In pursuit of procedural justice: Lessons from an analysis of 56 forest carbon project designs

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A B S T R A C T

In an effort to reduce the potential for negative social impacts in forest carbon projects, private third-party actors such as the Climate, Community, and Biodiversity Alliance (Alliance) have established certification schemes (e.g. standards) to ensure that biodiversity and community livelihood goals are met through just means while also reaching carbon mitigation goals. Using a mixed methods approach including rigorous content analysis coupled with descriptive statistics on 56 Alliance project design documents, this paper seeks to understand: 1) the extent to which projects seeking Alliance certification responded to the standards criteria requiring local community participation in the project development process; and, 2) how the Alliance certification standards can serve as an instrument for procedural justice and thus contribute to narrowing the social justice gap in global forest governance. We find that while the standards could potentially help address this governance gap by serving as standards of justice, evidence suggests that projects are not fulfilling requirements to facilitate procedural justice. We suggest that the lack of information and attention to stakeholder processes represents a substantial hurdle for facilitating procedural justice for impacted communities, suggesting that forest carbon (including REDD+) projects may result in the same threats to communities and livelihoods as past forest governance interventions. Furthermore, our findings signal the possibility of future credibility problems for the Alliance.

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1. Introduction

Procedural justice, most readily understood as the fairness of the process of decision-making and/or project implementation (Clayton, 1998), has largely eluded forest peoples affected by global forest governance initiatives (Sikor and Stahl, 2011). For the last several decades, the architects of institutions and approaches for global forest governance have tried to address the social justice critiques of forest peoples and their advocates through a variety of approaches, including community-based natural resource management, joint forest management, and other participatory approaches in forest governance interventions. Conventional wisdom suggests that more involvement of local communities in the design and implementation of projects should lead to better social and environmental outcomes. In other words, procedural justice should help improve overall project success. In the wake of increasing claims of injustice, actors engaged in forest carbon projects, including Reduced Emissions from Deforestation and Degradation (REDD+) projects, have been particularly concerned with creating and supporting institutions which can help facilitate procedural justice for communities impacted by forest carbon projects (Lawlor et al., 2010; Okereke and Dooley, 2010; Strassburg et al., 2012). The Climate, Community, and Biodiversity Alliance (hereafter Alliance) responds, in part, to such justice concerns through a set of standards (hereafter Standards) for certifying forest carbon projects. The goal of the Standards, which include 14 mandatory criteria and three optional criteria, is to facilitate multiple benefits and avoid negative social impacts through the promotion of best practices (see Appendix A, full standards available at http:\\www.climate-standards.org). Although the Alliance's Standards are the most recognized and sought-after among the forest carbon offset standards that target net positive community impacts (Richards and Panfil, 2011), little is known about the extent to which they address procedural justice concerns and thus contribute to narrowing the social justice gap in global forest governance.

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The purpose of this research is two-fold: first, we examine the Alliance's Standards using a procedural justice lens. We assess whether the Standards, if implemented as indicated, could serve as an instrument for facilitating procedural justice. Although the certification literature is rich with studies on legitimacy and effectiveness (Bernstein and Cashore, 2007; Cashore, 2002; Cashore, 2004; Gulbrandsen, 2005; Potoski and Prakash, 2005), no studies position standards as instruments for facilitating justice and only a few studies consider the justice dynamics of third-party certification schemes (see for example Boyd et al., 2007; Raines, 2003). Additionally, because forest carbon standards are so new, we found no studies published on them as of February 2013. By using a justice lens we aim to highlight the ways in which certification schemes can serve as justice-enabling institutions in global forest governance.

Second, we analyze the extent to which the Alliance contributes to narrowing the social justice gap in global forest governance by critically examining the project design documents (hereafter Designs). Using a mixed methods approach that couples content analysis with descriptive statistics, we analyze the Designs from 56 forest carbon projects that are seeking or have already obtained certification from the Alliance. We assess whether transparency and participation have been documented in compliance with the Standard's requirements promoting procedural justice. By analyzing the extent to which the Standards are rigorously enforced, we contribute to the literature examining the role of third-party certification schemes in filling governance gaps (Bartley, 2011; Falkner, 2003; Gulbrandsen, 2004).

The paper proceeds as follows: we first situate the Standards in the broader global forest governance and procedural justice literature. We then present our argument for positioning the Standards as standards of justice. This is followed by an overview of our methods and presentation of results. We conclude with an in-depth discussion of the results, their implications, and suggested avenues for future research. Overall, we seek to highlight the potential opportunities and risks associated with third-party certification for facilitating justice in forest carbon projects.

2. The social justice gap in global forest governance

Global forest governance, including interventions for sustainable forestry, forest conservation and preservation, and, most recently forest carbon sequestration, has been the focus of social justice critiques for more than 30 years (Blaikie and Brookfield, 1987; Forsyth, 2008; Peluso, 1993; West et al., 2006). An extensive body of literature documents the real or perceived inequities and injustices that have emerged in communities as the result of forest conservation and development interventions, such as protected area projects, Integrated Conservation and Development Projects, and community-based forest management projects, among others (Agrawal et al., 2011; Agrawal and Redford, 2009; Colchester, 2004; Klooster, 2000; Pagdee et al., 2006; Peluso, 1993; Roe, 2008; Singleton, 2000). Partly in response to these critiques, but largely for more pragmatic reasons, development organizations and donors pursued more participatory approaches to conservation to directly engage local communities (Campbell and Vainio-Mattila, 2003). Despite efforts to facilitate local community involvement in forest governance, forest peoples' claims of injustice persist.

In recent years, following a resurgent global interest in forest governance that positions forests as a critical resource in the battle to address climate change, the forest peoples' movement for rights and justice has gained momentum (Forsyth and Sikor, 2013; Sikor, 2012; Sikor et al., 2010). Non-governmental organizations, indigenous peoples' groups, and scholars have argued that the

fundamental challenges for forest carbon projects are not technical (i.e. carbon accounting); rather, they are rooted in the anticipated substantial negative social impacts that could result from project implementation if local communities are not adequately engaged and accounted for (Brown et al., 2008; Cotula and Mayers, 2009; Doherty and Schroeder, 2011; Peskett et al., 2008). These concerns, coupled with the historically poor performance of participatory approaches and continued loss of forests worldwide, are indicative of the critical role of community engagement for effective forest governance.

These two factors – the importance of community involvement in forest governance and the continued claims of injustice – suggest the existence of a social justice gap in global forest governance. Scholars and policy makers increasingly recognize that justice in global forest and global environmental governance may, in fact, be a necessary condition for sustainability (Agrawal and Gibson, 1999; Littig and Griessler, 2005; Okereke, 2006) yet justice for forest communities remains elusive. Questions of justice – what justice, whose justice, and how justice can be delivered – have become an important focal point for many scholars of global environmental governance (Martin et al., 2013; Okereke, 2008; Okereke and Dooley, 2010; Schroeder and Pogge, 2009). While the act of operationalizing procedural justice runs the risk of suggesting a universal conceptualization of justice – a highly contested concept – specifying a definition is necessary to evaluate whether justice concerns have been considered; for a discussion on the multivalent nature of justice, see Walker (Walker, 2012). To that end, scholars have made a number of important contributions toward conceptualizing justice in global environmental governance, namely: differentiating between intragenerational and intergenerational justice (Glotzbach and Baumgartner, 2012; Walker, 2012; Walker and Bulkeley, 2006); identifying scales of justice, such as macro- and micro-justice or the difference between societal and individual justice (Clayton, 1998); and identifying three interrelated types of justice (distributional, recognitional, and procedural) central to the study of global environmental governance (Schlosberg, 2004, 2007).

In this paper, we focus exclusively on procedural justice, adopting Clayton's (1998) definition: "procedural justice is usually considered to exist when all parties who will be affected by a decision have had a chance to participate in the decision-making process and to influence the final outcome" (Clayton, 1998, p. 164). We have opted to focus on procedural justice for two reasons: first, while distributional concerns often eclipse other justice concerns in forest projects, procedural justice is increasingly recognized as equally valid, if not more important, both among scholars, investors, policy-makers, and other forest carbon stakeholders (Brown et al., 2008; Harvey et al., 2010; Madeira, 2009; Martin et al., 2013). A growing body of literature suggests that some form of procedural justice at the community level is, in fact, a necessary condition for sustainable forest conservation and development projects (Harvey et al., 2010; Kanowski et al., 2011; McDermott and Schreckenberg, 2009; Ribot, 2011; Vandergeest, 2007; Wollenberg and Springate-Beginski, 2009). The inclusion of local stakeholder values can also help minimize conflict and negotiate tradeoffs (Ananda and Herath, 2003; Appelstrand, 2002).

Second, procedural justice can be considered a pathway to distributional justice, which is an important consideration for forest interventions that seek to provide benefits to forest communities. When a diverse and broad group of community stakeholders has capacity and opportunity to participate in project design, and when their values are taken into account, this process is more likely to lead to outcomes that are considered equitable and just by stakeholders at all levels (Brooks et al., 2006; Gross, 2008). Procedural justice vis-à-vis the inclusion of local stakeholders can also lead to improved institutional and/or project

designs that are well matched to local contexts, resulting in better resource conservation outcomes (Gardner and Walker, 1994; Ostrom, 1990).

The Standards present a unique opportunity to examine the role of procedural justice in forest carbon projects because of their high degree of transparency and emphasis on stakeholder participation. By following the Alliance's Standards, project proponents are signaling their commitment to generate net benefits for communities in a way that integrates community stakeholders' opinions, needs, and desires. The Standards move beyond the concept of "do no harm" to actively establish a commitment to procedural justice through guidelines for community stakeholder involvement in project design, implementation, and conflict resolution. Understanding how the Standards serve as standards of justice and analyzing the extent of their potential to facilitate justice would be beneficial for those interested in delivering better distributive outcomes to forest communities as well as for those working to address forest loss and degradation. It also contributes to understanding the extent to which certification schemes could help address the social justice gap in global forest governance.

3. The climate, community, and biodiversity alliance

3.1. Background

In 2003, a group of international nongovernmental organizations including Conservation International, the Wildlife Conservation Society, and CARE, among others, created the Climate, Community, and Biodiversity Alliance (Alliance) to produce standards that address the need for credibility of forest carbon offset projects to provide multiple benefits sought by investors. The Standards serve as a guide for project proponents to reduce the potential for negative community and biodiversity impacts and create net positive community and biodiversity impacts while also producing verifiable carbon emission reductions. Any land-based projects designed to generate greenhouse gas emissions reductions, community and biodiversity benefits are eligible to apply for certification (CCBA, 2008). The first edition of the Standards was released in 2005 and the second edition was released in 2008. A third edition of the Standards is currently under development. The standards include 14 mandatory criteria and three optional criteria that cover project design and management for delivering climate, biodiversity, and community benefits (see Appendix A).

Project proponents can be any actors or organizations, including communities, nongovernmental organizations, governments, and private entities designing forest carbon projects. Once a proponent has developed a Design in accordance with the Standards, the Design is open to a public commenting period after which it is revised and submitted for validation. Validation is "an assessment of the design of a land-based carbon project against each of the [Standards] criteria" (CCBA, 2008, p. 8). Verification, "an evaluation of a project's delivery of net climate, community, and biodiversity benefits against the project's validated design and monitoring plan," takes places once a project has been implemented (CCBA, 2008, p. 8). Projects may use the Alliance label only once projects are verified; verification takes places every five years during the life of the project. The verification and validation process is carried out by an independent, accredited auditor, which project proponents select and engage. The Alliance does not charge a fee for validation, but auditor fees range from €5000 to €25,000 per project (personal communication). Approved auditors are those accredited to audit Clean Development Mechanism, Forest Stewardship Council, or ISO 14065:2007/Voluntary Carbon Standard projects; there is currently no separate vetting process internal to the Alliance (CCBA, 2012). The Alliance produces and updates the standards, and serves as a resource and clearinghouse for projects, auditors, and those seeking information about certified projects. For an analysis of the standards themselves, see Wood (2011).

3.2. Standards of justice

Part of the Alliance's mission is to provide net positive community benefits and screen out projects with "unacceptable social and environmental impacts" (CCBA, 2008, p. 8). We reviewed the Standards using a justice lens and found they incorporate multiple criteria related to Schlosberg's (2004) three primary types of justice introduced in Section 2 (distributional, recognitional, and procedural). For example, Standard CM1 requires that the costs and benefits of projects are shared equitably – an indicator of distributional justice; indicator G5.3 requires that projects obtain approval from all relevant authorities, including traditional or customary authorities in the project-affected communities – an indicator of recognitional justice. As our focus in this paper is procedural justice, we analyzed the Standards to determine the extent to which they aim to facilitate procedural justice by identifying any requirements related to fairness in decision-making processes. In particular, we looked for processes that facilitate procedural justice identified by Schlosberg (2004), namely processes that "encourage active community participation, institutionalize public participation, recognize community knowledge, and utilize cross-cultural formats and exchanges to enable the participation of as much diversity as exists in a community" (522). We found that the Standards have extensive requirements for procedural justice across multiple standards and criteria. Table 1 highlights excerpts from the criteria and indicators that demonstrate requirements for facilitating procedural justice.

Based on this review, we argue that the Standards serve, in part, as standards of justice. The Standards clearly demonstrate and articulate ideas of justice that are becoming central in the discourse on global forest governance (Binmore and Sen, 2010; Forsyth and Sikor, 2013; Marion Suiseeya, 2013). Furthermore, projects that follow Alliance requirements must establish institutional structures within which project-affected communities and individuals can claim and exercise rights that are upheld, in theory, by the Alliance through the validation and verification process. In other words, projects create facilitative environments in which project proponents are duty-bearers and project-affected communities and individuals are rights-bearers who can expect more justice from projects certified by the Alliance than from non-certified projects. Thus, if project proponents adhere to the criteria in the Standards, we can imagine that justice, to some degree, for the project-affected communities would be facilitated over the life of the project.

Because of the importance of community involvement in project design from both procedural justice and effectiveness perspectives (Buchy and Hoverman, 2000; Glasmeier and Farrigan, 2005; Lemos and Agrawal, 2006), we focus exclusively on how project proponents demonstrate facilitation of procedural justice in the project design phase. The Standards establish criteria for examining procedural justice and require that project developers identify and detail their efforts to involve community stakeholders during project design and for project implementation. Under the Alliance's criterion for Project Design and Goals (G3), there are two indicators (G3.8 and G3.9) that require project proponents to actively engage with community stakeholders and to provide detailed documentation of these efforts in their Designs (see Table 1). In this section of the Standards, the Alliance requires documentation demonstrating that proponents have fulfilled the following during the project design phase: 1) project-affected stakeholders are identified; 2) project-affected stakeholders are involved in project design and able to share their ideas and

Table 1
Procedural justice criteria in the alliance's standards.

Standards reference	Criteria
G3 Project Design and Goals	"*Effective local participation* in project design and implementation is key to optimizing multiple benefits, equitably and sustainably. Projects that operate in a *transparent manner* build confidence with stakeholders and outside parties and enable them to contribute more effectively to the project."
G3.8 Project Design and Goals	"Document and defend *how communities and other stakeholders potentially affected by the project activities have been identified and have been involved in project design* through effective consultations, particularly with a view to optimizing community and stakeholder benefits, respecting local customs and values and maintaining high conservation values. Project developers must document stakeholder dialogs and indicate *if and how the proposed project was revised based on such input.*"
G3.9 Project Design and Goals	"Describe what specific steps have been taken, and communications methods used, to publicize the CCBA public comment period to communities and other stakeholders and *to facilitate their submission of comments to CCBA.* Project proponents must play an active role in distributing key project documents to affected communities and stakeholders and hold widely publicized information meetings in *relevant local or regional languages.*"
G3.10 Project Design and Goals	"The project design must include *a process for hearing, responding to and resolving community and other stakeholder grievances within a reasonable time period.*"
G5.2 Legal Status and Property Rights	"Document that the project has *approval* from the appropriate authorities, *including the established formal and/or traditional authorities* customarily required by the communities."
G5.3 Legal Status and Property Rights	"Demonstrate with documented consultations and agreements that the project will not encroach uninvited on private property, community property, or government property and *has obtained the free, prior, and informed consent of those whose rights will be affected by the project.*"
G5.4 Legal Status and Property Rights	"If any relocation of habitation or activities is undertaken within the terms of an agreement, the project proponents must demonstrate that the agreement was made with the *free, prior, and informed consent* of those concerned and includes provisions for just and fair compensation."
GL2 Gold Level Exceptional Community Benefits	"…recognizes project approaches that are *explicitly pro-poor* in terms of targeting benefits to globally poorer communities and the poorer, more vulnerable households and individuals within them. …this optional criterion requires innovative *approaches that enable poorer households to participate effectively* in land-based carbon activities."
GL2.4 Gold Level Exceptional Community Benefits	"Demonstrate that measures have been taken to *identify any poorer and more vulnerable households and individuals* whose well-being or poverty may be negatively affected by the project…"

CCBA, 2008, pp 12–34, italics added.

opinions; and, 3) project-affected stakeholder input is considered and responded to. We posit that criterion G3 and its associated indicators G3.8 and G3.9 establish minimum guidelines for identifying the rights-holders for each project and facilitating the full and deliberate participation of these rights-holders in the project design process.

The proponent's efforts toward meeting these criteria must be fully documented "in sufficient detail so that a third-party can adequately evaluate it" (CCBA, 2008, p. 16) and the Design must be made available for a 30-day public comment period. These requirements promote transparency and participation in project development; they further suggest that any member of the public, including researchers, should be able to understand and evaluate the efforts that project proponents have made toward meeting the Standards. We argue that if stakeholder engagement is documented according to the Standards as detailed above, the project has established mechanisms for facilitating procedural justice and thus could contribute to narrowing the social justice gap in global forest governance.

4. Methods

4.1. Data source and sample

Our primary data sources are the Designs submitted to the Alliance for validation and verification, which are available on the Alliance's website. The intent of these documents is to "describe the design of a project and the ways in which it meets each of the requirements of the CCB Standards" (CCBA, 2010, p. 4). As of March 2012, 77 projects listed on the Alliance website had been submitted for validation. Of these, 63 were in developing countries. We focus on developing countries because the majority of forest carbon projects are in tropical, developing states and the majority of the claims of injustice are related to the forest-dependent poor in these countries. Out of those 63, six had been withdrawn from

the validation process and one only included documents in Spanish, thus they were removed from the sample. Our final sample included 56 Designs. Thirty-six of the projects in our sample were validated and four had been verified at the time of our data collection. A complete list of these projects is provided in Appendix B. The sample includes different types of forest carbon offset projects including REDD+ and non-REDD+ (afforestation and reforestation, integrated forest management, and mixed) projects.

All projects seeking Alliance certification must provide extensive documentation for each indicator of the 14 required criteria as detailed in the Standards. Nineteen projects were designed using the first edition of the Standards and 37 projects were designed using the current second edition standards. Twenty-four projects are based in Latin America, 20 in Africa, and 12 are in Asia-Pacific. Twenty-three Designs were developed by a private entity, 13 by nongovernmental organizations, five by government agencies, and 15 were developed by multiple organizations. Table 4 provides an overview of the sample demographics.

We included both validated and un-validated projects in our analysis (see Section 3.1 for definition of validated and verified) because most projects are eventually validated: only six of the projects from our original sample of 77 were withdrawn for unknown reasons (the Alliance does not gather data on why projects are withdrawn; personal communication). As of July 2013, since we collected our data, no additional projects from our sample have been withdrawn, 10 more have been validated, four more have been verified, and three have had their validation expire.

4.2. Data collection and analysis

The length of the Designs ranged from less than 100 pages to more than 300 pages. We extracted text from sections G3.8 and G3.9 from each of the 56 Designs. For Designs that were developed to meet the first edition Standards, or Clean Development Mechanism (CDM) or Voluntary Carbon Standard (VCS)

requirements, we extracted text from the relevant sections (Sections G3.6, G3.7, CM1.2 and CM1.3 for CCB v1; Section F or H – Stakeholder Input – for CDM; and in the VCS documents we used the *CCBA required elements key* to identify the appropriate sections for extracting text). For projects applying for Gold Standard certification, we also extracted Sections CM1 (Net Positive Community Impacts) and GL2 (Exceptional Community Benefits).

We employed a mixed methods content analysis to collect both qualitative and quantitative data. We gathered demographic data for each project, such as the project type, number of communities, affected population, and project developer from the Designs. We coded text excerpts to reveal trends across projects and generated descriptive and categorical data to create a profile of the Designs. The coding protocol was developed based on prior research and additional content analysis of the sample using a procedural justice lens. To improve validity, we developed multiple quantitative and qualitative indicators for the variables of interest; for example, we identified whether the Design referred to either a process or criteria for stakeholder identification, and recorded this both as binary variables and through coding.

Coding themes were developed through two main avenues. First, several of the codes came directly from the criteria themselves by transposing Standards' requirements into binary presence/absence values (and extracting text from these sections for qualitative analysis). Second, some codes were developed based on the pilot testing of the data, by looking for what types of processes were described in the data; for example, the use of Participatory Rural Appraisal approaches were frequent enough to warrant a code.

The codes were tested on a small selection of the data and then adjusted to improve reliability between coders. Both authors coded all excerpts from each Design. Although a few discrepancies in the application of the codes did occur, they were minimal and reconciled through discussion. Tables 2 and 3 list the binary variables and coding themes used in our analysis.

In addition to some basic descriptive statistics, we created a composite index score for each Design to understand how well Alliance projects performed against the justice criteria. We generated the score by summing the presence of the ten criteria in Table 2, for a potential maximum score of 10. We also performed a non-metric multidimensional scaling (NMS) ordination. In this visualization, if higher performance scores are spatially correlated with certain variables, we can deduce a relationship between

Table 2
Justice criteria as binary variables for descriptive analysis.

Code category	Description
Criteria for ID	Did they define criteria for identifying communities?
Procedure ID	Did they outline the procedure for identifying communities?
Inclusion in Design	Did they include communities in the project design process?
Concrete Opinions	Are the methods of inclusion information gathering? In other words, are the opinions of communities concretely described in the documents?
PRA	Did they use Participatory Rural Appraisal (PRA) methods?
Community Roles	Are the roles of communities defined in the project design?
Women	Do they mention including women in the project design process?
Ethnic/Indigenous	Do they mention including ethnic or indigenous groups in the project design process?
Poor People	Do they mention including poor people in the project design process?
Marginalized Groups	Do they mention including other marginalized groups in the project design process?

Table 3
Coding themes for qualitative content analysis.

Parent codes	Description
Criteria -Stakeholder ID	Criteria for how communities and other stakeholders have been identified
Procedure-Stakeholder ID	Process for how communities and other stakeholders were identified
Involvement in Project Formation	How were the communities involved in project formulation?
Vulnerable Groups	What categories of vulnerable groups were identified? How were they included?
Information Availability	Details on how information about the project was made available
Conflict Resolution	Details on the mechanisms for conflict resolution
Project Support	Text indicating community support for, approval of, or willingness to participate in project
Roles in Implementation	What are the roles of the community in project implementation?

project characteristics and justice criteria. Our ordination was based on the Jaccard distance between sites, an asymmetric measure that ignores co-absences. We used a stepdown approach followed by a scree plot to choose a two-dimensional representation of the multivariate space. Project scores were rotated using principle components analysis to ensure the highest variation was explained by each axis. Locations of the components of procedural justice were determined based on expanded weighted averages of site scores. Project descriptors were fit to the ordination similarly and the statistical significance of the location of both factors and criteria were tested using a permutation test. All tests were performed using the vegan package in R version 3.0.1.

While we expect variation in how project developers identify and involve local community stakeholders, we do not expect variation in whether or not the developers identify and involve community stakeholders and provide documentation thereto. Thus, if the standards are implemented as written and enforced in their entirety, we would expect that Designs that have not provided the requisite information would be ineligible for validation and verification.

5. Results

Table 4 provides a snapshot of our data. This glimpse into the Designs shows that the majority of the Designs do not provide the required information documenting their adherence to the criteria for procedural justice. 86% of projects scored less than 5; the highest score was 9 and the lowest 0. Table 5 provides a summary of how the projects performed.

In the sections that follow, we present our results organized based on the three indicators for procedural justice identified in Section 3.2, namely how project-affected stakeholders were identified, involved in project design, and whose input was considered and responded to. This is followed by an analysis of the whether or not validation of projects signals compliance with the Standards and an analysis of potential explanations for variation in Design performance. Discussion of the results follows in the next section.

5.1. Stakeholder identification

The Standards require detailed descriptions of the process of identifying community stakeholders, yet 67% of the Designs did not provide this information. Furthermore, 43% of the Designs did not include criteria for stakeholder identification. Most importantly, 36% contained no mention of either indicator of stakeholder identification. However, a popular alternative strategy to address stakeholder engagement was to simply list the stakeholders; 64%

Table 4
Project design overview.[a]

		Total	Criteria ID	Procedure ID	Inclusion in design	Concrete opinions	PRA	Community roles	Women	Ethnic/ Indigenous	Poor	Marginalized groups
	All designs	56 (100%)	32 (57%)	18 (32%)	46 (82%)	32 (57%)	11 (20%)	21 (38%)	14 (25%)	10 (18%)	4 (7%)	5 (9%)
Region	Africa	20 (36%)	13 (65%)	9 (45%)	18 (90%)	12 (60%)	4 (20%)	7 (35%	3 (15%)	2 (10%)	1 (5%)	2 (10%)
	Asia-Pacific	12 (21%)	9 (75%)	4 (33%)	12 (100%)	6 (50%)	5 (42%)	7 (58%)	5 (42%)	3 (25%)	1 (8%)	0 (0%)
	Latin America	24 (43%)	10 (42%)	5 (21%)	17 (71%)	12 (50%)	2 (8%)	7 (29%)	6 (25%)	5 (21%)	2 (8%)	3 (13%)
Project developer	Private	23 (41%)	11 (48%)	7 (30%)	18 (78%)	13 (57%)	5 (22%)	8 (35%)	8 (35%)	4 (17%)	4 (17%)	2 (9%)
	NGO	13 (23%)	10 (77%)	9 (69%)	12 (92%)	7 (54%)	2 (15%)	7 (54%)	2 (15%)	2 (15%)	0 (0%)	3 (23%)
	Govt	5 (9%)	3 (60%)	0 (0%)	4 (80%)	2 (40%)	1 (20%)	0 (0%)	0 (0%)	1 (20%)	0 (0%)	0 (0%)
	Multiple	15 (27%)	8 (53%)	2 (13%)	12 (80%)	10 (67%)	3 (20%)	6 (40%)	4 (27%)	3 (20%)	0 (0%)	0 (0%)
Standards Version	1st Edition	19 (34%)	15 (79%)	3 (16%)	17 (89%)	11 (58%)	4 (21%)	8 (42%)	8 (42%)	4 (21%)	2 (11%)	2 (11%)
	2nd Edition	37 (66%)	17 (46%)	15 (41%)	29 (78%)	21 (57%)	7 (19%)	13 (35%)	6 (16%)	6 (16%)	2 (5%)	3 (8%)
Validation Status	Validated	36 (64%)	24 (67%)	12 (33%)	30 (83%)	21 (58%)	7 (19%)	14 (39%)	13 (36%)	7 (19%)	4 (11%)	3 (8%)
	Not Validated[b]	20 (36%)	8 (40%)	6 (30%)	16 (80%)	11 (55%)	4 (20%)	7 (35%)	1 (5%)	3 (15%)	0 (0%)	2 (10%)
Validation Level[a]	Validated Gold	27 (75%)	18 (67%)	8 (30%)	23 (85%)	16 (59%)	5 (19%)	12 (44%)	10 (37%)	5 (19%)	3 (11%)	1 (4%)
	Validated Silver	4 (11%)	4 (100%)	1 (25%)	3 (75%)	3 (75%)	1 (25%)	1 (25%)	1 (25%)	0 (0%)	1 (25%)	1 (25%)
	Validated N/A[c]	5 (14%)	2 (40%)	3 (60%)	4 (80%)	2 (40%)	1 (20%)	1 (20%)	2 (40%)	2 (40%)	0 (0%)	1 (20%)
Project Type	REDD+	21 (38%)	11 (52%)	6 (29%)	15 (71%)	11 (52%)	2 (10%)	8 (38%)	5 (24%)	3 (14%)	1 (5%)	0 (0%)
	Not REDD+	35 (63%)	21 (60%)	12 (34%)	31 (89%)	21 (60%)	9 (26%)	13 (37%)	9 (26%)	7 (20%)	3 (9%)	5 (14%)

[a] Percentages calculated based on the subsample size.
[b] Undergoing validation.
[c] Projects that are validated but did not indicate a validation level.

of the Designs without a stakeholder identification process provided a list of individuals or groups of stakeholders.

Out of the 32 projects that included criteria for stakeholder identification, 94% of them mentioned physical proximity to the project site (yet very few mentioned specific criteria for defining "local"), 60% mentioned membership in a work/production group, and 47% mentioned land ownership. These criteria usually lacked either a definition of how membership to these groups is determined and also failed to recognize the heterogeneity of the groups that might fall under the definition of a "local community" (Agrawal and Gibson, 1999).

Specific mention of vulnerable groups, such as women, indigenous, or the very poor are alarmingly absent from the Designs. In the stakeholder engagement process, 75% of the Designs did not target women, 82% did not target ethnic minorities or indigenous peoples, 91% did not target the very poor, and 92% did not target other marginalized groups. Overall, 62% targeted none of these groups at all. This absence raises questions about the extent to which the most vulnerable populations are visible to project developers. Furthermore, there was not one instance in which the developer provided details on how members of these groups were consulted and involved in project design.

5.2. Stakeholder involvement in project design

The majority (93%) of the Designs mentioned some form of community involvement in project design, which demonstrates a relatively high rate of compliance with the Standards. However, the descriptions of these processes in most cases were lacking. While some project developers provided detailed information about how they interacted with the communities (e.g. by providing meeting minutes, lists of participants names in meetings, etc.), others simply mentioned, "*a public information meeting was*

held"(LA-P-003). We found two instances of direct duplication of text in two separate Designs. In these cases, the project proponents were developing multiple projects and used identical language to describe stakeholder involvement in project design. While this could speak to the effectiveness of the methods these proponents have developed to include communities, it also could represent a lack of consideration for unique local contexts and cultural differences between sites, which obscures opportunities for realizing procedural justice (Wyatt et al., 2010).

When Designs did refer to local stakeholder engagement, they provided scant details and were notably devoid of diverse measures of engagement that could potentially engage a more comprehensive – and possibly more representative – group of stakeholders. For example, most Designs detailed the stakeholder identification process in vague terms: "*a detailed stakeholder analysis had been undertaken…*" (AP-M-009); or they used methods that required little investment:"*…there was no process of selection, but an invitation was issued…through an announcement published in a newspaper*" (LA-P-023). In such instances, it is unclear whether or not projects were able to fully engage project-affected stakeholders. In other examples, where project proponents were required to detail how they disseminated information about the project and interacted with project-affected communities, they often described presenting vague, open-ended questions in large meetings: "*…the organizers asked meeting participants if they had given any thought to or discussed the possible forms of community participation in the project*" (LA-N-005). Often in large meetings, community members may be hesitant to speak up, particularly when they do not hold positions of status in the community (Hickey and Mohan, 2004; Nightingale, 2002). In many cases, when Designs did include methods for inclusion, the methods used and the way in which the information about the methods is provided suggested a more passive role for the community, where the focus

Table 5
Design performance scores.[a]

Score	10	9	8	7	6	5	4	3	2	1	0	Total
# of projects	0	1	1	3	3	7	10	11	13	3	4	56

[a] Mean: 3.45, Mode: 2, Median: 4.

of meetings was on the project's needs, rather than community needs: project staff "…held community meetings…to sensitize the community to the project's goals…" (A-P-011). Especially in the case of REDD+ projects, where the concepts of reducing and measuring carbon emissions are quite complex, simply presenting information on a project might not be sufficient to ensure comprehension (Lewis and Sheppard, 2006).

One prevalent strategy of documenting stakeholder involvement was referencing Participatory Rural Appraisal (PRA). Eleven projects (20%) indicated PRA as a main tool in their project design process. While PRA is considered valuable for engaging local communities in decision-making processes (Chambers, 1994), in this context it appears to be more rhetoric than deliberate action to facilitate community voice. For example, most references to PRA failed to provide details on the specific methods used: "Participatory Rural Appraisals were carried out in the villages to identify the problems, views and concerns of local stakeholders and incorporated into the project design and management plan" (A-P-003). Proponents adopted the term PRA to imply that project-affected communities had been duly considered and included, presuming that mention of the approach alone is sufficient to signal meaningful inclusion of stakeholders in the process. Yet, by its very nature, PRA employs different methods and techniques for each community requiring further elaboration by the proponents to explain how stakeholders were included in the design phase.

5.3. Response to stakeholder input

While 93% of the Designs mentioned some method of including local participants in project design, only 57% reported any of the actual responses given by the local community members. There were also 16 projects that did not gather any input from groups or individuals in the community, instead soliciting feedback from leaders/representatives or in some cases, no one at all. While leaders are important consultants in project design, they are not necessarily a good substitute for broader or targeted community participation (Agrawal and Gibson, 1999).

5.4. Does validation signal compliance with the standards?

According to the Alliance, projects that are validated have demonstrated compliance with the Standards in their Designs and thus we would expect that all validated projects provide the required documentation on their efforts to facilitate procedural justice in the project design phase. The data on validated projects are mixed: of the projects that did not provide criteria for stakeholder identification, 50% have been validated. Of the 36 projects that have been validated, 24 provide criteria (67%); out of the 20 that had not been validated, only eight provided criteria (40%). Of the 20 projects that include neither criteria nor process for stakeholder identification, nine of them were validated (45%). Overall, we discovered a widespread apparent lack of compliance in the majority of Designs.

5.5. Characteristics of projects

Our final analysis on the Designs sought to determine whether any project characteristics were indicative of their performance for facilitating procedural justice in the project design phase, which could help identify what types of projects would be most likely to facilitate procedural justice, thus providing guidance for future projects. One surprising result is that REDD+ projects performed more poorly across the board than non-REDD+ projects, with the exception of the Community Roles criterion (see Table 5). Because REDD+ has high visibility in the media as a focal point for forests peoples group seeking to prevent further injustices they anticipate

with the implementation of REDD+, we expect these projects would make greater efforts to ensure that justice concerns are addressed in their Designs. Yet, the average performance score of REDD+ projects was 2.95 compared to 3.75 for non-REDD+ projects.

We also considered that proponents using different versions of the Standards may address the requirements differently, because the first edition Standards were enforced with more leniency than the second edition (Wood, 2011). This suggests that Designs submitted under the second edition would provide better documentation. We found that six of the 18 validated projects (33%) using the second edition had no mention of criteria or process, whereas only three of the 18 projects (17%) using the first edition omitted this entirely. In this case, enforcement of the Standards do not appear to be tightening or improving over time.

Another possible factor explaining compliance with the documentation requirements of the Standards is what type of organization the project proponent represents. For example, are nongovernmental organizations more likely than governments or private entities to document their efforts to facilitate procedural justice in the project design phase? We disaggregated the data by project developer and found that while nongovernmental organizations were slightly more likely to provide documentation on stakeholder involvement (85% compliance among nongovernmental organizations versus 64% among private entities), this trend was not present across all 10 criteria.

For further analysis, we used a non-metric multidimensional scaling method for ordination to see whether or not there were any significant correlations between project characteristics and project performance. We find that a two-dimensional ordination (final stress = 0.269) space explains approximately 65.5% of the variation in the procedural justice criteria met by projects (see Fig. 1). All criteria significantly mapped onto the ordination space ($p < 0.10$) and are plotted by name along with the individual Designs (indicated by their performance score). Projects with higher scores (blue arrow, $r^2 = 0.37$, $p < 0.001$) tend to be ones that mention marginalized groups (ethnic, women, etc.). None of the variation in the procedural justice criteria met by projects, however, could be significantly explained ($p > 0.10$) by project characteristics.
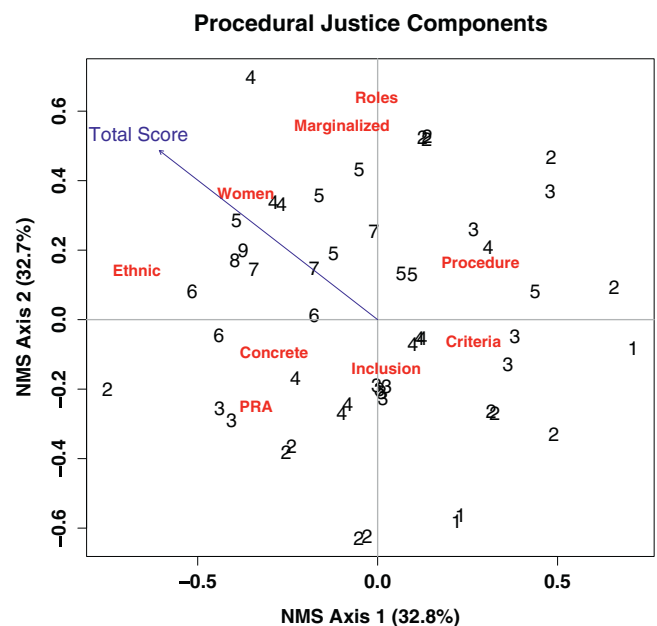

Fig. 1. Non-metric multidimensional scaling of procedural justice components by design demographics to visualize project performance.

6. Discussion: do the standards help narrow the social gap through the facilitation of procedural justice?

Considering the poor record of community inclusion in global forest governance, where participation rhetoric is more common than participation in part because "failure to reference community participation in a project proposal can spell "doom" and rejection" (Campbell and Vainio-Mattila, 2003, p. 419; see also Lundy, 1999), our findings are not surprising, but they are significant given the proliferation of certification schemes as a mechanism to improve community practices in project design (Bartley and Smith, 2010; Conroy, 2007; Klooster, 2010; Overdevest, 2010).

At the project level, our findings raise a number of concerns. First and foremost, we are unable to determine whether or not procedural justice is being facilitated. How does the omission of process information compromise justice outcomes? While lists of stakeholders and brief mentions of processes for stakeholder identification and involvement were common, we argue that details cannot be replaced with outcome summaries. For example, while the listing of stakeholders may seem like an innocuous choice, it is, in fact, an important consideration for the public consultation process. The language used in the Designs suggests that the developers often believe that community stakeholders emerge organically; that is, there is no systematic manner through which stakeholders are identified or actively recruited. Based on both the justice literature and the authors' experience as researchers and development practitioners in developing countries, these kinds of criteria fail to identify the most vulnerable populations – community members who are often marginalized because of economic status, gender, or ethnicity and may not self-identify or speak up at large meetings (Agrawal and Gibson, 1999). This is particularly concerning for vulnerable populations who have on average less education than local elites and thus are more susceptible to being co-opted into either the project or local leaders' agendas. If special measures are not taken to support meaningful engagement of vulnerable stakeholders, they become more susceptible to exclusion in project design and implementation, further marginalization, and/or inequitable benefit sharing (Conrad et al., 2011; Perhac, 1999). For these populations, a more direct and targeted strategy is necessary to enable full participation (Warner, 1997).

Additionally, these Designs are the primary source of information for interested parties to learn about the project and to provide feedback. Unless members of the public have intimate knowledge of the project, the public's ability to substantively participate in and comment on the project design is compromised when more complete information is not provided in the Design. Also, because certification programs purportedly hold projects to specific and rigorous standards, the Designs are also documents that could be referenced for "best practices" in realizing co-benefits. However, without detailed descriptions, it would be difficult for other developers to implement similar approaches. Given that scholars have already noted a gap between participation rhetoric and practice (Campbell and Vainio-Mattila, 2003; Conrad et al., 2011), it is particularly alarming when the rhetoric is not even present.

Omitting details on participatory processes for stakeholder engagement also raises the question of whether coded language is acceptable in diverse project contexts. Most notably, the majority of projects using the term "Participatory Rural Appraisal" provided no description of their efforts to involve project-affected communities under the assumption that use of the term implies what methods of inclusion were used. An examination of the origins and definitions of Participatory Rural Appraisal (see Chambers, 1994), demonstrate that in practice the approach is sufficiently broad to require more specification to understand what a project developer has actually *done*. This speaks to the risks in allowing practitioner coded language to replace a place-specific meaningful attempt to meet people where they are: procedural justice involves not only including local stakeholders in the process of decision-making but also ensuring that the process is fair and empowering to stakeholders, which is something that PRA does not inherently ensure (Smith and McDonough, 2001). In fact, PRA has been implicated as a potentially harmful device in the tyranny of participation discourse (Cooke and Kothari, 2001), so evoking PRA should include a meaningful consideration of the process and not serve as a signaling exercise alone. Finally, even if PRA could be used as a placeholder, documentation of the process and outcomes is still needed to demonstrate whether the participatory process meaningfully impacts project design.

Lastly, while we found widespread lack of compliance in the Designs, this in no way suggests that there have not been substantive efforts to comply on behalf of many project developers. For example, although we did find that the majority of projects did not provide details regarding their stakeholder criteria and identification process, nearly half did. However, what is more alarming is the tone in which these processes were reported; the brief reports suggested little to no conflict or complexity in the process. Ultimately there are inherent tradeoffs involved when designing projects, particularly when projects involve the distribution of benefits. Meaningful empowerment of stakeholders with diverse needs and goals will create conflict, and even the most well designed projects struggle to meet everyone's needs. Furthermore, community stakeholders will not always agree on the justness of a process or distribution of project costs and benefits. While it is clear that project developers have made some efforts to include local communities, the simplicity with which they report their community engagement suggests that the perspectives from various actors were not diverse or that tradeoffs were not inherent to project design – outcomes we view with skepticism.

Although we cannot determine whether or not procedural justice was actually delivered to project-affected communities in the design phase of Alliance projects without extensive fieldwork, we are able to say that, based on the documentation provided in the Designs, it appears that procedural justice still remains elusive for project-affected communities. More complete documentation of each project's efforts could perhaps change the outcomes of our analysis, but our findings suggest that projects are not complying with the Standards and the Alliance is not rigorously enforcing their Standards. This raises important questions both about the credibility of the Alliance to deliver multiple benefits and also suggests that the social justice gap with regards to procedural justice will persist.

7. Conclusion

To what extent do the Standards help narrow the social justice gap in global forest governance through the institutionalization of procedural justice? Our results help answer this question in two ways. First, they allow us to examine the extent to which projects seeking certification from the Alliance demonstrate compliance with the Standards to facilitate procedural justice during project design. The results suggest that despite the institutionalization of requirements for facilitating procedural justice, the majority of Designs fail to demonstrate their adherence to the Standards, thus raising questions about their intentions and potential for facilitating procedural justice for project-affected stakeholders. Second, the results suggest that, although the Standards can be construed as standards of justice theoretically, in practice they may not be. This could be a question of institutional design, but could also be a question of authority, interests, or the nature of justice itself.

Our analysis of the Standards through a procedural justice lens discussed earlier concluded that they are standards of justice that, in theory, could be used to help address to social justice gap in global forest governance. We argue that the Standards provide a framework for designing justice-enabling institutions in forest carbon projects by requiring proponents to consider and address multiple justice criteria in their Designs. Yet, as our results demonstrate, the Alliance itself may not be as effective at facilitating justice we would expect based on the requirements of the Standards. The poor performance of the Designs raises a number of questions about where justice can be found in forest carbon projects when projects fail to meet even minimum standards of procedural justice in the design phase. This has implications not only for the communities who may be negatively impacted, but also for overall project performance and the ability of forest carbon projects to effectively contribute to climate change mitigation.

In addition to the under-enforcement of the Standards, two main issues arise that suggest that the Standards may not contribute to narrowing the social justice gap: 1) the Standards do not fully embrace instruments that could facilitate procedural justice; and, 2) the credibility of the Alliance may be undermined by the perceived limited enforcement of the Standards. Both of these issues raise questions about the legitimacy of third parties as norm entrepreneurs in global forest governance. First, the Standards do not provide guidance on the importance of addressing power dynamics or knowledge and value differences, within project-affected communities and between communities and other project stakeholders. If integrated into the Standards, these concepts could help facilitate procedural justice by ensuring that all community stakeholders have the opportunity to exercise their voice and that local ways of knowing are not simply dismissed but are integrated into the project design. Instruments to address these concerns, which are well established in the literature, include designing creative ways to engage stakeholders beyond conventional meetings (Gibson et al., 2000; Li, 2002). Whether or not inclusion of these concepts in the Standards would contribute toward procedural justice relies first on better enforcement of the Standards.

Second, the credibility and legitimacy of the Standards rely heavily on the transparency of their operations and thus the proponent's ability to demonstrate front-end compliance with the standards – something the Alliance clearly recognizes through its firm commitment to transparency and availability of information to the public. The Designs should therefore provide at least the minimum information required by the Standards. Our results show that enforcement of the Standards is incomplete, raising questions about the extent to which the Alliance can be considered a credible actor for delivery of net positive impacts in communities. Furthermore, because the Alliance is a third-party actor – and thus not democratically accountable in the ways governments are – its credibility to deliver what it markets is a significant factor for determining the legitimacy of the Alliance and the Standards as actors in the pursuit of procedural justice for communities (Gourevitch et al., 2012; Starobin and Weinthal, 2010).

Finally, a clear next step in this research would be to ground-truth these projects to understand how the participatory processes employed by project developers align with what has been documented in the Designs. This kind of work will elucidate the coded language and process summaries to help understand *how* information is generated for a wider audience. Ultimately, while the Alliance may not be a perfect mechanism for delivering justice to project-affected communities, the Standards play a valuable role in continuing the discussion about how to ensure that forest carbon projects do not continue to exclude forest-dependent communities in project design and thus, has the potential to contribute to narrowing the social justice gap in global forest governance.

Acknowledgements

Appendix A. CCB Standards Criteria (Second Edition)

G1. Original Conditions in the Project Area	CM2. Offsite Community Impacts
G2. Baseline Projections	CM3. Community Impact Monitoring
G3. Project Design and Goals	B1. Net Positive Biodiversity Impacts
G4. Management Capacity and Best Practices	B2. Offsite Biodiversity Impacts
G5. Legal Status and Property Rights	B3. Biodiversity Impact Monitoring
CL1. Net Positive Climate Impacts	*GL1. Climate Change Adaptation Benefits (optional)*
CL2. Offsite Climate Impacts (Leakage)	*GL2. Exceptional Community Benefits (optional)*
CL3. Climate Impact Monitoring	*GL3. Exceptional Biodiversity Benefits (optional)*
CM1. Net Positive Community Impacts	

Source: CCBA (2008).

Appendix B. List of Projects in our Sample as of March 31, 2012

Project name	Country	Project developer	Validation status
Aberdare Range/Mt. Kenya Small Scale Reforestation Initiative	Kenya	Mixed	Undergoing validation
Abote Community-Managed Reforestation Project	Ethiopia	NGO	Undergoing validation
Afforestation and Reforestation on Degraded Lands in Northwest Sichuan, China	China	Government	Validated
Afforestation/Reforestation on Degraded Lands in Southwest Sichuan, China	China	Government	Undergoing validation
April Salumei Sustainable Forest Management Project	Papua New Guinea	Private	Validated
Avoided Deforestation in the Coffee Forest in El Salvador	El Salvador	Private	Validated
Avoided Deforestation Through the Payment of Environmental Services in Rainforests Located on Private Lands in the Conservation Area of the Central Volcanic Mountain Range of Costa Rica	Costa Rica	State	Validated
Biocorridor Martin Sagrado REDD+ project	Peru	Private	Undergoing validation
Boden Creek Ecological Preserve Project	Belize	Private	Validated
Buffelsdraai Landfill Site Community Reforestation Project	South Africa	Mixed	Undergoing validation
Bull Run Overseas Project	Belize	Mixed	Undergoing validation
Carbon Sequestration in Communities of Extreme Poverty in the Sierra Gorda of Mexico	Mexico	Private	Validated
Chocó-Darién Conservation Corridor Project	Colombia	Private	Validated
CO2OL Tropical Mix Reforestation Project	Panama	Private	Validated
Emas-Taquari Biodiversity Corridor Carbon Project	Brazil	Mixed	Validated
Forest Again Kakamega Forest	Kenya	Mixed	Validated
Forest Carbon Project in Quirino Province, Sierra Madre Biodiversity Corridor, Luzon, Philippines	Philippines	NGO	Validated
Humbo Ethiopia Assisted Natural Regeneration Project	Ethiopia	Mixed	Validated
Kachung Forest Project: Afforestation on Degraded Lands	Uganda	Private	Validated
Kamula Doso Improved Forest Management Carbon Project	Papua New Guinea	Mixed	Undergoing validation
Kariba REDD+ Project	Zimbabwe	Private	Validated
Kikonda Forest Reserve Reforestation Project	Uganda	Private	Validated
Madre de Dios Amazon REDD Project	Peru	Mixed	Validated
Makira Protected Forest Area Project	Madagascar	NGO	Undergoing validation
Multi-Species Reforestation in Mato Grosso, Brazil	Brazil	Private	Undergoing validation
Niger Acacia Senegal Plantation project	Niger	Private	Undergoing validation
Oddar Meanchey REDD Project	Cambodia	Mixed	Undergoing validation
Panama Canal Authority Sustainable Forest Cover Establishment Project	Panama	Government	Undergoing validation
Panama Native Species Reforestation	Panama	Private	Validated
Philippines Penablanca Sustainable Reforestation Project	Philippines	NGO	Validated
Reducing Carbon Emissions from Deforestation in the Ulu Masen Ecosystem	Indonesia	Mixed	Validated
Reforestation in Grassland Areas of Idete, Mufindi District, Iringa Region, Tanzania	Tanzania	Mixed	Validated
Reforestation in Grassland of Uchindile, Kilombero, Tanzania & Mapanda, Mufindi, Tanzania	Tanzania	Private	Validated
Reforestation of degraded land in Chhattisgarh, India	India	Private	Validated
Reforestation on Degraded Lands in Northwest Guangxi	China	Mixed	Validated
Reforestation with native commercial species on degraded lands for timber and carbon purposes in Campo Verde, Ucayali - Peru	Peru	Private	Validated
Reforestation with Native Species in the Pachijal and Mira River Watersheds for Carbon Retention	Ecuador	NGO	Undergoing validation
Restoration of degraded areas and reforestation in Cáceres and Cravo Norte, Colombia	Colombia	Private	Validated
Return to Forest, Nicaragua	Nicaragua	NGO	Validated
Rimba Raya Biodiversity Reserve REDD project	Indonesia	Mixed	Validated
Small-scale Reforestation for Landscape Restoration	China	Private	Validated
Sodo Community Managed Reforesation (Forest Regeneration) Project	Ethiopia	NGO	Undergoing validation
Sofala Community Carbon Project	Mozambique	Private	Validated
Surui Forest Carbon Project	Brazil	Mixed	Undergoing validation
The Juma Sustainable Development Reserve Project: Reducing Greenhouse Gas Emissions from Deforestation in the State of Amazonas, Brazil	Brazil	Private	Validated
The Kasigau Corridor REDD Project	Kenya	Private	Validated
The Kasigau Corridor REDD Project Phase II - The Community Ranches	Kenya	Private	Validated
The Monte Pascoal–Pau Brasil Ecological Corridor	Brazil	NGO	Validated
The Paraguay Forest Conservation Project	Paraguay	NGO	Validated
The Paraguay Forest Conservation Project Reduction of GHG emissions from deforestation and forest degradation in the Chaco-Pantanal ecosystem	Paraguay	Mixed	Undergoing validation
TIST Program in Kenya	Kenya	NGO	Validated
TIST Program in Kenya CCB-002	Kenya	NGO	Validated
TIST Program in Uganda CCB-001	Uganda	NGO	Undergoing validation
Watershed Restoration in the Cantareira Water System: Carbon, Community and Biodiversity Initiative	Brazil	NGO	Undergoing validation
Working for Woodlands Thicket Restoration Project	South Africa	Government	Undergoing validation

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