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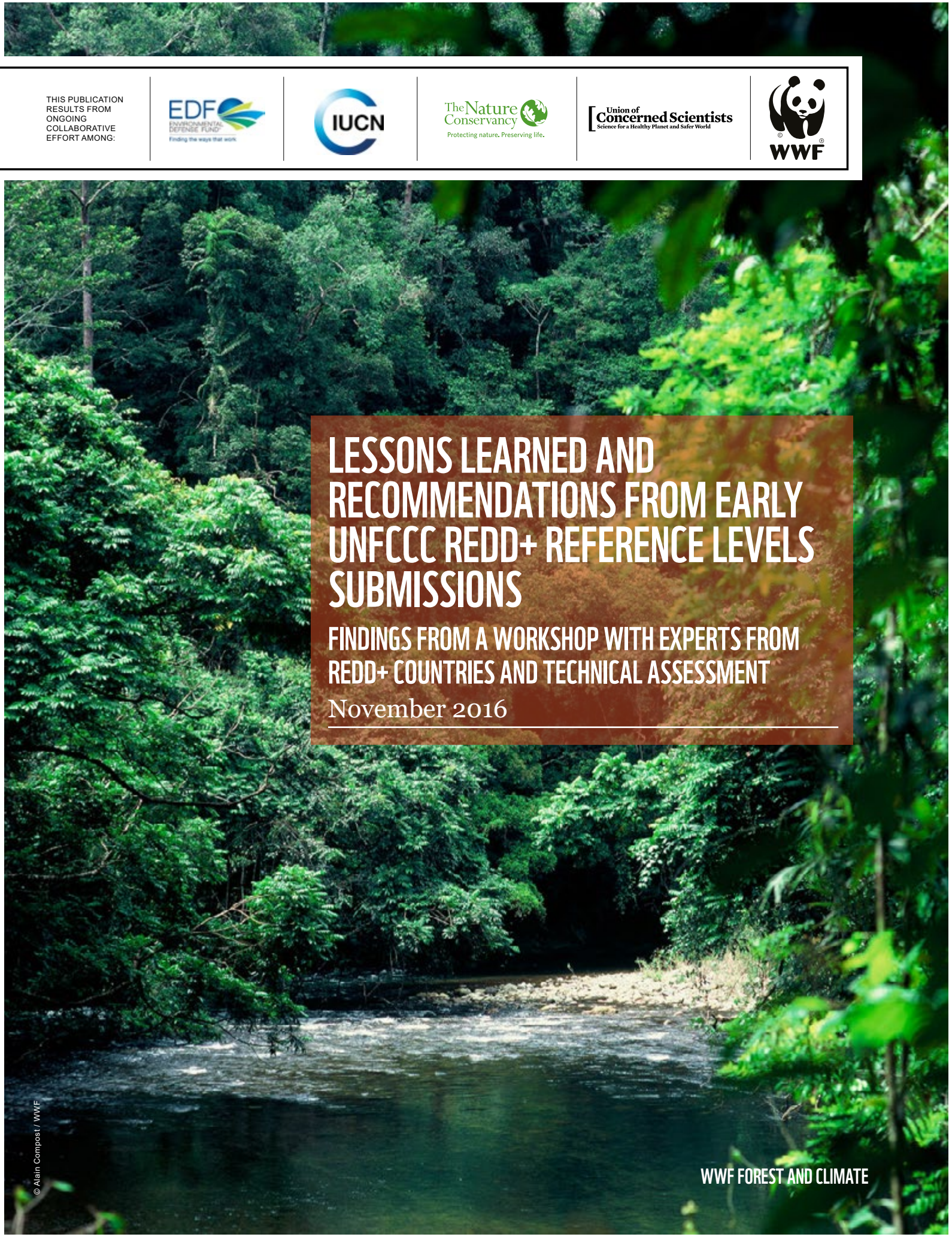

LESSONS LEARNED AND RECOMMENDATIONS FROM EARLY UNFCCC REDD+ REFERENCE LEVELS SUBMISSIONS

FINDINGS FROM A WORKSHOP WITH EXPERTS FROM REDD+ COUNTRIES AND TECHNICAL ASSESSMENT

November 2016

WWF FOREST AND CLIMATE

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Aboriginal and Torres Strait Islander people should be aware that this document contains images and names of people who have since passed away.

This report was supported, in part, by the Norwegian Agency for Development Cooperation, the United Nations Environment Programme through the International Union for Conservation of Nature, and The Center for Carbon Removal.

DEDICATION

Dedicated to Dr. Jim Penman, who passed away on September 9, 2016 after more than 20 years of contributions to climate science and policy.

Jim Penman at our workshop in May, 2016. Source: Jason Funk

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INTRODUCTION

Forest Reference Levels/Forest Reference Emissions Levels (FRLs/FRELs) are critical to the policy framework for Reducing Emissions from Deforestation and forest Degradation (REDD+) in developing countries. FRLs/FRELs provide the benchmark against which countries measure their results from REDD+ implementation. After several years negotiating REDD+, countries are now moving forward in presenting their FRLs/FRELs for technical assessment. Yet FRLs/FRELs are still incipient, and REDD+ countries and technical assessors are still in a learning-by-doing process, generating valuable lessons that are worth sharing.

On May 26 and 27, 2016, Environmental Defense Fund, International Union for the Conservation of Nature, The Nature Conservancy, Union of Concerned Scientists, and World Wildlife Fund hosted a workshop on FRLs/FRELs for REDD+. This workshop provided an unprecedented convening of two groups of experts: 1) those from REDD+ countries who were involved in creating FRLs/FRELs, and 2) those from developed and developing countries who had served on the Technical Team of Experts of FRLs/FRELs and/or those performing technical analysis of REDD+ results. The objective of the workshop was for participants to collect lessons learned and suggest recommendations in order to continually improve the FRL/FREL submission and assessment process.

This workshop followed a methodology developed by the Knowledge Sharing and Learning expert of WWF's Forest and Climate Program. This methodology has been used before to collect lessons learned from Monitoring, Reporting, and Verification of REDD+ in countries where WWF has worked for the last 6 years.[1]

The approach consisted of three major segments:

1. Reconstructing the process: we aimed to define the conditions in terms of capacities and national circumstances when countries first started working on their FRLs/FRELs.

2. Documenting the milestones and the achievements in developing an FRL/FREL: participants were asked to highlight major achievements and milestones along a timeline. These included country-specific items or general ones (e.g. major COP decisions) that defined frameworks, context, or capacity and process leaps (forward or backwards).

3. Identifying lesson highlights: participants were asked to group the highlights from segments 1 and 2 into challenges and lessons learned.

We asked participants to package lessons into major themes based on the IPCC principles: Transparency, Accuracy, Completeness, Consistency, and Comparability, as well as general lessons on the technical assessment process. We used these principles to organize our discussion and this report, though we also included emphasis from participants that not all IPCC principles are included in COP decisions on FRLs/FRELS and that FRLs/FRELs should be assessed holistically, not as a sum of their parts. We also included lessons that cut across these principles at the end of the report.

[1] World Wildlife Fund. "MRV and Reference Levels: Six years of learning through practice." http://d2ouvy59p0dg6k.cloudfront.net/downloads/mrv_report_online__web_email__1.pdf

1 TRANSPARENCY

Transparency is the principle that all assumptions and methodologies are explained clearly, allow for reconstructing the process by which the FRL/FREL was put together, and facilitate understanding of its scope and supporting sources of information.[2]

Lesson: The success of the technical assessment (TA) process and, ultimately, the international credibility of the FRL/FREL itself is critically dependent upon the degree of transparency in the FRL/FREL submission.
Points of discussion: Participants highlighted how full transparency and accessibility of the data, methods, rationales, and assumptions used in the FRL/FREL allowed for a sound interaction between the TA team and the countries. When that was the case, both country and TA team participants reported how this resulted in a better understanding of countries' proposals, better feedback from TA experts, and an overall improved FRL/FREL. Some participants emphasized the importance of TA team members maintaining the confidentiality of some information provided by the REDD+ country, as specified in the confidentiality agreement they are required to sign upon initiating the TA process. Others reacted to this by indicating how confidential information makes it difficult for stakeholders and potential donor countries to form a complete understanding of the FRL/FREL. Finally, some participants expressed that the TA team should also exercise full transparency in order to build confidence in the technical assessment process.
Recommendations: REDD+ countries can maximize the benefits they receive from the TA process if they provide full access to data, methods, rationale, and assumptions used to elaborate the reference level to the TA team. This includes measurement data as well as any information included on the relevant policy context or country circumstances, which could be especially useful when making adjustments in the future. Doing so will enable TA team members and the public in general to assess and give feedback on the FRL/FREL for its subsequent use. REDD+ countries seeking support for their activities should aim to reduce their reliance on confidential information to the extent possible, so as to deliver the highest degree of transparency for consideration by donor entities. Technical Assessors should also be transparent, clearly stating their sources and rationale behind their observations.

[2] IPCC, 2006. Guidelines for National Greenhouse Gas Inventories. Retrieved from http://www.ipcc-nggip.iges.or.jp/public/2006gl/index.html

2 ACCURACY

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Accuracy is the principle that estimates are unbiased, meaning they neither over- nor under-estimate the true value for a variable, and uncertainties are reduced to the extent practicable.[3] Uncertainties and bias can accumulate in the FRL/FREL estimation process from a number of different sources; the TA process is intended to help identify those sources and assess accuracy, as far as possible.

Lesson: In the TA process, REDD+ countries should be prepared to explain the procedures they used to eliminate bias from the various components of the FRL/FREL estimate.
Points of discussion: Participants carried on a robust discussion of uncertainty: estimation, reporting, and how to deal with the results. The group drew a distinction between accuracy (the condition that an estimate neither overestimates nor underestimates the true value of a variable) and precision (the degree of uncertainty remaining in the estimate). Some participants observed that in many cases precision estimates have been mistaken as the means to assess accuracy and as the only valid metric to assess uncertainty. The discussion highlighted the need for countries to explain to technical assessors how bias in the estimates has been removed, where possible, and avoid an exclusive focus on estimating precision. Some suggested that both countries and technical assessment team members could carry out the exercise of identifying potential sources of bias, giving REDD+ countries an opportunity to explain how such bias has been/could be dealt with in their estimates. Such an approach could complement information about precision estimates. Among the various statistical approaches, some participants emphasized that efforts to obtain larger sample sizes, and to use robust stratification, were potentially useful ways to achieve more accurate estimates.
Recommendations: As part of its quality assurance/quality control practices, each REDD+ country should document its procedures for identifying sources of bias, so that these procedures can be shared with the technical assessors during their assessment. Technical assessors, for their part, should assist REDD+ countries in evaluating their procedures and identifying any undetected sources of bias, and then work constructively to help the REDD+ country minimize bias in its estimates and in the FRL/FREL.

[3] Ibid

Accuracy

Lesson: In FRL/FREL submissions, countries should estimate and report the precision of their estimates, after sources of systematic bias have been addressed. This helps to enable the assessment of methods and results, facilitating constructive suggestions for improvement.

Points of discussion: Participants agreed it was better for countries to report how uncertainty has been assessed/addressed and provide access to the original data and procedures used. This approach can provide the opportunity for a learning-by-doing process during the technical assessment, in which the FRL/FREL team and the TA team can both benefit by learning from their experiences. Providing access to such information was identified as a good way of contributing to and benefitting from the collective learning process.

Recommendations: Countries that make use of all the data available are in the best position to benefit from the TA process. For example, in their submissions, countries could use annexes to explain the approaches used and the results obtained and request comments from TAs on the annex. For its part, the TA team could enhance the facilitative dialogue by providing feedback on all of the components of each country's submission, including their annexes, while making clear that the annex is not part of the formal assessment.

Lesson: Rather than strive for a specific target level of uncertainty, REDD+ countries should focus on transparently estimating and reporting the level of uncertainty itself.

Points of discussion: Participants discussed that reporting uncertainties when they are high could have national implications in seeking support for REDD+ activities, potentially jeopardizing a country's ability to secure resources for REDD+ implementation. For some countries, imprecise yet accurate average estimates with large confidence intervals can make it difficult for them to show significant reductions as per statistical significance. The group acknowledged that this could be a deterrent for countries to report on the uncertainty levels of their emissions estimates. This brought the conversations towards how both REDD+ and donor entities can make use of such estimates without stalling the process, which was a major concern of all participants. The group reached an informal consensus about the following points:

1. Uncertainty is difficult to reduce in the short term and different levels will need to be accepted by donor entities, as a reflection of different national capacities.

2. There needs to be clarity on a way for the REDD+ mechanism to be able to move forward even when uncertainties are considered high. For example, the FCPF has adopted an approach that uses a table of conservativeness factors[4] to address various levels of uncertainty, which was influenced by the Table of Conservativeness Factors from Decision 20/CMP.1, Appendix III[5].

3. A gap was identified: How to best make use of accurate—yet imprecise—data?

Participants noted that REDD+ countries can also make progress through the implementation of QA/QC procedures and a plan for managing uncertainties (e.g. following IPCC 2006, volume 1, chapter 3) that is ambitious enough to build trust over time, while donors should recognize that uncertainties may be high while countries strive to improve their LULUCF GHG inventories.

Recommendations: One way to address the identified gap would be for interested parties (donors, REDD+ countries, civil society, etc.) to develop harmonized approaches on how to make use of available data with high levels of uncertainty in FRL/FREL estimates. They should be designed to contribute toward building confidence in REDD+, even as activities are implemented

[4] FPCF Carbon Fund. 2016. Methodological Framework. Pg 17 https://www.forestcarbonpartnership.org/sites/fcp/files/2016/July/FCPF%20Carbon%20Fund%20Methodological%20Framework%20revised%202016.pdf

[5] UNFCCC, 20/CMP.1. FCCC/KP/CMP/2005/8/Add.3, page 38 http://unfccc.int/resource/docs/2005/cmp1/eng/08a03.pdf

Lesson: A smart stratification approach is one way that REDD+ countries can develop an efficient process of identifying sources of uncertainty and minimize their effect on the FRL/FREL estimate.
Points of discussion: Participants highlighted how, in many cases, approaches to stratification were based mostly on biophysical parameters, without clear linkages to the reported activities. This yields a poor match between the strata and the activities, resulting in higher uncertainty estimates. The group agreed that stratification should be designed to use the data that is available or that is expected to become available in the future. Participants went further and indicated that under ideal circumstances, REDD+ activity strata should line up with the GHG inventory sectors. Some participants suggested the use of proxy measures in stratification approaches for some activity data, such as degradation. Such an approach could categorize forests based on proxy measures of the degree of degradation, rather than attempting to actually quantify carbon losses through degradation. This approach has the advantages of offering an efficient reduction of uncertainties and a sound logical linkage to mitigation actions.
Recommendations: To the extent possible, REDD+ countries should align their estimated categories with GHG reporting activities for ease of comparability and future reporting on the land sector. These countries should also plan in advance to use stratification as an efficient strategy to reduce uncertainty.

3 COMPLETENESS

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The IPCC defines completeness as covering all sources and sinks for a specified geographic area,[6] while the COP19 decisions define completeness as allowing the reconstruction of FRLs/FRELs (13/CP.19).[7] This led to robust discussion among the group about the implications of this difference in the definitions of this principle.

Lesson: Differences in the requirements for completeness between COP REDD+ decisions and inventory guidance lead to differences in the information submitted in FRLs/FRELs with regards to completeness. Since completeness may be useful in the longer term to gain experience with additional categories and pools, REDD+ countries may benefit from using the tools and approaches that are available to help them achieve a greater degree of completeness (as applies to inventories) in their FRLs/FRELs.
Points of discussion: Participants noted that completeness was purposefully defined differently between COP REDD+ decisions and the IPCC. Most of the first FRLS/FRELs submitted have met the complete set of requirements mandated in the REDD+ COP decisions. However, COP decisions also call for countries to justify why pools and activities omitted from their FRL/FREL were deemed not significant, and not all countries included a clear justification in their submissions. In this regard, the FRL/FREL submissions do not meet the same standard for the principle of "completeness" as it applies to national inventories. While the FRLs/FRELs are separate and distinct from the inventories, this difference could have the effect of making it more difficult to assess the degree of coverage of sources, sinks, pools, and activities.
Recommendations: Countries should use the key category analysis to identify significant sources/sinks, and include those in their GHG inventories as well as the FRL/FREL. Additionally, any other data, even for non-significant categories, should be included if it is already available, perhaps in an Annex, which could help demonstrate that the category is not significant or is not a source of leakage of emissions from significant categories. Countries should also move toward greater completeness over time, possibly through the use of a land-based approach, as is already required in national inventory reporting.

[6] IPCC, 2006. Guidelines for National Greenhouse Gas Inventories. Retrieved from http://www.ipcc-nggip.iges.or.jp/public/2006gl/index.html
[7] UNFCCC, 2013. Decision 13/CP.19 Annex. Retrieved from http://unfccc.int/resource/docs/2013/cop19/eng/10a01.pdf#page=34

Lesson: There is a potential for leakage of emissions to non-included categories and areas within a country.
Points of discussion: Participants discussed the relationship between activity selection, leakage, and double-counting, noting especially that countries should provide evidence that leakage into non-included categories or areas will be monitored in some way (consistent with their own stepwise approach). If categories are excluded due to lack of data, countries could use proxies to show that emissions are not leaking into those categories. To meet COP guidance, countries should aim to implement REDD+ at the national level, which could lessen the risk of leakage.
Recommendations: Countries should provide evidence that emissions are not leaking into non-included categories or areas. REDD+ countries should also move towards comprehensive coverage of REDD activities, avoiding double counting and using IPCC defaults, in the absence of better data. Donor countries should provide adequate finance to help countries meet these goals.

Lesson: As countries determine the scope of their reference levels, in terms of the included activities and/or pools, they may need to use data for these activities/pools that vary in quality.
Points of discussion: Both REDD+ country and Technical Assessment participants noted that there is a challenge in striking the right balance between high quality data and a FRL/FREL with a larger scope. For a pay-for-performance system like REDD+, countries may seek to include only data of high quality, and there may be hesitance to initially include lower-quality data, especially if providing such data may have an adverse impact on their eligibility for payments. Participants noted that this approach does not fall in line with the principles of accuracy, completeness, consistency, and transparency, and that there should be approaches developed to address the use of data that is of lower quality than desired.
Recommendations: If no other data are available, REDD+ countries should use and include default values using country-specific activity data in their FRL/FRELs, if desired in an Annex. The Technical Assessment should provide comments on these, to help countries improve their collection of data. REDD+ countries could also include information on how they will improve data in future submissions. Donor countries should provide support for improving data over time.

4 CONSISTENCY

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Consistency is the principle that an inventory should be internally consistent in all elements over time, so that differences in trends and categories are due to real differences, not to changes in methodology.[8] However, different methodologies may be used over time if recalculations occur in a transparent manner and incorporate good practices.

Lesson: Using different categories, definitions, or stratification schemes for the FRL/FREL, the GHG Inventory, and monitoring systems can create inconsistencies that will cause challenges for monitoring, reporting, and verification of REDD+ activities.
Points of discussion: Challenges to considering the categories included in the FRL/FREL noted by participants include the difference between the REDD+ activities listed in COP decisions (e.g. deforestation, degradation, and other activities) and national inventories (e.g. land converted to cropland or forest land remaining forest land). Furthermore, participants noted that it's important to try to separate activities in such a way that can inform policies to address the emissions. For example, separating deforestation and degradation might be helpful because there may be different policies that effectively address each activity. Activities may also be represented in several key categories, based on stratifications by ecosystem type. Aligning key categories with stratification could help countries address more difficult categories such as degradation, because it could help identify and prioritize development of relevant emissions factors.
Recommendations: REDD+ countries should be consistent in the way they define and measure activities in the reference level and the GHG inventory, which can also shape and improve monitoring systems.

[8] IPCC, 2006. Guidelines for National Greenhouse Gas Inventories.

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5 COMPARABILITY

According to the IPCC, comparability means that an estimate is reported in a way that allows it to be compared with estimates from other countries.[9]

Previous guidance suggested that the process "should produce information that is comparable across Parties and over time."[10] While ecosystems, capacities, and circumstances differ across countries, this guidance implies that two conditions should be met: 1) that the process of estimation be conducted in such a way that the resulting estimates can be compared to those from other countries, and 2) that information about the process be reported transparently, to allow for such comparisons. The IPCC guidelines themselves, if followed correctly, offer pathways for meeting the first condition; thus, one way to evaluate comparability is by assessing the degree to which the guidelines were followed. COP decisions on constructing reference levels and the technical assessment process provide a comparable basis for assessment, in that countries are required to follow the same guidance and processes. However, the decisions 13/CP.19 on technical assessments for FRLs/FRELs do not require assessment of comparability among countries.

Lesson: For good reasons, Parties did not require FRL/FRELs to be assessed for comparability, and since REDD+ is still in early days, we need to let it evolve and be open to lessons that are relevant for comparability.
Points of discussion: Participants noted that there is no mandate in the relevant COP decision to assess FRL/FRELs for comparability among countries. This was clearly a deliberate decision by the Parties, since other IPCC principles of good practice were included in the assessment. There was wide agreement among participants that countries are starting from very different national circumstances and capacities, so comparability should not be expected yet. Furthermore, most felt that as countries worked to improve their performance on other principles, the level of comparability would also improve on its own. Transparency and completeness were cited as being of key importance for facilitating comparability. Many participants emphasized that the technical assessment process is meant to be a facilitative process for enhancing Parties' understanding of a REDD+ country's circumstances and contributions.
Recommendations: REDD+ countries could contribute to progress on comparability without taking on any additional burden simply by being very clear in their submissions about what is and is not included in the FRL/FREL. For in-stance, they could be explicit about how the distinct pools, gases, and activities are treated in the FRL/FREL and on how IPCC guidance was applied. On a voluntary basis, countries, donor entities, experts, and the UNFCCC secretariat could work collaboratively to identify ways to achieve greater comparability in the FRL/FREL submissions.

[9] IPCC 2006 Guidelines, Chapter 1 http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/1_Volume1/V1_1_Ch1_Introduction.pdf
[10] IPCC Special Report on Land Use, Land-Use Change, and Forestry http://www.ipcc.ch/ipccreports/sres/land_use/index.php?idp=0

Lesson: Parties could potentially achieve many benefits by working toward greater comparability over time, including reducing uncertainties in the global stock-take (the assessment of countries' collective progress on climate change that will occur every 5 years after 2023; Art. 14, CP21), and facilitating performance-based payments.
Points of discussion: Participants noted several potential benefits that could arise if Parties worked voluntarily toward greater comparability in FRLs/FRELs. For example, greater comparability could facilitate the flow of payments based on actual performance, rather than differences in capacity among REDD+ countries, more directly incentivizing emissions reductions. Noting the difficulty that the UNFCCC secretariat experienced in synthesizing INDCs, the participants suggested that greater comparability could also facilitate a more straightforward and accurate global stock-take process in the future. Participants also observed that, for now, there is no explicit incentive for REDD+ countries to strive for comparability, since donors are not really looking for it from the technical assessment process. Without such an incentive, many participants felt that REDD+ countries would not prioritize comparability, especially in light of their other tasks in preparing for REDD+. As a result, little progress may be made toward comparability, in spite of its potential benefits, at least until donor entities make it a priority of their own. However, participants also suggested that near-term progress could be made within a narrower scope, such as focusing on particular activities or drivers. In this regard, specialized guidance may be necessary in order to coordinate global progress, even on this narrower scope of issues.
Recommendations: Many of the benefits of comparability could be achieved through voluntary cooperation among Parties, donor entities, and experts, in consultation with the UNFCCC secretariat. Such a cooperative approach would not require a COP mandate, though such a mandate would potentially help spur progress. One outcome of a cooperative approach could be a more standardized structure for the FRL/FREL submissions, similar to the function achieved by the common reporting format tables in the national inventories.

Lesson: Countries see challenges in defining forests and harmonizing forest definitions across countries, which are different based on countries' national circumstances.
Points of discussion: The current FRLs/FRELs necessarily have different definitions of forests for different countries, based on their national circumstances. This may create challenges in understanding the role that activities in forests contribute to overall climate goals, due to differences in what is measured from one country to the next. This may also cause difficulties for donor entities in determining how to prioritize their investments in REDD+ activities. Countries could reduce these challenges by taking steps to harmonize their forest definitions.
Recommendations: As an interim step, REDD+ countries should define 'forest' by using land-use criteria, which would be operationalized by using a combination of time-series, remote sensing, and groundtruthed data.

6 TECHNICAL ASSESSMENT PROCESS

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Beyond addressing the various principles of good practice, the participants also discussed whether and how improvements could be made to the technical assessment process itself.

Lesson: The current approach to the technical assessment cannot ensure consistent assessments across countries, despite deliberate efforts to achieve more homogeneous assessments.
Points of discussion: Some participants expressed concern that the TA process may not be able to deliver consistent and even levels of feedback across countries. This concern arose from two major factors: 1) the heterogeneous experiences and types of expertise among the technical experts, and 2) the limited number of technical experts. In general, REDD+ countries also emphasized the facilitative nature of the assessment process, encouraging assessors to "put themselves in the shoes" of the FRL/FREL developers and to learn about the capacities and national circumstances of the countries they are assessing. Representatives asked for assessors to continue to work with REDD+ countries and not against them. Participants cited the helpful efforts the UNFCCC Secretariat has undertaken toward maintaining a group of experienced assessors and cultivating new ones. In many cases, the Secretariat has encouraged assessors to share their relevant experience and expertise with one another. However, despite these efforts, the group acknowledged that different assessors bring different strengths to the process, and the two assessors selected to assess a Party's FRL/FREL may have quite different expertise from another set of assessors. This creates the potential for inconsistent assessments and recommendations. The group discussed a few different factors that could contribute to the potential for inconsistent assessments. For example, reviewers of national inventories are required to pass an exam and achieve certification through the UNFCCC – but this certification is not currently required for FRL/FREL assessors. Another factor was that focal points are required to nominate new experts to the Roster of Experts, but in many cases they are not aware of the need for land-use experts, nor are they familiar with the experts within their own countries, creating a bottleneck in new nominations.
Recommendations: Some of the participants highlighted existing structures or practices that could serve as models to help support and maintain high-quality and consistent assessments. For example, for national inventories, LULUCF reviewers can refer issues to a panel of experienced reviewers to help resolve difficult issues, and such an approach could also be taken with FRL/FREL assessments. Another factor may be to require assessors to achieve the same certification required of LULUCF inventory reviewers. More generally, greater coordination among the technical assessors could help ensure a consistent and even process over time and across countries, and to some extent this is already happening informally.

Lesson: The resources available to the UNFCCC Secretariat to conduct a high-quality technical assessment process may not be sufficient to meet the demands placed on it, so some additional capacities and resources may be necessary to sustain and improve the quality of the TA process.
Points of discussion: The group expressed widespread and enthusiastic praise for the efforts the Secretariat has made to help expand the pool of assessors and facilitate a fair and constructive assessment process for FRL/FRELs. However, many recognized the limited capacity of the Secretariat and noted specific ways the Secretariat could improve the outcomes if it had more resources. In general, participants identified the need for Parties to think about the sustainability of the process and take steps to ensure continued confidence in the technical assessments. Some suggestions included the idea that individuals within the Secretariat may have knowledge of experts who could be good candidates for technical assessors, and these individuals could be helpful in identifying new assessors. In some cases, this knowledge arises from participation in the review of Biennial Update Reports (BURs). Participants suggested that the expert identification process could be made more formal and successful if the Secretariat staff could allocate time to identifying in-country candidates and facilitating their nomination by their national focal points. Another suggestion was that the Secretariat could help facilitate (and contribute to) the design and construction of a "default" model for FRL/FREL submissions. This process would require additional capacity and a mandate from the COP. Most agreed that such a mandate and the appropriate resources would be helpful and appropriate (though difficult to obtain), since the Secretariat is often in the best position to understand the capacities and needs across countries – factors that would be important in the development of a "default" approach. Such a process could also have benefits in delivering comparability among the FRLs/FRELs and facilitating timely and consistent assessments.
Recommendations: Since it was acknowledged that the Secretariat cannot formally take action without a mandate from the COP, the group thought it may be useful for Parties to explore whether such a mandate would be helpful to the achievement of the goals of REDD+. Furthermore, many expressed interest in participating in a process to develop a more standardized "default" approach to the FRL/FREL submissions – even if such an approach were only used on a voluntary basis by REDD+ countries. Notwithstanding a mandate from the COP, some noted that such a process could prove useful to donor entities.

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7 OVERARCHING LESSONS

Finally, a number of points emerged from the discussion that did not fit neatly into any of the categories listed above.

Lesson: Assessment of FRL/FRELs in parts, by each separate principle and criteria in the COP decision, does not give a complete picture of the FRL/FREL.
Points of discussion: Participants highlighted how assessment of reference levels based on the principles and criteria, one at the time, did not allow for a complete picture assessment of the proposed FRL/FREL. It was agreed that partial criteria is needed, but that a holistic approach was advisable for an FRL/FREL submission assessment. Such an approach would ensure that performing poorly under a specific criterion would not mean a proposed FRL/FREL would be invalid; conversely, it could mean that compliance with all criteria would not necessarily guarantee the legitimacy of a given FRL/FREL.
Recommendations: Reference levels should be assessed as a complete construct, not as the sum of the parts.

Lesson: Overreliance on consultants and other partners could be detrimental to REDD+ countries in the long term.
Points of discussion: Participants discussed the tradeoffs of working with consultants to create FRLs/FRELs. Overreliance on consultants can contribute to a lack of country ownership and capacity. In some cases, consultants can create a lack of transparency by placing copyrights on data. In other cases, consultants come from a project background with limited understanding of the national context.
Recommendations: REDD+ countries should continue to build national capacity and ownership in creating and improving their FRLs/FRELs, creating long-term, stable jobs within countries. Consultants and other partners should contribute to and allow the development of sustainable capacity in REDD+ countries in the long term, and should create exit strategies with the REDD+ countries for when they are no longer needed.

Lesson: FRLs/FRELs and measuring, reporting and verification (MRV) are interconnected
Points of discussion: After REDD+ countries create their FRLs/FRELs, they need to measure their progress against these baselines through MRV and submit their results. To ensure consistency between the FRLs/FRELs and reported results, countries will need to use the same methodologies and tools, or follow practices to ensure consistency across methodologies, such as those recommended in the IPCC guidelines.[11]
Recommendations: REDD+ countries should consider how FRLs/FRELs fit into their long-term monitoring and MRV strategies. REDD+ countries should indicate how they will maintain consistency between their FRLs/FRELs and their MRV systems and Biennial Update Reports.

Lesson: It is important to bolster the credibility of REDD+ and its contribution to the overall climate regime.
Points of discussion: Participants expressed the importance of environmental integrity of FRLs/FRELs, because they could have bearings on the credibility of REDD+ as a whole. At the same time, they emphasized that FRL/FREL creation and assessment were learning-by-doing processes that need support and investment. Finally, participants cautioned not to lose sight of the bigger picture —fostering sustainable development and fighting climate change — and the role REDD+ can play.
Recommendations: Donor countries, REDD+ countries, and multilateral institutions such as the Green Climate Fund should make FRLs/FRELs operational, in part through payments for results, so that REDD+ does not lose momentum. Donor countries also need to build their capacity on REDD+, keeping informed on some of the more technical aspects of REDD+ such as uncertainties. Finally, countries should consider how REDD+ fits with other national and international priorities, such as Sustainable Development Goals and the UNFCCC global stock-take.

[11] IPCC 2006 Guidelines, Volume 1, Chapter 5. http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/1_Volume1/V1_5_Ch5_Timeseries.pdf

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Annex 1:

A FOCUS ON DEGRADATION IN FOREST REFERENCE LEVELS

An important point that emerged from the workshop was that degradation – though potentially an important source of emissions and potential leakage of emissions from deforestation – tended to be omitted from REDD+ FRLs/FRELs. Workshop participants discussed this issue in depth, yielding six important lessons about how to make progress toward the broader inclusion of degradation in FRELs, presented below.

LESSON 1:

Definitions of degradation may be tailored to each country's circumstances in terms of land-use classification, MRV systems, policy instruments, and goals, as long as the definitions and their intended use are clearly communicated, while keeping consistency with IPCC methods for estimating emissions and removals in *Forest Land Remaining Forest Land.* [12]

Points of discussion:

- Inclusion of degradation in national (or subnational) FREL can be facilitated by:
  - An operational definition of degradation, with consensus among relevant domestic agencies;
  - A set of definitions, identified by the country, for degradation and degraded land, based on practical considerations, and stratified for each major ecosystem type, in part to help identify the areas where development of degradation emistsions factors should be prioritized;
  - Identification of which anthropogenic emissions and removals in Forest land remaining Forest land should be considered to be forest degradation
  - Identification and inclusion of degradation as a REDD+ activity, in accordance with the identification of key categories for the national GHG inventory;
  - The separation of deforestation and degradation as distinct activities, because they may be caused by different drivers and therefore addressed by different policies;
  - Definitions of deforestation and degradation matched to the capacities of the monitoring and measurement system;
  - Consideration of how current methods and available data may help to avoid double-counting and increase transparency;
  - Consideration of potential future changes in the comprehensiveness of activities, spatial coverage, or methods of data collection and analysis.
  - The need for REDD+ to consider natural disturbances, along with associated guidance by IPCC, when it comes to degradation and any other land use or land use change.

[12] IPCC 2006 Guidelines. Chapter 4.2 Forest Remaining Forest Land. http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/4_Volume4/V4_04_Ch4_Forest_Land.pdf

- Among other reasons (covered in more detail below), the inclusion of degradation in the FREL is impeded by the difficulty in determining the extent to which degradation is anthropogenic.

Recommendations:

After reaffirming each country's flexibility to define activities and land-cover categories according to its own national circumstances, participants focused their attention on the most useful and effective elements to construct definitions for degradation and degraded land. In many cases, participants from REDD+ countries noted that the definitions must serve broader purposes, domestically, beyond simply tracking emissions. For instance, they can be used for broader applications of land-use planning. Therefore, the development of definitions for degradation and degraded land should consider wider applications, and facilitate deeper understanding of land-use drivers and the potential expansion of degradation. Furthermore, the definition must be compatible with current and future MRV systems in order to be meaningful. Finally, the definition should be designed to avoid the possibility of double-counting and to enhance transparency.

Meeting these criteria will not be easy, and the approach must necessarily differ from country to country. Nevertheless, the group agreed that environmental integrity and the demonstration of results will be favored by definitions of degradation that 1) differentiate it from deforestation, 2) fit within a clear stratification of activities and categories, 3) are compatible with existing or planned MRV systems, 4) can be inclusive of all land-cover types within the country, 5) are compatible with IPCC guidelines

LESSON 2:

Current guidance is sufficient for the inclusion of degradation, though some updates and supplemental methodologies could be helpful.

Points of discussion:

- Countries can make the best use of current IPCC guidance by:
  - Using Tier 1 default data when better, country-specific information cannot be utilized (although many countries also have data on forest fire, timber growth, and harvesting statistics, which may offer ways to improve upon a Tier 1 approach.[13]
  - Reporting comprehensive and complete information in the national inventories and national communications, using a land-based approach, as a means to demonstrate the potential level of leakage to other areas or activities, including degradation.
- Participants expressed concern about how to use current guidance to:
  - Support requests for result-based payments, when the quality of underlying data is mixed or unverified, which is often the case for degradation;
- Participants suggested the possibility of countries submitting a supplemental Annex to the FREL, in which they could request a technical review of information on additional activities (such as degradation), which may not be ready for consideration as REDD+ activities, but could be added later in a stepwise approach.
- Participants also suggested that REDD countries could provide an improvement plan for how to include/improve degradation data in the future.
- Participants noted the development of helpful methodological advice[14] from the Global Forest Observations Initiative (GFOI) and a planned process to add refinements to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, which serve as a basis for developing FRELs.

Recommendations:

Participants agreed that current IPCC guidance is sufficient to enable them to include degradation in FRELs in a robust way; however, they also agreed that useful information, methodologies, and practices have become available since the guidance was developed. In some cases, these developments have reduced the costs or effort required to reach higher tiers of the reporting guidelines, putting higher-quality information within reach of even the most capacity-limited countries. As a result, the lower tiers may not be as relevant. At the same time, the IPCC guidelines are not always useful in guiding countries about how to utilize these newer approaches, and so supplemental guidance may be needed. The GFOI has developed relevant advice on many of these points, and the IPCC is expected to develop refinements to the existing guidelines starting later this year. Such refinements and guidance may help countries find cost-effective ways to include and report on activities and policies aimed at reducing degradation.

[13] Several sources of up-to-date, spatially explicit information about land-cover change are available for the entire globe (e.g. GoogleEarth, Global Forest Watch), but in some cases, this information is not accessible or usable by the team constructing a country's FREL. Furthermore, land-cover information is only one of two pieces of information needed to calculate emissions from degradation; the other is the relevant emissions factor.

[14] http://www.gfoi.org/methods-guidance/

LESSON 3:

Data quality is currently perceived as a barrier to inclusion of degradation in FRELs.

Points of discussion:

- Participants representing REDD+ countries expressed concern that reporting high levels of uncertainty could become a point of scrutiny by technical assessors, and as a result, could discourage donor entities from supporting activities aimed at reducing forest degradation.
- Participants representing technical assessment teams and civil society noted that some of the goals of the assessment process are to exchange information, identify areas for improvement, and facilitate capacity building,[15] and that the process cannot achieve these goals unless relevant information is made available.
- Participants agreed that this barrier could be addressed through trust-building practices like cooperative exchanges, focused dialogues that include donor entities, and the submission of supplemental information for review.
- Participants noted the high costs of MRV with respect to degradation, and questioned the cost-effectiveness of MRV activities when it will be difficult to demonstrate results and secure results-based payments for reductions in emissions from degradation.
- Participants acknowledged that uncertainties will continue to be an ongoing challenge in relation to degradation, and therefore countries may need incentives and support for degradation and other REDD+ activities to move forward despite high uncertainties.

Recommendations:

While the group spent substantial time talking about technical approaches to address uncertainties, the participants also highlighted the perception of uncertainty, and its potential implications. All acknowledged that uncertainties about emissions from degradation could be high – sometimes exceeding 100% -- but most REDD+ countries thought that quantifying and reporting this information was not out of reach technically. Their bigger concern was that reporting this information would discourage support more than omitting the information, creating a perverse incentive. Representatives of the technical assessors and civil society were sympathetic to this concern and were aware that securing support is essential for the success of many REDD+ activities, including degradation. Furthermore, if such information is not included in the FREL submission, the REDD+ countries miss the opportunity to access the expertise of the technical assessors in the facilitative review process.

Recognizing that perception is one of the key challenges, the group worked to identify approaches that can address this perception and improve the trust between REDD+ countries and donor entities. The technical assessors were sensitized to their role as intermediaries in this process. Some of the ideas for building trust and addressing uncertainties included 1) using South-South exchanges to share experiences and build a common understanding of potential approaches to reduce uncertainties; 2) including information on uncertainties in a supplemental annex to the FREL, so that technical assessors can comment on it; and 3) encouraging donors and researchers to develop approaches and informational resources that can shed light on degradation, and then make these resources available to all countries at minimal cost. This last idea could deliver the added advantage of harmonizing the types of data used for building FRELs and reporting progress, making the assessment process more streamlined and the results more easily verified.

LESSON 4:

Leakage of emissions from deforestation into other activities (such as degradation) and areas has the potential to go undetected, primarily as a result of incompleteness and related uncertainties in the FREL and subsequent MRV; therefore, national inventories may be an important source of supplemental information.

Points of discussion:

- Participants acknowledged the risk of leakage of emissions from activities included in the FREL to activities or geographies not included in the FREL. Degradation was a clear example.

[15] Decision 13/CP.19

- Participants also noted that REDD+ countries may work toward greater comprehensiveness and completeness over time, using a stepwise approach, and that this process could be accelerated, in some cases, with external support.

- Participants observed that national inventories should be comprehensive and provide complete coverage of all sources and geographies, using a land-based approach. Such information can provide important context to the activities and geographies included in the FREL and might be used to demonstrate the potential extent of domestic leakage (if any).

- Participants suggested that even if degradation is excluded from FRELs due to lack of data, countries could provide evidence through proxies that emissions are not leaking from deforestation to degradation.

Recommendations:

Participants were aware of the risks of leakage, and discussed the various approaches that have been used in voluntary and national contexts to address the risk of leakage. Nevertheless, representatives from REDD+ countries tended to see data and resource constraints as the main barrier to addressing this issue. Addressing the risk of leakage may currently be beyond the scope of the FREL process and beyond the capacity of many countries, unless additional support is made available.

As a backstop, national inventories could provide information that indicates the potential extent of domestic leakage. If done according to IPCC guidelines, the inventory should be comprehensive, and would potentially include emissions beyond the scope of the activities included in the FREL. Thus, comparing the emissions reported in the inventory to the emissions reported for the activities covered in the FREL could give an indication of the possible scale of domestic leakage.

National inventories can only provide an indication, however, and additional, independent research may be needed to monitor degradation that does not fall under the scope of REDD+ activities.

LESSON 5:

Facilitative reviews, exchanges, and expert dialogues are an important means of sharing information and experience, building capacity, and improving the consistency of reviews, especially for an activity like degradation, for which information and understanding is limited.

Points of discussion:

- Participants highlighted the value of the facilitative assessments, South-South exchanges, and other dialogues among experts, as a means of sharing experiences and building capacity.

- Participants noted that technical assessors vary in their experience and approaches, and this has the potential to result in uneven assessments across countries. The group emphasized the importance of ongoing dialogues and training among assessors, as well as development of a broader pool of assessors.

Recommendations:

Participants suggested that additional support and coordination of the technical assessment process would facilitate more even outcomes and would improve the overall quality of the assessments. The group also proposed ways to expand the pool of technical assessors, which is currently quite limited. Participants noted the established procedure for consulting experienced LULUCF experts in the event of a disagreement or need for clarification, but there were differences in views about whether these procedures applied to the FREL assessment process.

LESSON 6:

Additional research and supporting investments can improve knowledge of degradation and strengthen the basis for addressing degradation in the FREL.

Points of discussion:

- Participants noted the important role of independent research from outside sources, which has informed countries about unknown processes of degradation and undetected levels of emissions. Such research has been key in developing methods for identifying and measuring degradation.

- Participants also suggested that donor entities could benefit from supporting the integrity and quality of the assessment process, by investments such as 1) building up

a broader, more diverse pool of assessors, 2) supporting effective and comprehensive training for assessors, and 3) facilitating broader dialogues among assessors and between assessors and FREL developers.

- Participants highlighted the importance of research aimed at addressing practical considerations and challenges for countries developing FRELs and monitoring degradation.

Recommendations:

Participants explored the potential weaknesses of the technical assessment process and identified ways to guard against overtaxing those engaged in the process or undermining the integrity of the process. The role of outside research was seen as one of the key factors in maintaining independent checks on degradation and developing new methods for tracking aspects of degradation. The group suggested that these issues could be an important area of focus for donor entities, who also benefit from a robust process with the highest possible integrity – an outcome that is not assured under the current, somewhat inconsistent way in which assessors are identified, trained, and assigned.

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Annex 2:
PARTICIPANTS LIST

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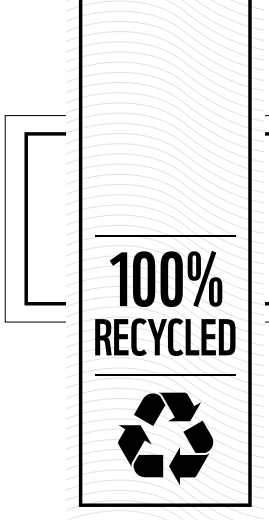
All participants had the chance to review the document, but the authors take sole responsibility for any errors in transcription or interpretation that occurred during the development of this report.
* These participants could not attend the full workshop. Therefore, the recommendations in this report may not fully reflect their views.



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