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REDD+ CAPACITY BUILDING

FROM PROJECT-BASED TO NESTED REDD+

Monitoring, Reporting and
Verifying (MRV) standards
for carbon accounting

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EXECUTIVE SUMMARY

Consensus has been reached in climate negotiations that carbon emissions associated with Reducing Emissions from Deforestation and Forest Degradation (REDD+) will be monitored and recorded based on national-level accounting systems. However, sub-national initiatives, especially at the project level, are rapidly evolving and are already being implemented in many countries. Determining ways to integrate these two different accounting systems and scales, i.e., generating “nested” approaches, is thus integral to the future success of a global REDD+ mechanism.

In recognition of this challenge, this short report seeks to determine which of the existing standards for the monitoring, reporting and verification (MRV) of carbon emissions associated with REDD+ activities are most appropriate for use within a nested system. Furthermore, the report seeks to uncover and highlight key issues that all project managers developing REDD+ projects should consider when developing sub-national REDD+ projects. To achieve this goal the author has undertaken both a literature review and a series of key stakeholder interviews.

The key findings of the research are as follows:

- COP 17 mandated that reference emissions levels for national REDD+ emissions reporting should be calculated using the most recent Intergovernmental Panel on Climate Change (IPCC) guidelines, and thus all REDD+ projects should ensure that they comply with these guidelines to allow for future nesting.
- When developing project-based MRV systems, the national REDD+ strategy and context should be taken into consideration to ensure that the projects are set up to be easily integrated into a future nested system.
- If there is a lack of national MRV guidelines to comply with, the Verified Carbon Standard (VCS) currently provides the most useful standard for MRV in REDD+, but its detailed methodological requirements provide significant hindrances. VCS is recommended for use, but only if it gives a realistic and feasible means of conforming with the IPCC 2006 guidelines. Where this is not possible, other guidelines such as the GOLF-GOLD source book should be referenced.
- Governments should be consulted as stakeholders when setting up project-based MRV activities.
- Dialogue needs to be established and formalized between field level projects and the jurisdictional or national level to ensure that activities are complementary and that progress is made in parallel.
- Simplicity in developing MRV systems is important. This helps to reduce costs and make projects more profitable.
- Feasibility and cost benefit analyses should be undertaken before any REDD+ project is initiated. This will help define the MRV system put in place. The World Bank's training manual on opportunity costs is a useful document to consult in undertaking this assessment.
- The drivers of deforestation and degradation will help to define the MRV system required.
- Capacity development is needed to support governments in building a central REDD+ coordinating body that can set out MRV criteria and subsequently implement national and nested REDD+.
- Capacity development is also required to support information system management, to ensure that data is effectively collected and stored in databases for use in nested and national MRV systems.

INTRODUCTION

Consensus has been reached in climate negotiations that emissions associated with REDD+ will be monitored and recorded based on national-level accounting systems. However, sub-national initiatives, especially at the project level, are rapidly evolving and are already being implemented in many countries. Determining ways to integrate these two different accounting systems and scales, i.e., generating “nested” approaches, is thus integral to the future success of a global REDD+ mechanism.

In recognition of this challenge, there is a specific need to understand how the project-level monitoring, reporting and verification (MRV) of carbon emissions reductions associated with the majority of existing REDD+ projects can be integrated with future national reporting frameworks. This is not only important for the future success of REDD+ but also relevant today, as project managers need to ensure that when they are developing REDD+ projects, they take heed of how future reporting mechanisms will likely take shape.

This short report investigates this issue through both a literature review and a summary of the findings from a series of interviews with key stakeholders both internal and external to WWF. The report’s goal is to gain an overarching picture of the different perspectives of standards used for MRV and applied to REDD+, as reporting moves from a project-based framework to a more nested or national approach.

Interviews were held with a variety of experts, including: technical and MRV experts from large conservation NGOs and the World Bank, individuals involved in the development of voluntary standards including the Verified Carbon Standard (VCS) and the Climate Community and Biodiversity Alliance’s (CCBA) voluntary standard, as well as WWF project managers for REDD+ projects based in a variety of countries.

While the key goal of the research was to gain a picture of which standards for MRV are most appropriate for use within a nested approach to REDD+, several specific research questions were also addressed. These included gaining an understanding of the challenges of applying existing MRV standards, determining how funds should be allocated within a nested system, and defining the overarching social and political issues that need to be considered.

A summary of the key findings from the interviews has been presented in chapter 2. Chapter 3 provides a short literature review to determine if the findings from the interviews can be supported by common thinking in academia and among international institutions. Taking forward the commentary and findings in chapters 2 and 3, recommendations for project managers are provided in chapter 4, along with next steps for further research.



2.0

SUMMARY OF KEY FINDINGS

This chapter summarizes the key findings from a number of stakeholder interviews. Individuals were interviewed from a range of organizations including both technical and MRV experts from large conservation NGOs, the World Bank and individuals involved in the development of voluntary standards including VCS and CCBA, as well as WWF project managers for REDD+ projects based in a variety of countries.

Please note that the content of this chapter reflects the collective response from the interviewees, and the information should be regarded in parallel with the literature review summarized in chapter 3. Finally, the key findings from both chapters 2 and 3 are drawn together in chapter 4, along with a recommended way forward.

2.1

WHICH STANDARD IS THE MOST APPROPRIATE FOR CARBON MRV IN NESTED REDD+?

There was general agreement among the interviewees that no one standard will be applicable to all countries within a nested or sub-national REDD+ framework. Moreover, the only actual standard for carbon-related MRV being used within REDD+ projects among the interviewees was the VCS's standard. Within WWF, existing policy states that the VCS should be used for REDD+ in conjunction with the CCBA's standard to account for social and environmental safeguards. Outside WWF, the VCS standard was also deemed the most robust and appropriate standard for carbon accounting in REDD+ projects, and again was typically applied with the CCBA's standard. However, not all projects involving MRV systems were being set up to comply with this standard.

On review of the interviews, three approaches emerged in terms of MRV: complying with the VCS and CCBA, developing a "best practices" MRV, and "lowering the bar" by using simple and easy methods. These approaches are detailed below.

2.1.1

Complying with VCS and CCBA

In terms of using standards for MRV within REDD+, VCS and CCBA were the only two standards mentioned by those interviewed. VCS is being used to develop an assessment of the carbon emissions associated with REDD+, and the CCBA is being used to ensure that social and environmental safeguards are met.

The key reason noted for using the VCS's standard was the organization's good reputation—thus buyers want to buy VCS credits as they are seen as being robust and credible. Obtaining buyers is a critical concern for projects applying certification standards, because with no buyers, the view is that there is no value in certification. There is a trade-off to this, though: VCS certification is very costly, time-consuming and data-intensive.

While many are currently applying VCS's MRV systems to REDD+ projects, a number of key issues were raised in relation to the system's applicability at the sub-national or nested level. These included the onerous methodological requirements of the VCS standard and the fact that there are currently not many methods available under the standard. Those that have been developed are specific to a certain project case, and if a new project differs even just a little bit from the existing methods, the project managers must update and rewrite the affected method steps and undergo a double approval process. It is thus difficult and costly to start a project that doesn't already have a methodology that fits. Others

commented that VCS was very complex and complicated, and that it is hard to combine the required technical accuracy with the reality of what the project can achieve, especially in developing countries. Others still noted the difficulties of up-scaling the technical requirements of VCS methodologies. For example, VCS reference areas need to be similar and uniform when compared to the project area in order to assess project baselines and potential leakage. This becomes a problem when REDD+ is scaled up, as it is not possible to find appropriate reference areas and at the national level finding reference areas becomes rather impossible.

Of importance to this research is the fact that VCS has recently started the process of developing a new standard, the “jurisdictional and nested REDD+ standard” (JRNI), which has the goal

of providing an integrated accounting framework for crediting REDD+ projects, policies and programs across states, provinces or nations. The completed development of the JRNI standard is likely to be a few years away. VCS has also set up an initiative to look at standardizing approaches to setting baselines and determining additionality that does not need a baseline per se, but instead uses a performance benchmark (if you perform better than a threshold then you can gain credits and be rewarded). This effort is linked to the JRNI initiative, but has been kept separate so that it can be integrated into jurisdictional and nested projects, and is also currently undergoing a formal consultation process. Given these initiatives, it is likely that the VCS standard will become more applicable to MRV for nested REDD+ projects in the future.

2.1.2

Best-practices MRV

Some stakeholders are developing MRV systems that do not comply with a reporting standard but instead represent best practices: the highest-grade methodologies possible for carbon accounting. The goal is to develop systems that can be used as proof-of-concept demonstrations. These projects are generally not intended for the voluntary market but are instead intended to attract financing from international systems or bilateral funds. MRV best practices meet the need for demonstration projects showing how REDD+ can be pulled off on a larger scale.



“...REQUIREMENTS FOR MRV STANDARDS WILL ULTIMATELY BE DRIVEN BY THE MARKET, AS A VALIDATION OF INVESTMENT.”

2.1.3

Simply “lowering the bar”

A third approach discussed by interviewees was a simplified MRV system. Such an approach can help make REDD+ projects more financially feasible, thanks to the reduced time and costs required for developing the MRV system, setting up the project and achieving certification. This is especially relevant in a climate where the rate of financial return has not been proven when investing in the development of large-scale, complicated and expensive REDD+ projects. A “lowering the bar” approach to MRV, however, can be criticized for ignoring the fact that better data may be available and may provide an inaccurate estimate of carbon emissions. Nonetheless, the accusation of inaccuracy may not be valid. When you consider the multiplication effect of the uncertainties involved in developing detailed methodologies, the detailed methodologies may actually hold higher levels of uncertainty than the data used in a more simplified approach. In essence, the argument for “lowering the bar” is that more sophisticated methods increase cost and do not necessarily yield greater accuracy.

An example of this approach is the simplified carbon accounting process used by the Amazon Fund, in which deforestation rates are solely measured and applied to a single carbon biomass factor. While it is estimated that Amazonian forest carbon storage varies between 50 and 400 tonnes per hectare, the Amazon Fund adopts a relatively low “flat rate” estimate of 100 tonnes stored per hectare. Although this means that Brazil is likely underestimating the emissions

reductions achieved from avoided deforestation, the simplicity of this approach has significantly reduced the costs, time and complexity associated with taking detailed onsite measurements, which has allowed the plan to be quickly and effectively put in place.

2.1.4

Summary

On reviewing the methods currently used to establish MRV systems, it is clear that there will never be one solution that will meet the needs of all countries. Furthermore, it must be noted that countries are stating they do not want REDD+ to become another Clean Development Mechanism (CDM)—one central body that makes all decisions. While the VCS’s JRNI may provide solutions for some countries, it is unlikely to suit everyone, and one approach produced by one central body is likely to be especially problematic. Further, requirements for MRV standards will ultimately be driven by the market, as a validation of investment. Exploring what the market demands in terms of MRV would be a good starting point to move this discussion forward.

2.2

OTHER KEY ISSUES ASSOCIATED WITH JURISDICTIONAL AND NESTED MRV SYSTEMS

In addition to exploring the applicability of different standards for MRV in a nested or jurisdictional REDD+ framework, this interview-based research has enabled the discovery of a number of key issues associated with scaling up MRV systems. These key issues are explained in the text below. A summary of supporting literature is provided in chapter 3, and potential solutions and ways forward are discussed in chapter 4.

2.2.1

Detail

One of the key issues that currently exists in developing project-based MRV systems is the level of detail needed during the data collection stage, especially within the VCS standard. This is not only time-consuming and costly but sometimes nearly impossible to obtain. Interviewees noted that it is already difficult to reconcile the technical accuracy required by standards with the reality of data availability in developing countries. This raises the question of how this issue can be managed as REDD+ moves toward a more nested approach, where even more complex systems for monitoring and measuring are required and there is an increased likelihood of data

availability issues arising. In particular, delivering national and sub-national monitoring at a level of detail that certifiers are happy to certify will be a key issue.

Furthermore, it was recognized that the level of detail within the MRV system should be in part related to the drivers of deforestation. For example, if agricultural expansion drives deforestation in one area, a monitoring system that quickly identifies land use change is needed. If the main issue is fuel wood collection, the monitoring system will have to be completely different. Thus, in different contexts the challenges are very different and the system will look different. This does not mean that the systems cannot be comparable, but it does mean that systems need to be flexible to support varying national and sub-national situations.

“...IT WAS RECOGNIZED THAT THE LEVEL OF DETAIL WITHIN THE MRV SYSTEM SHOULD BE IN PART RELATED TO THE DRIVERS OF DEFORESTATION”.

2.2.2

Uncertainty

The uncertainty within the data sets used for MRV within REDD+ was identified by numerous interviewees, especially in relation to the IPCC's tiered system. Managers said as they move from tier 2 to tier 3 the uncertainty in the data sets increases, because there is nothing to guarantee that the data sets the IPCC requires them to use are more accurately generated. Interviewees also said that it can be very difficult to determine the uncertainty associated with data resources, as this uncertainty is often not reported, or if it is it is minimized. As managers incorporate more data sets into an analysis, the uncertainty will continue to rise, leading to a situation that can worsen, as more information is gathered.

Information about the IPCC tiered system is available at <http://bit.ly/IPCCtieredsystem>

2.2.3

Cost

Project managers have already recognized the need to keep REDD+ projects as simple as possible in order to make them financially viable, and the need for a very honest and accurate feasibility assessment or project cost benefit analysis (CBA) to determine if efforts make financial sense or not. Currently, in the absence of a lack of robust pricing signals, managers struggle to understand costs and reasonable cost levels. Again, this points to the need for a middle ground in terms of detailed and accurate project methodologies versus a portfolio of methods with



fewer details—as well as a greater level of user friendliness. A key question to consider is how detailed the data within an MRV system should be in practical terms. Under the VCS, for example, each new project has to develop its own methodology and must undergo a double approval process, which is very costly.

Some project managers have already started to think about how they would manage this in a nested REDD+ framework. For example, WCS representatives recommended that project managers negotiate with the regional or national government to have the entire cost of project development and certification be recouped from any carbon revenues generated in a transparent and accountable manner, and have the remaining finances distributed among stakeholders in a fair manner. For example, the WCS representatives suggest that 10 to 15 per cent of the overall project income should go to the government, and then a proportion for project management and a proportion to beneficiaries on the ground. They also stated that decisions on the allocation of finances must be made at the front end of the project, in a transparent and open manner with all major stakeholders involved.

Finally, it should be recognized that this is a new field, and that projects are still determining the market demands in terms of MRV systems for REDD+. Over time, managers will be able to see how MRV can be set up to support all kinds of projects, and develop methods that the market accepts but are not overly onerous for the project developers. VCS perceives the projects currently

underway as pilot projects, where lessons will be learned and methods adapted to make them more applicable and easier to use.

2.2.4

Good Governance

A strong message coming from the majority of interviewees was that developing MRV for nested projects is more of a political issue than a methodological issue. It was suggested that supporting the development of good governance structures was key, including supporting governments in developing national and sub-national REDD+ policies rather than (or at least before) setting up individual REDD+ projects. Furthermore, at the national level, REDD+ is linked to development, and there is a need for it to be meshed with national development goals to make sure that the social and political components are being appropriately considered. It was suggested that many countries need support in understanding this concept and in coordinating and integrating REDD+ into their wider policy frameworks. Adding an additional layer of complexity, the successful delivery of REDD+ requires the coordination of numerous government departments that may not be used to working together. Any support that can be given in supporting this process will be useful.

Another key element of good governance that came out in the interviews was that of developing mechanisms to ensure that an appropriate proportion of the money generated from REDD+ goes to on the ground project managers. Due to the high levels of corruption

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existing in many REDD+ countries, this goal is particularly challenging. However, interviewees had a number of suggestions as to how this could be addressed, whether through working with governments to generate the political will to distribute fairly or accessing some form of international entity that has the role of ensuring that fair distribution takes place. Alternatively, REDD+ projects that are currently being developed could be set up in a way that ensures appropriate funds to the key stakeholders, as was developed in the WCS project detailed in section 2.4.3 above.

2.2.5

Capacity Development

The interviews made clear that although some capacity is being built within nations that are implementing REDD+, much more could be done to support the future development of effectively nested MRV systems. It was noted that in some countries, many potential donors are trying to implement REDD+ projects, all with their own specific agendas. This can be challenging and confusing for the local governments, especially if they do not have their own central coordinating body. In such situations organizations such as WWF should be working with the government to help it appropriately manage and coordinate REDD+. In terms of cost effectiveness, it makes sense to have a core national and native monitoring team and a reporting team of experts rather than an individual team for each specific REDD+ project. While some countries may not be ready to take on this role, it should be considered when developing a capacity-

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building programme. Support may be needed to help governments determine what isn't working so that unsuccessful projects aren't being replicated in different parts of the country. Mechanisms may also be needed to ensure that the different projects within the country are communicating with each other and sharing experiences.

It was also recognized that while a lot of effort is being made to develop MRV systems, there seems to be a lack of necessary effort to support nations in developing appropriate data management systems across and between ministries. For example, developing capacity for complex modelling and monitoring is getting far more attention from donors than the simple aspects of data management and database development. REDD+ requires a vast quantity of information from different agencies at the sub-national and national level, so data needs to be collected, shared and managed in a coordinated way. The more efficiently it is shared, the better a country can plan for emissions reductions.

2.2.6

Transparency and Alignment

The need for REDD+ project managers to understand how their efforts will fit into sub-national and national REDD+ activities and to be completely transparent with regional and national governments was seen by some interviewees as the most important criteria for the successful delivery of nested REDD+ projects. Concerns were raised about the political distrust of NGO-implemented projects when governments feel that NGOs are “going behind their backs”. Building a strong relationship with the government and being completely transparent with it is thus critical. It was recommended that at every stage in project development, project managers should be communicating and coordinating with government representatives in a transparent and inclusive manner. For example, one interviewee suggested that even if project managers do not need approval from local governments to implement their projects, they should still seek to ensure that good relationships are built. Anything from local governments that demonstrates their recognition of a project is very helpful.

Project managers should work with local governments to develop alignment. Where projects are coordinated with the government it helps to effectively move things forward for all parties. In Peru there are a large number of projects being implemented, and stakeholders are working together to develop a regional baseline that all can use.

2.2.7

Financial Accountability

Linked to transparency is the issue of clear financial accountability; that is, project managers must ensure that the financial structures of their project are open and transparent to regional and national governments. Governments are very sensitive to this issue, and a lack of financial transparency will likely cause political tensions between institutions delivering projects and governments. Project finances must be managed in a very clear way so that national and sub-national government bodies are included. If these bodies are consulted when developing the project's financial structures, they will have some ownership over the process. Interviewees warned that if this does not happen, governments may feel that they are being undercut. To manage this issue in Madagascar, the WCS agreed that it would provide a full account of all the costs of setting up the project, and if the project cost less than estimated, they would only take the money that covers their costs.

politically and socially viable. Such an assessment will also help with developing the approach used within the project, such as what form of MRV system can be put in place based on how much money is predicted to be available after the sale of carbon credits.

In particular, being “really honest” in this assessment was mentioned, reflecting project managers’ tendency to be overly optimistic both in terms of the overarching project costs as well as the revenue that can be generated from avoided carbon emissions. There have been situations where the cost of implementing and attaining tier 3 data has been very high and the process has taken a lot of time, but the resulting data still has a lot of uncertainty associated with it. In other words, a very costly process has obtained data that is highly unreliable. This has brought into question the potential for projects to cover their costs when collecting tier 3 data, and whether it is actually more financially viable to take a simpler approach with lower project costs, even if it produces less accurate data.

2.2.8

Feasibility Assessments and CBA

The need to assess the implications of different project design options was noted by a number of interviewees. Due to the complexity of developing REDD+ projects, a thorough and detailed feasibility assessment that explores the social and political environment as well as the potential for emissions reductions is deemed necessary as the first step in any REDD+ project. This should help to identify if the project is financially,

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3.0

SUMMARY OF SUPPORTING LITERATURE

To support the interview process, a literature review was undertaken. The results of the literature review have been reported under the same headings as chapter 2 to allow easy comparison of the messages coming from both assessments.

3.1

WHICH STANDARD IS THE MOST APPROPRIATE FOR CARBON MRV IN NESTED REDD+ PROJECTS?

3.1.1

Decision at COP 17

Prior to discussing the literature review it is necessary to comment on the recent developments in international climate change negotiations that have implications for this research project. At the recent Conference of the Parties (COP) session, COP 17, held in Durban in December 2011, the COP adopted a decision called “Guidance on systems for providing information on how safeguards are addressed and respected and modalities relating to forest reference emission levels and forest reference levels as referred to in decision 1/CP.16 (Draft Decision -/CP.17 Annex)”. In this decision, the COP requested that countries reporting on their reference emissions levels for REDD+ reporting be “guided by the most recent Intergovernmental Panel on Climate

Change guidance and guidelines”. The COP is asking nations to use the IPCC’s 2006 guidelines for generating national REDD+ reference levels when monitoring and measuring emissions reductions. Furthermore, while it requires that countries use transparent historical data and that they adjust for national circumstances, it does not specify exactly how countries should do this. The COP instead requests that “countries submit information and rationale on the development of their forest reference emissions levels ... including information on how the national circumstances were considered” (Draft Decision -/CP.17 p9). Essentially the COP suggests that it is all right for countries to develop their own approaches as long as they explain what they are doing and why they are doing it. The decision also mentions that “a step-wise approach to ... reference level development may be useful” and that “sub-national ... reference levels may be elaborated as an interim measure while transitioning to a national forest reference emissions level”. This has opened the door to nested MRV as part of a future national approach to emissions reductions, and has closed the gap in terms of requirements for sub-national and national reference-level generation.

For project managers developing sub-national REDD+ projects, it is clear that all methodologies for quantifying carbon emissions should comply with the IPCC 2006 guidelines. Furthermore, if national REDD+ strategies contain guidelines for MRV, these should also be complied with to ensure the success of future nesting.



3.1.2

Literature on standards for MRV

Not many authors have assessed the different standards for REDD+ in terms of those standards’ ability to undertake MRV, and no other authors have addressed this issue explicitly in terms of MRV for a nested REDD+ mechanism. The closest any author has come to addressing this issue is Merger et al. (2011), who explore the “practical applicability to REDD+ of ten forest management, social, environmental and carbon standards” (2011:550). Those authors assess the ten standards on their ability to perform against six criteria: poverty alleviation, sustainable management of forests, biodiversity protection, quantification and assessment of net greenhouse gas emissions, monitoring,



and reporting and certification procedures. In our analysis (assessing MRV procedures for the certification of emissions reductions) only the final three criteria are relevant. The report concludes that of the ten standards assessed, only the VCS treats these three criteria comprehensively. This directly supports the analysis of the interviews presented in chapter 2, which suggested that the VCS is the standard currently most applicable to REDD+. Nevertheless, the paper also notes that the implementation of the VCS is costly and time-consuming with complex methodology approval procedures that strongly hinder its use. Indeed, a quote from a project manager goes as far as stating that these issues provide a direct “disincentive to using carbon finances as a means to protect native forests”

(Merger et al. 2011:537). The other two standards that are noted in the paper for their ability to quantify carbon emissions are the CarbonFix Standard and Plan Vivo. The CarbonFix Standard performed well on monitoring and reporting and certification, but in its current form is only applicable for afforestation and reforestation carbon credits and thus is not applicable to REDD+. Plan Vivo performs well on monitoring and reporting, but it does not provide for certification and therefore again has limited usefulness due to market requirements. The majority of markets are unlikely to accept carbon credits generated under this standard (Estada 2011).

Another important development to note is that the VCS has recently started the process of developing guidelines and an associated standard for monitoring, reporting and verifying emissions that arise from a jurisdictional and/or nested approach to REDD+. While this provides an important first step towards issuing credits from the voluntary carbon market for such projects, there are still some fundamental issues that need to be resolved before it is truly applicable. These include important issues such as the scope of historical baselines against which the emissions will be credited (i.e. what activities should be included within the baselines) and how to manage the politics of leakage between jurisdictions. Furthermore, many specifications referred to under their draft documentation call for a very detailed and data-intensive monitoring system that will again raise the many issues discussed in chapter 2. While in some situations using the standard under the VCS’s voluntary carbon system may be the most appropriate way forward for developing projects for REDD+, and the new jurisdictional and nested standard will help such projects be more easily integrated into a nations overarching REDD+ framework, it is likely that many nations will find the standard too prescriptive, too costly or not politically acceptable, and will have difficulties with its implementation.

Other authors suggest that nations develop their own MRV systems that have their own defined rules and verification systems (Forest Trends and Climate Focus 2011). In such eventualities private investors need the certainty that future political

conflicts at the local, jurisdictional and national levels will not have an impact on the projects they intend to invest in. Thus there is a clear need for nations to develop clear REDD+ guidance documents and rules that all projects and jurisdictions need to comply with, and to commit these to law. These documents should contain information such as who proposes and registers sub-national reference levels, what type of verification and certification systems are to be put in place, national definitions of forests, and eligible activities under the scheme.

3.2

OTHER KEY ISSUES ASSOCIATED WITH JURISDICTIONAL AND NESTED MRV SYSTEMS

3.2.1

Detail

A number of authors discussed the need to simplify MRV systems, especially in the context of nested and national REDD+ mechanisms. Such authors typically feel that delaying REDD+ payments to nations due to the complexities involved in setting up MRV systems would undermine the overall success of the schemes. Furthermore, these authors suggest that focusing on accurate MRV may result in a REDD+ mechanism that only works in a few countries and only over the medium term. For example,

Bucki et al. (In Press) argue that stringent MRV systems that are too complex will alienate some nations from participating in REDD+ activities, which will likely be those that are the least developed thus inferring issues of equity. In such situations there is a risk of avoidable deforestation in countries that can afford to develop and implement REDD+ policies being displaced to those where there is neither the capacity nor the finances to implement such complex MRV systems. Thus to ensure that all forest-rich countries can participate, these authors suggest that the bar should be lowered in MRV. To do this they suggest that the most critical drivers of deforestation should be addressed first, that reliable and readily available data should be used for as many countries as possible, that the progressive addition of sub-national datasets to the national level should be allowed, and that a gradual build-up of capacity should be encouraged. In support of their approach they state that using a simpler method will provide much needed time to build capacity within nations, and will reward early action. Furthermore, the financial savings associated with a simplified MRV system can be redirected into activities that reduce deforestation.

Others suggest a “matrix” approach to data collected under nested systems, whereby areas at lower risk of changes in forest carbon stocks have a lower level of detail in their monitoring data (Herold and Skutsh 2011). For example, in areas where REDD+ projects are being implemented or in areas that are at risk of deforestation, data collection efforts can be more intensive and rigorous and can collect

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tier 3 data. This data will then undergo third-party verification. In areas not at risk of deforestation and where no REDD+ project activities are taking place, data collection efforts and verification procedures can be less intensive, at least in the early stages of nesting. Indeed, the recent thirty-fifth session of the United Nations Framework Convention on Climate Change's Subsidiary Body for Scientific and Technical Advice (UNFCCC's SBSTA) has left the door wide open to this concept, stating that national (or sub-national) MRV should be guided by IPCC guidelines and that the data should be transparent, consistent, robust, complete, comparable and subject to quality assurance and quality control.

In a similar approach to allowing multiple different levels of data accuracy within one MRV system as detailed above, other authors comment on the possibility of allowing many different MRV systems to be combined within an overall nested approach. Those promoting nested systems often cite the fact that nested systems can generate finance from both carbon markets and public funding mechanisms. However, these systems have different MRV requirements (Forest Trends and Climate Focus 2011). The former is typically associated with projects that attract private investors who have a demand for carbon credits and require detailed, reliable and credible MRV systems to validate the carbon credits they are purchasing. In contrast, the latter is typically associated with programmes carried out by national governments and that will have MRV requirements as set out by the funder.

Thus, certain authors suggest that there be two forms of MRV working at two different levels: an internally appropriate MRV mechanism that supports the direct allocation of incentives to nations and a nation or state system that decides on how credits should be allocated within jurisdictional boundaries.

3.2.2

Uncertainty

The literature also notes that developing MRV systems that can accurately detect emissions reductions or gains is a big issue. Some suggest that uncertainty levels are so high that detecting changes in emission rates could remain hidden in "error margins" for years to come (Bucki et al. In Press). This is a huge issue for the UNFCCC, which needs consistent benchmarks to allocate REDD+ incentives to nations on a fair and equitable basis, as well as for other organizations that are developing standards for emissions certification. Moreover, due to the differences in national data sets, accounting methodologies, and associated definitions of forests and deforestation, costly data collection activities will not necessarily produce comparable and reliable information, which may compromise the credibility and effectiveness of a nested or national REDD+ mechanism. Some of the interviewees in this research commented on how the cumulative sources of error in data can cause very large uncertainties, which is supported by the literature. Pelletier et al. (2011) report that in some cases deforestation has to be reduced by over 50 per cent to allow for a clear detection of emissions reductions.

"...DUE TO THE DIFFERENCES IN NATIONAL DATA SETS, ACCOUNTING METHODOLOGIES, AND ASSOCIATED DEFINITIONS OF FORESTS AND DEFORESTATION, COSTLY DATA COLLECTION ACTIVITIES WILL NOT NECESSARILY PRODUCE COMPARABLE AND RELIABLE INFORMATION..."

“TO ESTIMATE THE FULL COSTS OF IMPLEMENTING REDD+ IN A COUNTRY, IT IS NECESSARY TO NOT ONLY QUANTIFY THE COSTS OF PROJECT IMPLANTATION BUT ALSO TO CONSIDER THE COSTS ASSOCIATED WITH DEVELOPING THE PROJECT...”

Some suggest that this issue of uncertainty should be addressed by applying the conservativeness concept, a message echoed in the interviews conducted in this research. This concept suggests that emissions reductions should be rewarded at the lowest end of the confidence interval of emissions reductions, or by applying a discount factor to the estimated emissions reductions using a method such as error propagation or a Monte Carlo analysis to quantify the uncertainty or variability (Terra Global Capital 2010). When accuracy is improved in the future, this can be rewarded with extra emissions reduction payments (Grassi et al. 2008).

3.2.3

Cost

The case for developing a detailed understanding of the full implementation costs of REDD+ is put forward clearly by The World Bank (2011), and in their report they provide information to support policy makers in identifying and estimating the costs associated with REDD+ programs at the national level. To estimate the full costs of implementing REDD+ in a country, it is necessary to not only quantify the costs of project implantation (e.g. the cost of preventing deforestation) but also to consider the costs associated with developing the project, such as contracting consultants to develop the MRV system and the fees involved with certifying emissions reductions, as well as the income that has been lost as a result of implementing REDD+. These opportunity costs include direct on-site costs such as the lost revenue from logging or from

other income-generating activities, and indirect off-site costs such as lower national tax income because of fewer commodities entering the economy. Opportunity cost estimates are normally excluded from REDD+ cost estimates, but they are vitally important as they likely represent the largest portion of total REDD+ costs. Moreover, opportunity costs gain relevance when discussing the cost of projects that form part of a nested or jurisdictional REDD+ framework. Sub-national and national governments are inherently concerned with activities that impact their revenue streams.

While there is some concern over the costs of developing MRV systems for REDD+ projects that aim to create carbon credits for use in international markets, these costs may be lower when MRV is considered for a nested or jurisdictional REDD+ system. For example, some have noted the importance of nested MRV systems to avoid redundant accounting requirements that are more appropriately handled at the national or jurisdictional level (GCF 2010). For instance, under a nested approach leakage can be managed at the national level rather than within each nested project. This will result in future cost savings, as national-scale programs of carbon accounting can achieve efficiencies through significant economies of scale.

In terms of the actual costs for certification against a standard, they can vary widely. Estimates range from around US\$15,000 to US\$50,000 per project depending on the complexity of the standard, the project type, the

size and regional distribution, and the quality of the project documentation (Merger et al. 2011). Because of these project-dependent causal factors, it is difficult to estimate the certification costs for different standards, as the costs are directly related to the number of days of expert input required.

However, if a standard is complex it is likely that certification costs will rise because of the need for expert certifiers and the lack of readily easy-to-follow templates, which means a lack of easy-to-review project documentation. This is a key concern when it comes to the new jurisdictional and nested standard being developed by the VCS. Similarly, if project managers lack the skills to produce high-quality documentation, it is likely that certifiers will require more time and effort for the reviewing process and costs will rise. Finally, the bigger and more dispersed a project area is, the more

certification will cost, as there will be more complex and time-consuming field visits to pay for.

3.2.4

Capacity Development

It is estimated that only a limited number of countries have the capacity to monitor and report changes in forest cover and carbon stocks (Herold 2009). This represents a huge obstacle to overcome in nested and jurisdictional approaches that are framed within a national context and thus nations should be supported in developing capacity in this area. In particular, capacity should be built to enable countries to set up their own in-house regulatory entities that are responsible for setting up and overseeing the approval of REDD+ projects. Forest Trends and Climate

Focus (2011) suggests that such a group should be responsible for establishing the procedures for approval of REDD+ project activities, registering REDD+ projects and ensuring that they comply with national MRV criteria. This includes setting reference levels, dealing with leakage, permanence and double counting. Importantly, Forest Trends and Climate Focus recommends that this regulatory entity be autonomous, stating that this will “reduce the risks of political interference where pure technical decisions are required” (2011:12). Under this approach the affected nation is recognized as the facilitator of REDD+ transactions, but significant capacity building is required to ensure that it can effectively deliver this role.



Terra Global Capital (2010) supports this view, and suggests a phased approach to capacity development to provide incentives for early action under a project-based approach. It suggests that in the first phase of projects, MRV systems should comply with previously developed standards, such as the VCS, as long as the standards have been approved by an overarching international compliance mechanism such as the UNFCCC. At the same time, jurisdictions should be supported in developing REDD+ readiness, including the development of baselines and classifications and setting out procedures for monitoring. In the second phase of projects, baselines should be meshed with those developed at the jurisdictional level, including the classification and monitoring systems agreed to by the jurisdiction. In the third and final phase, jurisdictions finish developing the capacity for yearly monitoring, and can then generate detailed and accurate data.

3.2.5

Transparency and Alignment

Zhu et al. (2010) discuss the nested approach and set out a framework for how it could work in practice. In their approach they promote the need for transparency and alignment of project-based MRV systems with national governments and their associated REDD+ strategies. To accomplish this they suggest that all projects should be approved and registered by national governments. Furthermore, they suggest that project-level reference levels be developed in line with a reference boundary that coincides with



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administrative territorial boundaries. In this way, all projects within an administrative boundary could develop the same MRV systems and reference emission levels. Such an approach avoids the costs associated with establishing systems from scratch for each individual project within a nested system, and also facilitates the integration of projects and sub-national initiatives into a future national REDD+ mechanism.

3.2.6

Feasibility Assessments and CBA

As noted in the interviews, if there is no project cost benefit analysis prior to project initiation, there is a risk that the project costs (implementation, transaction and opportunity costs) will be higher than the financial returns from the avoided carbon emissions within the REDD+ scheme. It is therefore essential to undertake a full project cost benefit analysis (CBA) before investment is made in the REDD+ project. A key question brought up by CBA is whether the financial returns from REDD+ projects are larger than other land use options. For REDD+ to be successful, the answer to this question must be yes. The revenue generated from



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REDD+ activities is fundamentally dependent on the international carbon price (the price at which emission reductions are sold), the potential revenue for other land use options and the cost of implementing REDD+ in a specific nation.

Furthermore, developing a strong understanding of the costs and potential income will help guide decisions about what sort of MRV system should be put in place. Specifically, the level of detail in the MRV methodology will have direct implications on the transaction costs of the project. If the other costs are high and benefits are low, then a costly MRV system would not be appropriate, and (depending on the costs of different MRV systems)

project managers can make informed decisions on the most appropriate way forward.

In terms of undertaking a cost benefit analysis, the report recently written by the World Bank (2011) and referred to in section 3.2.3 provides useful information on how to determine the opportunity costs as part of an overarching CBA process. Using the methodology that the World Bank presents has the dual benefits of providing information and insights into the drivers of deforestation with high opportunity costs linked to high potential for deforestation. Knowing which parties will likely gain or lose from REDD+ can help to identify the social implications of initiatives and prevent adverse consequences.

Finally, understanding the opportunity costs can support the development of appropriate compensation for those who are adversely impacted by REDD+ policy.

3.3

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4.0

4 WAY FORWARD

4.1

KEY FINDINGS— ADVICE FOR PROJECT MANAGERS

In order to frame the proposed next steps in section 4.2 below, the key findings from chapters 2 and 3 are detailed below:

- COP 17 mandated that reference emissions levels for national REDD+ emissions reporting be calculated using the most recent IPCC guidelines, and therefore all REDD+ projects should ensure that they comply with these guidelines to allow for future nesting.
- When developing project-based MRV systems, the national REDD+ strategy and context should be taken into consideration to ensure that projects are set up to be easily integrated into a future nested system.
- If there is a lack of national MRV guidelines to comply with, the VCS currently provides the most useful standard for MRV in REDD+, but its detailed methodological requirements are a significant hindrance. VCS is still recommended for use, but only if it gives a realistic and feasible means of complying with the IPCC 2006 guidelines. Where this is not possible, other guidelines such as the GOLF-GOLD sourcebook should be referenced.
- Governments should be consulted as stakeholders when setting up project-based MRV.
- Dialogue needs to be established and formalized between projects and the jurisdictional or national level to ensure that activities are complementary and progress is made in parallel.
- Simplicity in developing MRV systems is important. This helps to reduce costs and make projects more profitable.
- Feasibility and cost benefit analyses should be undertaken before any REDD+ project. This will help define the MRV system that will be put in place. The World Bank's training manual on opportunity costs is a useful document to consult in undertaking this assessment.
- The drivers of deforestation and degradation will help to define the MRV system required.
- Capacity development is needed to support governments in building a central REDD+ coordinating body that can set out MRV criteria and subsequently implement national and nested REDD+.
- Capacity development is also required to support information system management in order to ensure that data is effectively collected and stored for use in nested and national MRV systems.



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4.2

KEY RECOMMENDATIONS

The original brief for this report suggested a review of the standards used for MRV in terms of their suitability for calculating forest carbon emissions in a nested REDD+ framework. Given that the VCS is the only standard currently being used, a review of different standards is not feasible. There are, however, a few new options for further research. The following are key recommendations in this regard:

1 There are currently three broad approaches that project managers are using for developing MRV systems. These approaches can be investigated further to gain a deeper understanding of which approach is most appropriate in which context. It is suggested that a suitable output here would be some form of **decision-making tool for project managers to help them decide which type of MRV framework is the most appropriate for their project**.

In terms of providing guidance on how project managers should be managing the transition toward nesting, there is no clear guidance at the moment and an **assessment should be undertaken to review examples of different approaches that are being taken**.

2 Developing an understanding of the costs and benefits of a REDD+ project is a critical step in determining what form of MRV system should be set up. In particular, there is a lack of understanding about the link between the quality of data

collected for an MRV system and the corresponding level of financial transaction created by the project. There is thus a need for some **detailed guidance to support project managers in undertaking a cost benefit assessment of their REDD+ projects**.

This should include **the ability to determine the rate of return on investment when using different standards**. Again, the output could take the form of a decision-making tool or be included within the decision-making tool mentioned above. Any tools must include both an assessment of the political and social environment and a projection of the actual cost of setting up the project and the potential for generating revenue.

It is also recommended that **an assessment of existing REDD+ projects is carried out to feed into this decision-making tool**, with the goal of gaining an understanding of the costs associated with developing different MRV systems, the drivers for the decisions made in project development, what is working and what is not.

3 It is unlikely that one standard for MRV will be generated to suit the needs of all countries, and a single approach coming from one central body is likely to be problematic. This is a potential concern in the development of VCS's JRNI. Instead, standards need to be developed that allow countries to propose different ways to meet the standards. **It is recommended that this point is emphasized when providing peer review support to the JRNI's development**.

“...DEVELOPING AN UNDERSTANDING OF THE COSTS AND BENEFITS OF A REDD+ PROJECT IS A CRITICAL STEP IN DETERMINING WHAT FORM OF MRV SYSTEM SHOULD BE SET UP”.

**“...TRAINING PROGRAMMES
COULD BE DEVELOPED
TO SUPPORT PROJECT
MANAGERS BUILDING
CAPACITY WHERE NEEDED”.**

4 The requirements of MRV systems are defined by markets, be they those wishing to purchase carbon credits on the voluntary market or bilateral donors. There appears to be no causal link between the quality of data specified and the financial returns generated. To obtain a deeper understanding of the drivers of developing the different MRV systems outlined in this report (section 2.1) **further research is required that explores the requirements for MRV set by these different markets.** This could take the form of a survey and interview-based research and would include gaining an understanding of the levels of uncertainty that markets are willing to accept. This is a two-way process, as it is important for markets to understand the implications of the MRV systems they are demanding.

In addition, it is recommended to undertake **research looking into the financial implications of improving data quality for MRV to determine the rate of return on investments for different standards.**

5 Capacity building is another area where an investment of time and effort can help to achieve more successfully integrated MRV systems. Some areas of capacity are already being developed within sub-national and national governments, but there are areas that are currently falling off the radar. One of these is developing the simple yet critical skills of information systems management, including database development and management. This data can be used to feed into national level reporting.

It is therefore recommended that a **capacity building checklist be developed** that project managers can use as guidance to check whether appropriate levels of capacity are being built. To take this a step further, **training programmes could be developed to support project managers building capacity where needed.**

6 Finally, a key area of guidance for project managers in terms of developing nested projects is how to deal with the politics of setting such projects up. MRV in nested projects is more a political issue than a technical issue, and project managers need to be aware of how best to manage this situation.

Transparency, alignment and good governance are all areas that the project manager can address, and again **some form of guidance is needed to support project managers in a difficult political context; deliverables could include case studies of best practices, and no-regrets actions in developing MRV for REDD+.**



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Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

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