estimated Reference Level 9.7]

YES

Yes, the reference level is expressed in tonnes of carbon dioxide equivalent per year.

Ind 10.2 The ER Program explains how the development of the Reference Level can inform or is informed by the development of a national Forest Reference Emission Level or Forest Reference Level, and explains the relationship between the Reference Level and any intended submission of a Forest Reference Emission Level or Forest Reference Level to the UNFCCC

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 ER-PD explains some of the similarities and differences between the RL (in the ER-PD) compared to the FREL/FRL submitted to the UNFCCC. The two used the same forest definition and data from NFIMAP-4. While not all elements are exactly the same in the UNFCCC submission vs. the ER-PD, the two can be said to be generally consistent. For example, the RL collapses some of the land cover categories in the national FRL. NCC-specific Emission Factors were also estimated, but using the same national data from the NFI. There are also some differences in the Activity Data when the analysis was downscaled to the NCC region (see Annex 2, page 53). The TAP does not consider these differences material.

An update in the modified UNFCCC submission related to new data and information on the success rate of Program 661 has been included in the Advanced ER-PD. The TAP notes, however, that some changes were made to the modified FREL/FRL submission to the UNFCCC that have not yet been modified in the ER-PD. In particular: (1) New definitions for REDD+ activities (in particular, conservation and the sustainable management of forests), and (2) a new strategy for ensuring conversion of natural forests to plantations will be counted as a loss of forest carbon stock—and that the same areas would not be eligible for future removals. This is related to Indicator 24.1 on Safeguards, with respect to the

UNFCCC safeguard on incentivizing the protection and conservation of natural forests (and that actions are not used for the conversion of natural forests).

The ER-PD also suggests that the RLs used in the accounting area for the ER-P (for the NCC region) will be nested into the national FREL/FRL submission to the UNFCCC, in order to avoid double counting of ERs. It suggests the ER Program would report its performance to the Vietnam REDD+ Office, which is responsible for reporting on REDD+, including information that would be included in BUR submissions. While details on how the "nesting" would be accomplished were not provided, the TAP considers the statement of intent a positive signal—although more details will be required to avoid double counting (see Criterion 23).

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

NO

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

The ER-PD suggests Viet Nam is in the process of preparing a second BUR and that the RL *can* contribute to improving GHG estimates for the LULUCF sector. However, there is no explanation on intended steps to ensure the RL achieves consistency with future GHGIs.

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]

Vietnam's reference period in the Advanced Draft ER-PD is 2000-2010, which is compliant with the MF requirement (i.e. currently there is not more recent data available for the entire NCC region). However, Vietnam suggests it may shift the reference period to a more recent time period (e.g. 2005-2015)—a result of discussions during the TAP incountry visit, which occurred just after the Carbon Fund meeting in June 2016 when CF Participants modified this Indicator (to "two years before the TAP starts its assessment"). While more recent data may not yet be fully available for a more recent time period, the TAP agrees that it would be advisable to avoid a large gap, if possible, between the reference and crediting periods and to provide a more accurate representation of expected emissions/removals in the crediting period. The end date in this instance would be 1.5 years prior to the start of the TAP assessment, but is justified as Vietnam has long been on a 5-year cycle of developing forest inventory data.

Ind 11.2 The start-date for the Reference Period is about 10 years before the end-date. An alternative start-date could be allowed only with convincing justification as in Indicator 11.1, and is not more than 15 years before the end-date.

YES

[Reference Period 9.1]

Both the "temporary" Reference Period (2000-2010), plus the proposed new Reference Period that may be considered for the Final ER-PD (2005-2015) are compliant with this indicator (see comments in Indicator 11.1).

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]

Vietnam specified the forest definition used in the Reference Level construction. The definition is consistent with that applied in the UNFCCC submission. The TAP notes that the stratification of forest types is different in the FREL/FRL submission to the UNFCCC, but consistent with the ER-PD (which collapses several forest types into one category given similarities in carbon stock estimates and to reduce the level of uncertainties).

The TAP also notes that Vietnam changed some of the definitions for forests and activities in response to a recently UNFCCC Technical Assessment. It will be important that these changes are reflected in the updated ER-PD to ensure consistency.

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

NO

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

Because the proposed RL omits removals in the reference period from Program 661, it therefore exceeds the average annual historical <u>NET</u> emissions, which is how this Indicator was interpreted for the assessment (per guidance provided by the FMT). In addition, Vietnam does not meet the eligibility requirements of Indicator 13.2.

However The TAP believes that the MF was not written in a way that considers options for countries with large removals and therefore this indicator requires further clarity from Carbon Fund Participants on its intent for countries in situations like Vietnam. It is the view of the TAP that, in particular, the requirement of Indicator 13.2(i), which is justifiable in the instance of avoided deforestation, is not a logical requirement for considering "business as usual" baselines for removals, and Indicator 13.2(ii) should include "circumstances that changed such that rates of *forest-related GHG fluxes* [or forest-related emissions or removals] during the historical Reference Period...".

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:

NO

(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].

Vietnam is not an HFLD country. It has medium forest cover (between 40-50%) and low deforestation rates. National circumstances do not suggest that deforestation and degradation would be underestimated by historical data; however, the adjustment proposed is for *removals*—which is not contemplated by this Indicator.

Program 661 appears to be a specific national circumstance, i.e. a one-time program approved by the Parliament (1997) and initiated by the Prime Minister in 1998, with a specific end date (2010), a special budget line item and also supported by forest assistance funding. Additional justification, however, may be provided by Vietnam – for example, to put Program 661 the context of other ongoing forest restoration efforts and to provide more information on the two justifications provided: (a) reduced area for planting; and (b) terminating of funding.

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:

NO

- i. The basis for adjustments is not documented; or
- ii. Adjustments are not quantifiable.

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

Vietnam has provided information on the proposed adjustment and Program 661 is a well-documented reforestation effort by the country. The ER-PD also provides information on the quantification of the impacts of Program 661, including data and information on the success (survival) rate, as requested by the TAP prior to the advanced draft. The same information on 661 is consistent with Vietnam's modified FREL/FRL submission to the UNFCCC.

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

NO

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

The adjustment for Program 661 exceeds 0.1% of total carbon stocks. However, the TAP notes that the type of adjustment (i.e. for removals) does not appear to be originally contemplated by the Carbon Fund when developing the MF -- and therefore the threshold (0.1% of carbon stocks) may not be applicable.

Note: The average carbon stocks using Annex 2, Table 1.13 (area of forest stratified by 5 forest types) multiplied by the EFs provided in Annex 2, Table 2.3 gives an average of ~115 MtC or 420 MtCO2 over the period 2000-2010, or an annual average of 420,162 tCO2 per year. This compares to a proposed adjustment of -2.9 MtCO2/yr. These figures will change with a new Reference Period (2005-2015).

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.

NO

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

The ER program does not use the same or demonstrably equivalent methods for setting the Reference Level and for ongoing MMR. The two systems use the same remote sensing data but very different methods for interpreting the data (RL used manual mapping, MMR will use semi-automated methods). There is no proposal in the ER-PD to describe how the results could be made comparable.

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]

The MMR system should be able to report at least twice during the period, if not more frequently. The method proposed is spatially explicit but does not describe how lands will be tracked through time (as per Approach 3). Degradation is current estimated from changes between forest classes and does not use proxy data.

The TAP has provided an assessment of "YES" for this indicator, notwithstanding the issue (mentioned in several other indicators) that the RL and current and proposed MMR system do not measure the full suite of expected ERs in the proposed "models".

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]

Vietnam is using Tier 2 for aboveground biomass estimates and IPCC defaults for root: shoot ratios. Tier 1 is not used for any pools.

The TAP considers the answer to this indicator as "YES" because Tier 2 estimates are applied. However, the TAP notes that it is unclear how the emissions factors will be kept consistent between the RL period and the measurement. The RL periods EFs are based on the 2010 forest inventory, applied back to 2000 using remote sensing. During the measurement period EFs will be calculated using a newer inventory system. It is unclear if any differences in EFs would be to actual changes or due to differences in the measurement and sampling system.

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]

The Forest Monitoring System proposed in the ER program is based heavily on the planned NFMP for Viet Nam. This includes a new national scale mapping method, improved forest inventory data and systems for the collection and processing of local data collected by forest rangers and communities. As such the ER program MMR will likely be consistent with the national system. However, it is not clear how any additional data collected as part of the ERP will be used by the national system. For example, data on the growth and management of new forest plantations is not explicitly addressed in the NFMS or MMR plans. These issues will need to be addressed as the programs are implemented.

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 proposed activities for the ER program include piloting within the Provincial Forest Monitoring System (PFMS) monitoring, verification and reporting of forest cover including the use of village-based forest patrolling teams that can report detected forest change from on the ground, and use tablets to record information and send it to a database (which is the checked by District, then Provincial authorities). This system is described in the following document and has been supported by JICA:

http://www.vietnam-redd.org/Upload/CMS/Content/REDD%20projects/JICA-DienBienREDDpilot/SUSFORM-NOW/00 Implimentation%20handbook-en.pdf

This system is not used for mapping or to develop forest cover change, but can be useful as a verification system. The ER-PD suggests information from the tablet system would be integrated into FORMIS II. While it is unclear how the tablet system, which has been piloted, will be scaled up and how information will be integrated into the national monitoring system, the piloting work to date is compliant with "exploring opportunities" for community participation in forest monitoring and the ER-PD suggests that further expansion of these activities will occur.

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

Ind 17.1 Deforestation and degradation drivers that may be impacted by the proposed ER Program measures are identified, and their associated risk for displacement is assessed, as well as possible risk mitigation strategies. This assessment categorizes Displacement risks as high, medium or low.

NO

[Identification of risk of Displacement 11.1]

A table has been produced which summarizes possible displacement risks. However, it does not contain a full reflection of displacement risks. Given that the population in the forest areas the project will engage are relatively poor and dependent on local production of food crops, any activities which limit the local populations access to land and crops is likely to result in localized displacement. Providing local populations improved access to protected forest will not substitute for land for producing food crops unless part of the land is allowed for crop production or alternatives are found. This would be medium to high risk. However this may be picked up within the accounting area.

The TAP agrees that the risk of displacement for the other drivers are generally low but are of the opinion that the risk of international displacement as at least medium. If the Program somehow managed to tackle illegal logging then this may simply cause greater illegal activities over the border, particularly in Lao PDR. This is critical border of movement of illegal timber from Lao PDR to Vietnam.

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.	NO
[ER Program design features to prevent and minimize potential Displacement 11.2]	
Given that the ER Program does not recognize any displacement risks then no strategy to mitigate or minim displacement is provided. However if Vietnam agrees with the TAP that a displacement risk identified above as the TAP seems to think, then a mitigation strategy would need to be put in place.	-
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 additiong-term sustainability of ERs	ress the
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]	
While an assessment of the anthropogenic and natural risks of reversals has been carried out, there is no cl differentiation of risks during the term of the ERPA and after the end of the term of the ERPA. This needs to	
Ind 18.2 The ER Program demonstrates how effective ER Program design and implementation will mitigate significant risks of Reversals identified in the assessment to the extent possible, and will address the sustainability of ERs, both during the Term of the ERPA, and beyond the Term of the ERPA [ER Program design features to prevent and mitigate Reversals 12.2]	NO
	<i>(</i>
Information has been provided on how the Program will mitigate risks and address the sustainability of ERs	(Table

Information has been provided on how the Program will mitigate risks and address the sustainability of ERs (Table 11.1). However it is not always clearly justified that these activities will be able to mitigate these risks. The risk of higher prices for commodities, for example, could lead to a major reversal in land use. Rubber has expanded rapidly in the NCC due to government support programs and high prices in the past decade. These prices have since fallen considerably, while the price of the other main crop which is exported, cassava, remains fairly low. If the prices were to spike significantly and/or other profitable crops introduced to the area history in Vietnam has shown this to be a major driver of forest loss and degradation. Stricter policies which are being introduced will help mitigate this risk. However this would need to be complimented by stronger enforcement capacity.

The ER-PD has indicated Option 2 to develop an ER Program CF Buffer. The determination of the reversal set aside percentage, based on guidance provided as shown in Appendix 6 does not provide sufficient details on how these

percentages were derived. It is our view these are on the low side. In particular Default risk B, as there remains ineffective vertical/cross sectoral integration. Plans and activities continue to be implemented very much on a sectoral basis which makes it highly challenging working and finding solutions across sectors which is particularly important for REDD+. In many cases there is also ineffective coordination vertically and although there are a myriad of different plans and policies in Vietnam, implementation remains a major challenge. For these reasons we would deem that there is medium risk. Also with Default risk C there is certainly a lack of experience in decoupling economic growth and deforestation and forest degradation and there continues to be a lack of understanding and efforts to address the underlying drivers of deforestation (in particular around governance). Although there is an improving legal and policy environment to support REDD+, there is a lack of domestic support and the continued expectation that this will be supported through international agencies. This remains at least a medium risk.

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]

Vietnam has chosen Option 2. Comments on the reversal risk assessment are provided in Criterion 18.

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

NO

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

Unlike many other forested developing countries, Vietnam's dynamic land sector means that the assumption that all cover change is land use change (deforestation or enhancement) or a REDD+ activity (degradation or restoration) may be inaccurate (see discussion for Criterion 5). This current assumption may result in overestimation of reversals (in the traditional sense, a planted area in one period may be detected as deforestation in the next when it is actually harvest with expected regrowth). It may also fall under the MF definition of reversals, depending on timing of the monitoring periods.

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]

NO

The TAP believes this indicator is currently out of compliance with the MF due to Step 1. The ex-ante estimation of expected Emission Reductions (ERs) was not made as a comparison to the RL—rather, it was based on specific activities/models, expected hectares where interventions would take place, and the resulting impact on emissions/removals from those specified activities. This allowed for the use of different methods to calculate the RL vs. estimated ER delivery.

As explained (and illustrated) in Criterion 3, at least four of the eight proposed "models" (Models 2, 3, 6 and 7) assume generation of ERs (all from removals, labeled "C+" in Table 4.3, Annex 4) that are currently not estimated or included in the proposed RL (and so cannot be "subtracted from the RL"). From Table 4.3, it can be calculated that of the expected ERs, about 12% fall in this category.

The expected ERs are based on application of eight "models", on 224,930 ha of land (4.4% of the total land area of the NCC region), that are expected to be carried out over the ERPA period. The estimates are considered to be conservative as they do not include expected changes from the full range of REDD+ policies and measures suggested in the ER-PD. However, given the dynamic nature of Vietnam's lands, it also means that expected GHG flux variabilities may overtake the actual impacts that occur from the seven models, or activities, on what is currently a small fraction of the NCC region (see Annex 4, Table 1.1 for the % of land use class area for each model – for example, plantation models 6 and 7 are expected to be implemented in 7.6% of the total plantation areas). Another example are the historic emissions from EGR-R to EGR-M forests which changed from ~13.5MtCO₂ in 2000-2005 to ~4.9MtCO₂ in 2005-2010; and from EGR-R to EGR-P from 3.5Mt to 5.3Mt in the same periods. Overall the differences in the two periods were

around 3Mt in (increased) emissions and 26Mt in (increased) removals. The ER-PD suggests that some interventions will be targeted at hotspot areas (e.g. Model 3); this approach should help reduce the "signal to noise" ratio during the monitoring period.

There are also differences in how removals are estimated over time. Models 4, 5 and 8 are calculated by averaging out the carbon benefits of the models over 10-year periods, whereas the RL assumes full carbon stock uptake of the plantation when first detected (e.g. by the Landsat imagery, so several years after planting). This results in a conservative estimate of ERs, i.e. an overestimation of removals in the RL and/or an underestimation in the monitoring period. However, the difference could be very large and would likely result in Vietnam not being able to meet the RL even if area targets are reached. Removals related to avoided deforestation and degradation (models 1, 2 and 3) are spread over 5-year periods and therefore not comparable to the RL. However, in the longer term the accounting of carbon benefits may "true up" (although not necessarily during the ERPA term).

The TAP notes that the assumed survival rate of plantations in the RL is 87%, but is 90% in the estimated ER calculation. This difference will not substantially change the estimated ER delivery.

Finally, the TAP notes that In the draft ER-PD, Vietnam did not apply an uncertainty set-aside. The Advanced ER-PD (Section 13.1) suggests that there will be an assumption of a 4% set-aside. While uncertainty of results is unknown at this time, a 4% "conservativeness factor", given the current accuracy assessment estimations, is a credible assumption. However, the 4% does not (yet) appear to be applied in Table 13.1 (ex-ante estimation of ERs). The figure preceding the Table in the text (page 138), suggests the total ERs for an 8-year period would be 20.75MtCO2, which appears to include the 4% set aside. Table 13.1 in the main text also does not appear to match Table 4.3 in Annex 4.

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

(i) [Participation under other GHG initiatives 14.1]

NO

The ER-PD states that the "ER Program will be nested into the national REDD+ implementation to avoid double counting of emission reduction and/or removal enhancement" and that any REDD+ results will be nested into the national REDD+ performance to be reported to the UNFCCC in the BUR technical annex (Section 4.20). The ER-PD also states an intent to develop a registry (Section 18.2), although the information provided is very general and limited (see assessment for Indicator 37.2).

In particular, the ER-PD does not yet describe how "nesting" of projects may be managed within the NCC region, as well as any details or methodologies on how nesting ERs sold from the NCC region would be included in a national level accounting system—particularly given that currently the NCC data is somewhat consistent, but not the same as the national level estimations, including those used in the national FREL/FRL (see assessment in Indicator 10.2).

The ER-PD does not appear to clarify participation in other GHG initiatives, but rather describes in Section 18.1 some of the national level systems (e.g. the GHG Inventory and NDC). For example, currently, there is one CDM A/R project in Vietnam (although not located in the NCC region). There may also be at least one additional project (that the TAP was able to discover) in the pipeline within the NCC region: the Khe Nuoc Trong Carbon Balanced Project (World Land Trust as the project developer), although the TAP does not have information on the status of the project. World Land Trust's website suggests the project would like to engage in voluntary offsetting.

In sum, it would be useful for the ER-PD to provide a status of REDD+ related projects in the country and how double counting will be avoided both from project to subnational level programs (such as within the NCC), as well as with the national level system of monitoring performance.

NO

Explanation covered above.

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]

So far, the ER-PD has presented a short but clear account of safeguard issues and has shown how the key tenets of the World Banks Safeguard Policies have been taken into account. Furthermore gaps between what the ER-PD proposes in relation to those World Bank Guidelines have also been identified, as have been the expected *positive and negative impacts* of the ERPD. The TAP has also noted the presence of a Gender Action Plan preceded by an analysis

There is however more that needs to be done with respect to the facilitation of participation by ethnic minorities of which the NCC Region has many and their legal empowerment which are a critical Social Safeguard Issue. Furthermore poverty reduction efforts among the ethnic minorities appears to be a challenge since the ethnic minorities that hold communal tenure land rights could be disadvantaged since even the Vietnam Land Law of 2013 does not make provision for communal tenure.

A critical safeguard issue with respect to the project interventions is that the support for plantations will lead to a further loss in the remaining natural forests. This issue is of high concern given that forest which can be classified as 'degraded' natural forest can be converted to tree crops such as rubber and acacia. Although rubber has been the major driver of conversion, because of current depressed global prices, the threat from forest plantations remains. This threat may be made all the more likely with the forthcoming revision of the forest law. This law will have provisions to re-designate 'non-critical' protection forest to production forest and could possibly will lead to the likely large scale conversion of protection forest to plantations. It is important that the ER Program ensures that this is no conversion of natural forest of plantations. This is already picked up in the UNFCCC FREL submission.

Another critical issue is basic food security and poverty alleviation. If the ER-PD restricts the use of forest land for food crops, without alternative options then demand for land for subsistence farming will continue to be a threat to the sustainability of the ER Program. The ER Program has nothing on support to agriculture as it is just focused mainly on forests. The focus which is entirely within the forest sector remains cause for worry.

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

NO

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

The TAP observes that Table 14.1 depicts a clear appreciation of the ER-PD of the World Banks Operational Policies on Safeguards and what the ER-PD aims to do to address each item under the operational policies. However, the TAP has noted that there is a real risk of the remaining degraded natural forests being converted to rubber and acacia plantations and other crops such as cassava; a development which may further erode the rich biodiversity of the NCC Region. The TAP would like to see evidence that a strong Safeguard against such exists in the accounting area and indeed nationally. Given that Vietnam's Land Law of 2013 still does not recognize community tenure (*common property rights*), how does the ER-PD expect to legally empower ethnic minorities who live within or in close proximity to the target areas within the NCC Region? In addition to this, the TAP expects the ER-PD likely to be more explicit on how it is going to address poverty alleviation among the rural poor with special attention to ethnic minorities who are currently not as active in the formal economy as others. The same ethnic minorities constitutes 11.5% of the overall population of the NCC Region and in many cases over 90% of the forested upland area.

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

NO

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

The TAP has noted that this has been explained and is consistent with the two preceding indicators. Descriptions on arrangements to provide information on safeguards during ER Implementation has been provide but is mainly confined to the early assessment done as part of the process to develop the ERPD. There much less on how safeguards will be monitored. So far, the section does not provide an information system for safeguards. As such a question remains as to whether there is a plan to further elaborate a comprehensive system for the monitoring of safeguards in the ERPD, and whether Vietnam consider a plan to monitor safeguards on a set regular basis to be included as a section in the national carbon registry.

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 **YES** and is made public. The FGRM applicable to the ER Program demonstrates the following: i) Legitimacy, accessibility, predictability, fairness, rights compatibility, transparency, and capability to address a range of grievances, including those related to benefit-sharing arrangements for the ER Program; ii) Access to adequate expertise and resources for the operation of the FGRM [Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3] The TAP has taken note of the fact that Vietnam's Land Law of 2013 has made provisions for FGRM even though no specific FGRM has been specifically developed for the ERPD. It also states that grievances should be lodged and addressed at the local level The TAP has also noted that Vietnam subscribes to FPIC Principles elaborated and approved by member states under the auspices of the UNFCCC The role of Communal Reconciliation Committees has also been described in relation to benefit sharing but also in the context of solving common complaints. To improve the flow of information provided the ER-PD could consider transferring subsection 14.3.2 on 'monitoring of benefit sharing mechanisms' to Chapter 15 of the ER-PD where it probably fits better. It is also critical to clarify how the described FGRM fits with the current system of resolving land disputes in the country and what is needed in addition to meet World bank requirements. Ind 26.2 The description of FGRM procedures, included in the Benefit-Sharing Plan and/or relevant YES Safeguards Plans, specifies the process to be followed to receive, screen, address, monitor, and report feedback on, grievances or concerns submitted by affected stakeholders. As relevant, the Benefit-Sharing Plan and/or relevant Safeguards Plans and/or ER Program Document describe the relationship among FGRM(s) at the local, ER Program, and national levels [Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3] The procedures for the lodging of grievances and the principles guiding the process have been clearly described as already stated under 25.1 but what is lacking is a comprehensive system to monitor benefit sharing, FGRM and safeguards.. YES

improve the FGRM

to improve it 15.3]

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

[Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions

Yes, this is in place as already described under 26.1

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

NO

[Analysis of drivers and underlying causes of deforestation and forest degradation, and existing activities that can lead to conservation or enhancement of forest carbon stocks 4.1]

An ER-PD should ideally be designed to maximize emission reductions and maximizing sinks, hence the TAP expects a Program Design that clearly addresses the drivers of deforestation and forest degradation and "+". This analysis is therefore key to the successful design of the program. The current ER-PD lists and describes an array of 8 models on protection of natural forests (avoided deforestation), rehabilitation of degraded forests to enhance carbon stocks, afforestation / reforestation and transformation of current plantations from short to longer-rotation regimes. While this is quite impressive, it does not include how underlying causes of deforestation and forest degradation will be addressed. The section could be enriched by a description of historical forest and land use trends and an assessment of likely future trends.

Preceding the ER Program is an assessment of drivers which still remains limited and focused on direct drivers and then there is an identification of the major barriers and how to overcome them. The link between the direct drivers, the identified barriers and the proposed emission reduction program should be clear with priority programs and actions clearly described. The TAP expects this section to provide (i) identification of the key drivers (e.g. agriculture, infrastructure, illegal and unsustainable logging etc including any quantification where possible; (ii) link between what has been described as barriers showing the indirect/underlying causes to these key drivers; (iii) identifying priority underlying causes and develop policies and measures (PaMs) to address them; and (iv) link the PaMs directly to the intervention areas and activities. This, in the TAP's opinion could help provide logic to the drivers and proposed activities.

There is also a lack of any assessment of the issues to delivering the '+' (SFM, rehabilitation, conservation). This requires some analysis; the same as the drivers of deforestation and forest degradation.

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

NO

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

[Institutional and implementation arrangements 6.1]

Just as already stated under indicator 27.1 the TAP has taken note of the proposed emission reduction program that is also summarized in tables 4.8, and 4.9 and Figure 4.5. As highlighted before there is the need to identify direct drivers, then look at the underlying causes (referred to as barriers) then pinpoint key Policy and Measures to address the critical underlying causes. This should provide the actual intervention areas and activities and improve the section.

Another important point to highlight is the limitations of relying entirely on the PRAPs. It is generally recognized that the PRAPs are limited, in particular the understanding and analytical basis to determine drivers of deforestation and degradation (and there is limited assessment for the '+'). The proposal writing team argues that this is the decision of the provinces so we should stick with what they agree. However the process to formulate the PRAPs was limited, the driver's assessment weak and biased with limited broad stakeholder views. It was dominated by forest sector interests and government interests. The TAP is of the opinion that without reviewing the PRAPs in view of the intended results from the ERPD, the program may not effectively tackle difficult governance issues nor reflect concerns of the broader

constituency. For these reasons depending entirely on this document will imply a limited driver's assessment and a bias in program design which currently exists. In our view, a more sophisticated and better articulated drivers assessment, which links direct drivers with the barriers is needed, which would then clearly inform the program design and intervention areas and activities. This need broad stakeholder input.

As it stands, the ER-PD does not indicate how it will support or promote agricultural practices in the accounting area that will be consistent with its proposed ER Programs. Likewise there is no indication that it will engage the energy and infra-structure sectors. So far, there is no mention of ongoing government efforts in the form of policies and plans which support the chosen interventions (e.g. longer rotation, mixed species plantations, comanagement of natural forests) which could lead to the scaling up of impact.

In addition and while the PRAPs exist there is also a lack of funding for activities identified so there also needs to be some clarity on how the intervention areas and activities will be supported. The TAP also wishes to see a critical look at the concept of co-management of forest areas, and its likelihood of being successful in Vietnam, and certainly in the context of a performance based system that the ER-PD is.

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:

NO

- 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]

The ER-PD provides an updated assessment of land and resource tenure regimes in the accounting area, which is complete in some aspects but less so in others.

With respect to **Item I**, the range of land and resource rights in the accounting area are for the most part identified, though the analysis is scattered and not well organized, and there are important omissions. Section 4.4 provides an overview of several types of land and resource rights that exist in Vietnam, including customary rights.

Notable omissions include a discussion of forest protection contracts, which though not considered a form of forest "ownership" ⁴ can be considered a form of tenure that is relevant to the ER-P, since contracts may include access, use and management rights. Some discussion on these contracts is provided in Section 15.3, but it is not systematic and disconnected from the overall tenure analysis.

Table 4.12 provides quantitative information on the amount of land that is "owned" by different actors in the Accounting Area. It does appear to have some omissions, most notably:

- 1. Communally-owned land is excluded, though it is acknowledged that two forms exist in the Accounting Area;
- 2. There are no figures on the amount of land under forest protection contracts;
- 3. Area owned/managed by Commune People's Committees is not included;
- 4. There is no indication of the amount of land where customary practices are followed, though it is acknowledged that this information may not be readily available.

With respect to **Item II**, the legal status of rights is partially laid out, but could be better developed, e.g. through a clearer comparison of the use rights of different types of forest owners (households, management boards, companies etc.) and other categories of users (e.g. forest contractors), and the extent and limitations of those rights. Some information is provided on this in sections other than 4.4, but it is not systematic and is disconnected from the land tenure analysis. Regarding customary rights, the simple assertion that they are not recognized by the Government appears to ignore provisions of the Civil Code 2015 that recognize community ownership based on customary practice.

Some legal ambiguities are well identified, such as the conflict between the Civil Law and the Law on Forest Protection and Development (LFPD) regarding recognition of communities as a legal entity. Others could be further developed, such as discrepancies between the Land Law and the LFPD regarding the allocation of forest and forest land, and the absence of clear guidance for the issuance of communal titles. Others are not mentioned, e.g. the absence of implementing regulations to guide issuance of forest use permits to communities or regarding the duration of forest use rights.

With respect to **Item III**, several conflicts that are common in the Accounting Area are identified, such as the overall conflict between customary practices and statutory law, and conflicts between forest-dependent communities and state forest companies and forest management boards. The description is quite general, and more detail on the nature and types of conflicts that arise between these entities would be useful. Other conflicts, such as the frequent conflicts between state entities and forest contractors over non-payment of forest protection fees, are not mentioned.

There is no attempt to quantify how much land is subject to such disputes, though the TAP recognizes that this may be difficult. Figure 4.7 clarifies that local land tenure issues will be assessed as part of ER-P implementation, which should help to make this assessment more complete. The description of how the ER-P proposes to resolve such conflicts could be better laid out (see C28.2).

With respect to **Item IV**, Section 4.4(d) describes the contribution of the ER-P to addressing land tenure issues in the Accounting Area. The description is short and could be further detailed, in particular to clarify how the Adaptive Collaborative Management Approach will lead to the expected achievements that are indicated. There are also several references to the update of the Law on Forest Protection and Development in the context of the ER-P (e.g. section 4.2), but it is not clear how the ER-P will contribute to this process, if at all.

It would appear important to consider whether there are any potential negative impacts of the ER-P on land and resource tenure. There is some indication in the safeguards assessment (Chapter 14) that the Program will lead to a restriction of access rights – this should ideally be further developed and linked to the tenure assessment.

Finally, the assessment does appear to have been conducted in a consultative and participatory manner, given that land issues appear to have fairly broadly discussed in the stakeholder consultations described in Chapter 5.

⁴ In Vietnam all land is owned by the State. Nonetheless, organizations, individuals and households, and to some extent communities, can be allocated land use right certificates (LURCs), and these persons are commonly referred to as "forest owners". For the purposes of this assessment the possession of LURCs is considered as "ownership".

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.

YES

[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-P does explain how the relevant issues have been taken into consideration, though it would be important to develop this further in the next version of the ER-PD.

Section 4.2 sets out how the ER-P intends to address "insecure land tenure" – in this case defined as the absence of LURCs for individuals and households – namely through the inclusion of forest land allocation (FLA) in the ER-P and the enhancement of household and community access rights through collaborative management approaches. It is noted that the provincial action plans (PRAPs) include a "basket of FLA approaches". There is also reference in Section 4.3.2 to a "large number of different types of contracts" and an "assumption that the contracts are combined with other program measures such as adaptive collaborative management approaches".

While this is a good indication of the integration of the land tenure assessment in Program design, it would be important to provide more information on the different FLA, forest management contracts and collaborative management approaches proposed, the different situations in which they will be used and who they will be offered to. In general it is positive that there are a number of different approaches identified, given that there are a range of types of land/resource tenure in the Accounting Area. However, it would be important to understand how they respond to the specific issues identified in the land and resource tenure assessment.

The description of the Adaptive Collaborative Management Approach (ACMA) – which appears to be central to the ER-P's implementation overall and for addressing land tenure conflicts in particular – also needs further development. It is indicated that the ACMA will lead to greater access and help to resolve local conflicts over land and resource tenure; however, it is not made clear how this ACMA will achieve this and what the precise outcomes are expected to be (e.g. issuance of formal LURCs, formalizing access rights etc).

There is some indication in Section 4.4(b) that the Program will contribute to strengthening the rights of those that have traditionally/customarily owned the forest, though it is also not very clear how this will happen.

There are also several land tenure issues regarding which it is less clear how they have been integrated into Program design. For instance, it is not clear how the Program will address issues experienced with forest protection contracts.

In Section 14.1 on safeguards there is some indication that the land and resource tenure assessment has been taken into account in the Safeguards Plan, such as through addressing the issue of restricted access for ethnic minorities to forest resources through the Ethnic Minority Planning Framework. As noted above, it would be important to have more clarity on how the proposed management approaches address these concerns.

The ER-PD does indicate the positive contribution the Program is expected to have on clarifying land and resource tenure, as described above an including in Chapter 16 on non-carbon benefits. It is not very clear how broad this will be – in Table 16.1 under "potential number of beneficiaries" there is an unclear reference to "From FSDP project."

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]

There is some high-level assessment of the implications of the land and resource tenure issues in the country for the ability to transfer title in Section 18.2, and several important questions that need to be considered are identified. This assessment would need to be developed in significantly more detail in order to enable a more complete assessment of the implications in question and allow for risks relating to title to be adequately identified.

Some indicative guestions that would be important to consider include:

- 1. The identification of the entities other than the State that can claim some form of land and resource rights in the Accounting Area and the extent to which these entities participate in the Program or may have their land and resource rights limited by the Program. Note that state companies may not necessarily be considered as 'the State' from a legal point of view.
- 2. The extent to which the major conflicts and issues identified in the land and resource tenure assessment may pose a risk to the ability to transfer unencumbered title to ERs.

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

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

YES

The TAP has taken note of the use of Adaptive Collaborative Management Approach (ACMA) to discuss and develop a Benefit Sharing Mechanisms and a Plan. Furthermore, descriptions of institutional capital benefits on the one hand, and natural, physical and financial capital benefits on the other, have been provided. A proposed modality for benefit sharing based on four technical criteria, has been described. The legal barriers or constraints that will face benefit sharing have also been clearly stated in section 15.3.2 and going forward Vietnam needs a comprehensive set of proposals and a plan to overcome them. Important among these is the status of households versus communities during the distribution of benefits and also the treatment of contractors or licensed operators in Forest Protection and Development. The section also singles out the need to clarify, *rights to carbon*, land and forests, particularly *forest allocation* and associated *land use rights*. As an operating principle the sharing of benefits should include all legitimate stakeholders

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

Ind 30.1 The Benefit-Sharing Plan is made publicly available prior to ERPA signature, at least as an advanced draft, and is disclosed in a form, manner and language understandable to the affected stakeholders for the ER Program12. The Benefit-Sharing Plan contains the following information:

NO

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]

As stated in the preceding indicator, modalities for a BSM based on four technical criteria has been described in Chapter 15, Sections 15.1 which also includes describes verification of the ER area at the Provincial Level, recognizing the collective efforts of places with higher populations in order not to dilute per capita benefits, a system for sharing of funds between national entities, provinces and at the level of ACMAs.

The ER-PD has also recognized the requirements on BSM as provided in the Methodological Framework of the Carbon Fund and it in the process deviations from the Methodological Framework have been pointed out. The ER-PD in Section 15.1.4 appears to imply that customary rights are not relevant in Vietnam ("there are some notable differences in Vietnam..."), which is at odds with the legal assessment (see C28). In general, the benefit sharing arrangements, although more or less described, lack detail in some parts and arguably fall shy of a full benefit sharing plan. Though technically this is not required until ERPA signature, and the TAP recognizes that Vietnam has some months to get it together. The section is on the right track, but the TAP would need to see some more detail on how the ACMA will actually work in practice. Right now there is a lot about its benefits, and the description of practicalities is scattered and not always coherent.

C 31 The benefit-sharing arrangements are designed in a consultative, transparent, and participatory manner appropriate to the country context. This process is informed by and builds upon the national readiness process, including the SESA, and taking into account existing benefit-sharing arrangements, where appropriate

Ind 31.1 The Benefit-Sharing Plan is prepared as part of the consultative, transparent and participatory process for the ER Program, and reflects inputs by relevant stakeholders, including broad community support by affected Indigenous Peoples. The Benefit-Sharing Plan is designed to facilitate the delivery and sharing of Monetary and Non-Monetary Benefits that promote successful ER Program implementation. The Benefit-Sharing Plan is disclosed in a form, manner and language understandable to the affected stakeholders of the ER Program

NO

[Description of stakeholder consultation process 5.1]

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

So far what has been described are modalities for a BSM, a road map to comply with FCPF Requirements on the same and a range of eligibility criteria that has not been finalized. From the description of categories of beneficiaries, a big risk is the fact that ethnic minorities risk being alienated from the sharing of benefits from Forest Ecosystem Services (FPES) which is already operational since Communities Living Inside Forests if not directly involved in forest protection and development (FPD) are not beneficiaries

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]

Section 15.3 provides a good and relatively thorough description of both the legal framework applicable to benefit sharing and the potential legal constraints that the benefit sharing mechanism may face. Though there is some information to show that the Benefit-Sharing Plan is in line with this legal framework, this is incomplete, and several issues remain unresolved.

On the one hand, it is indicated that the identification of beneficiaries under the law is in line with the results-based payment approach and that both forest owners and non-forest owners who participate in emission reduction and enhancement activities are entitled to receive benefits, which appears to support the approach adopted by the ER-P. There is also some indication that the ER-P will respond to the inability of communities to open bank accounts by supporting them to form cooperatives, though more information on this would be useful (it is currently only indicated in a footnote).

On the other hand, there is no information provided on how the Benefit-Sharing Plan takes into account and deals with the legal constraints identified in Section 15.3.2. For example, it is stated that "the amendment, supplement and completion of the legal framework relating to community are essential", but there is no indication of whether such amendments etc. are envisaged under the ER-P. Similarly, there are no solutions identified for issues regarding forest contractors, rights to carbon or coordination between different government entities in identifying beneficiaries.

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

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

YES

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

The ER-PD has clearly described non-carbon benefits in the context of Vietnam and in that regard the following observations have been made by the TAP:

- Local communities view non-carbon benefits quite broadly as opposed to Institutions of Government operating at provincial and higher levels. The communities view non-carbon benefits in terms of investments to eliminate rural poverty, in addition to rights to access NTFPs and land for production forestry. This is an important issue that can help to improve the livelihoods of local people and help sustain emission reduction programs.
- Between national, provincial and local levels the perceptions on what priority non-carbon benefits are tend to differ
- Provincial structures are generally reluctant to cede control of forest resources to local communities since they
 themselves have resource constraints that forest resources can help alleviate
- Improved governance seems to be perceived as a focal non-carbon benefit of REDD+ besides biodiversity and ecosystems services, for which there already exists FPES schemes in Vietnam

Despite the above points which have been noted, the TAP expected an explicit description of ecosystem / ecological services as a key non-carbon benefit and the protection of which should also be a key safeguard issue, alongside the social and economic ones. The potential for the further loss of the remaining natural forests is a threat which this ER-PD ought to guard against more clearly in the document.

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]

Based on the observations in under Criterion 34.1 there is evidence of consultation of stakeholders who view non-carbon benefits broadly and in the context of their socio-economic needs, in addition to ecological benefits.

C 35 The ER Program indicates how information on the generation and/or enhancement of priority Non-Carbon Benefits will be provided during ER Program implementation, as feasible.

Ind 35.1 The ER Program proposes an approach utilizing methods available at the time to collect and provide information on priority Non-Carbon Benefits, including, e.g., possibly using proxy indicators. If relevant, this approach also may use information drawn from or contributed as an input to the SIS

NO

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

While priority non-carbon benefits have been described and while there already exists a forest based PES scheme (PFES) the ER-PD has not articulated a system on generating information on priority non-carbon benefits.

It has also been mentioned in Chapter 15 (Section 15.3) that participatory monitoring, as it refers to a formal role of communities or contribution with participatory monitoring approaches is not recognized.

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:

YES

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

[Authorization of the ER Program 18.1]

The ER-PD refers to the authority of MARD to act on behalf of the Government for the ER-P, referencing its designation as the lead agency on REDD+ and as responsible for coordinating the mobilization of REDD+ funding, as set out in the Approval of the National Action Plan for Reduction of Green-house Gas Emissions through Efforts to Reduce Deforestation and Forest Degradation, Sustainable Management of Forest Resources, and Conservation and Enhancement of Forest Carbon Stocks; Prime Minister's Decision 799/QD-TTg 27 June 2012.

The TAP also notes that, according to Decree 199/2013/ND-CP dated 26 November 2013 of the Government, MARD have the overall authority for the management, development, protection and use of forest, and the exploitation and processing of forest products.

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

NO

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]

There is an initial assessment of some of the issues that may arise in transferring title to ERs to the Carbon Fund in Section 18.2, and the ER-PD recognizes the "need to study and develop a legal framework for forest carbon rights, trading and transfer forest carbon credits." There is also an indication that these issues will be addressed through the adoption of a Decision by the Prime Minister.

It nonetheless appears that there has as yet been little consideration given to how to address the question of ensuring title to ERs can be transferred to the Carbon Fund, and the TAP stresses that the need to address this in the next version of the ER-PD. It is indicated that a Decision will be adopted to regulate the issue of carbon title, but the TAP understands from meetings with MONRE that such a Decision will take at least 1-2 years to be adopted, and there remains uncertainty regarding how exactly the Decision will seek to regulate carbon title. The approach to securing title to ERs under the ER-P will need to take this uncertainty into account and ensure that future developments will not impact the security of title over ERs sold to the Carbon Fund. The intention of the government to foster private investment in REDD+ projects is particularly relevant in this regard, and highlights the need for mechanisms that avoid double counting and competing claims over title to ERs between private projects and the ER-P.

As noted under Indicator 28.3, it will also be important to better link the assessment of land and resource tenure to the ability to transfer title to ERs and provide an indication of the approaches that will be used to minimize the risk of competing claims to title from the different categories of persons that are participating in the Program, including both landowners and local individuals/communities without land titles.

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

NO

[Transfer of Title to ERs 17.2]

Though the requirement to obtain the ability to transfer title only strictly arises at the time of transfer, the fact that this issue has not yet been considered in detail raises concerns. It is important to highlight that the development of a strategy to secure title to ERs and, in particular, actually going about securing titles can take considerable time.

Moreover, there is currently no indication of the development of an accounting mechanism for ensuring that ERs regarding which secure title is not secured can be deducted from the amount transferred to the Carbon Fund.

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

Ind 37.1 Based on national needs and circumstances, the ER Program host country has made a decision whether to maintain its own comprehensive national REDD+ Program and Projects Data Management System, or instead to use a centralized REDD+ Programs and Projects Data Management System managed by a third party on its behalf. In either case of a country's use of a third party centralized REDD+ Programs and Projects Data Management System, or a country's own national REDD+ Programs and Projects Data Management System, the indicators below apply

YES

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

Yes, Section 18.2 indicates there has been a decision to maintain a national REDD+ Program and Projects Data Management System, referred to in the ER-PD as a "REDD+ Registry".

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:

NO

- 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 information on registries in Section 18.2 is very general and limited. There is no detailed description of how the registry will look, its key components and what kinds of data and information will be generated to populate, update and maintain it. More information will be needed to determine whether the proposed REDD+ Registry would meet the requirements of this indicator, including information on the overall scope, design and framework of the registry, how it will be integrated into existing systems, the legal framework, the mechanism for avoiding multiple claims to etc. It would also be important to have an indication of the timeline for developing the Registry.

There is reference made to links between the Projects and Programs Data Management System and the existing land registry, but it is not clear what the relationship between the two would be. It would be important to better understand this relationship.

The TAP also notes the intention stated by MONRE to encourage the development of private REDD+ projects in the future. The existence of a private REDD+ market would reinforce the need for a robust system that avoids multiple claims over title to ERs, particularly where Government programs and private projects exist side-by-side.

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 ER-PD acknowledges that the system would need to be computerized and open to the public, but does not provide details on plans to ensure this is the case.

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

NO

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

Information on compliance with this indicator is not provided in the ER-PD.

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	NO
[Data management and Registry systems to avoid multiple claims to ERs 18.2]	
No information is provided in Section 18.2 on whether Vietnam intends to create its own or use an transaction registry.	existing ER
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/NO
[Data management and Registry systems to avoid multiple claims to ERs 19.2]	
[This may be non-applicable depending on the specific ER program]	
Ind 38.3 An independent audit report certifying that the national or centralized ER transaction registry performs required functions is made public.	YES/NO
[Data management and Registry systems to avoid multiple claims to ERs 19.2]	
[This may be non-applicable depending on the specific ER program]	
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/NO
[Data management and Registry systems to avoid multiple claims to ERs 19.2]	
[This may be non-applicable depending on the specific ER program]	

Annex 1 to the TAP technical assessment