

Article

Assessing the Progress of REDD+ Projects towards the Sustainable Development Goals

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Abstract: Almost a decade since the establishment of Reducing Emissions from Deforestation and Degradation (REDD+), this study investigates the extent to which REDD+ projects are delivering on the promise of co-benefits and the elusive ‘triple-win’ for climate, biodiversity, and local communities. The Climate, Community and Biodiversity Alliance (CCB) is among several leading REDD+ certification standards that are designed to support the delivery of social and environmental co-benefits, and ‘socially-just’ carbon. This study uses an in-depth content analysis of 25 subnational REDD+ project documents to assess the extent to which REDD+ project objectives align with Sustainable Development Goals (SDG) targets, and evaluates the reporting of progress towards meeting these objectives. Currently the CCB standards address a relatively small subset of SDG targets. Despite this, we find that REDD+ projects aspire to work on a much broader set of SDG target objectives, thus going beyond what the CCB Standards require for REDD+ validation. However, although reviewed REDD+ projects have these aspirations, very few are actively monitoring impact against the goals. There is a gap between aspiration and reported progress at the goal level, and for each project: on average, only a third of SDGs that are being targeted by REDD+ projects are showing ‘improvement’. The analysis shows which global goals are most frequently targeted, and which are the least. It also allows an analysis of which projects are following through most effectively in terms of monitoring progress towards the SDGs. This assessment provides insights into the priorities of REDD+ project proponents, suggesting that REDD+ has unfulfilled potential to elicit positive change in relation to the SDGs. Our analysis also shows that there is considerable potential for the safeguarding bodies to do more to ensure that real improvements are made, and reported against, aligning REDD+ projects more strongly with global development agendas.

Keywords: REDD+; CCB Standards; Sustainable Development Goals; climate change; community; biodiversity; development; forests

1. Introduction

Amidst rapid social, political and environmental change, questions over the use, value, and control of forests are vital to the protection and conservation of these ecosystems. Reducing Emissions from Deforestation and Degradation (REDD+), was established under the United Nations Framework Convention on Climate Change (UNFCCC) nearly a decade ago and is a highly visible intervention in global forest conservation. REDD+ is primarily a Payments for Ecosystem Services (PES) system, which economically rewards resource managers for the secure provision of ecosystem services [1].

In the case of REDD+, the PES system remunerates forest managers in the Global South for reducing deforestation and degradation, thus reducing carbon emissions. Carbon offset credits are ‘sold’ to (often Global North) buyers [2]. Under the UNFCCC, REDD+ refers to the full range of policy approaches and positive incentives undertaken by nations to support activities that reduce emissions from deforestation and forest degradation, and the enhancement of forest carbon stocks through conservation and sustainable management of forests. The potential for conservation co-benefits from these forestry activities have provided an important potential new source of international finance for biodiversity conservation efforts [3]. As evidence continues to support the critical importance of forests to local livelihoods [4] efforts have been made to ensure that livelihood benefits are realized as part of REDD+, to avoid adverse unintended consequences on forest-dependent and forest-adjacent populations in developing countries. The use of market principles to protect tropical forests in order to mitigate climate change has also raised important concerns about justice for local, indigenous communities [5,6]. In response, the international development community has developed frameworks to reduce the risk of negative social and environmental outcomes from REDD+ projects. The ‘Cancun Safeguards’, agreed by UNFCCC parties at the sixteenth session of the Conference of the Parties (COP16) in 2010, require that ‘free, prior, and informed consent’ is obtained to protect the rights of indigenous people living in project zones, as well as mandating regular reporting on the progress of safeguards [7]. These mandatory safeguards still provide flexibility in REDD+ design, allowing project proponents to respond to local contexts and circumstances. REDD+ has gained widespread acceptance as a mechanism for developing countries to reduce forest degradation and associated CO₂ emissions [8,9], whilst offering unprecedented opportunities to provide community and biodiversity ‘co-benefits’ in project zones—a ‘triple-win’ scenario.

A number of reporting frameworks have emerged to guide best practice in the REDD+ context. Complementary to the Cancun Safeguards, these include the Climate, Community and Biodiversity Alliance (CCB) standards, which provide third party certification of REDD+ activities, allowing for greater confidence in the veracity of claims made by project proponents, especially for investors and buyers in the emerging market for REDD+ carbon credits [10]. It is hoped that such accreditations will enhance the monetary and moral value of projects in the global marketplace through the certified assurance of socially- and environmentally-just carbon—the sought after ‘triple-win’ for climate, community, and biodiversity [11]. These standards can help governments and project developers implement activities which contribute (net) positive co-benefits for local biodiversity and communities, whilst mitigating the potential negative outcomes of REDD+ on these entities [12]. The CCB standards were established in 2005, featured prominently in the COP16 agreements, and are now amongst the most widely used of certification standards, with more than 130 projects worldwide having sought accreditation. To date, CCB has issued 39,201,081 verified carbon units (1 verified carbon unit (VCU) = 1 tonne of carbon) to a range of forestry programs worldwide [13]. CCB certification is applied for voluntarily by project proponents and it represents a desirable seal of approval for many communities, corporate investors, and governments.

The CCB Standards require projects to be evaluated by independent auditors at the validation (design) stage and verified periodically over the project lifetime. The reporting requirements of the Standards are designed to promote a high level of transparency and accountability, but do not specifically state how certain criteria should be addressed, fulfilled, monitored, measured, and reported. Proponents must identify the best way to communicate this information to auditors in project validation and verification reports—some guidance and template documents are made available by CCB to project proponents, but they are not always used. At present, most standards suffer from a lack of specificity, and do not provide a comprehensive framework for assessing the quality of governance and overall effectiveness of REDD+ projects [14]; the CCB standards have these same challenges. Inevitably, any attempt to synthesize REDD+ outcomes based on documentation from these audit processes will reflect the limitations of the verification and monitoring processes themselves, and the extent to which these processes recognize the complex political economy context within which REDD+ projects are

implemented [14,15]. Recent work on the quality of REDD+ governance at the intergovernmental level, with implementation agency- and country-levels has resulted in proposals for governance standards that could provide greater assurance about the overall legitimacy and accountability of the mechanism [14]. As the current CCB standards do not explicitly address quality of governance, our analysis does not assess these specific concerns about how these governance issues might impact REDD+ effectiveness. Our analysis is limited to project-level plans and outcomes, as reported in design and verification documents under the CCB standards. Although project level outcomes are clearly impacted by macro scale political economy issues, project proponents and implementers have less direct influence on how REDD+ is governed at country and intergovernmental levels. Our current exercise is analytically specific to the project level outcomes based on these existing standards, and it remains valid, despite concerns about the overall governance and legitimacy of REDD+ implementation at a more macro scale.

Alongside the expansion of REDD+ activities in recent years, a new global development agenda has been established under the framework of the Sustainable Development Goals (SDGs). Adopted by the United Nations (UN) General Assembly in September 2015, this set of 17 Goals and 169 related targets unite a wide array of social and environmental issues, including education, health, and biodiversity, with an aspiration to achieve these globally by 2030 [16]. The Goals are increasingly being used to guide government policy worldwide, and they are also increasingly being adopted by businesses and other organizations that are keen to engage with the current global development agenda. The high level of acceptance, and the authority across diverse sectors, that the SDGs have attained make them a useful evaluative framework for the present analysis, commanding greater recognition and validity than other alternatives. We recognize that the SDGs framework, while being widely accepted, has also been subjected to considerable critique since its inception, with commentators suggesting that this remains a vague and fragmented concept, with little practical value [17,18]. Others raise concerns of governance: Like the CCB Standards, the SDGs are not legally binding, and governments must voluntarily support the Goals, and they are responsible for mobilizing policy and practice in accordance with the Goals, and for monitoring progress. Where accountability systems are weak, transparency is lacking and private interests are strong, there is risk of the Goals being implemented in ways which conflict with local needs [19]. Despite these critiques, the SDGs do provide an increasingly accepted set of targets for assessing progress, and provide a useful framework for the evaluation of a diverse set of REDD+ projects.

Both REDD+ and the SDGs represent aspirational ambitions for the global community, but much of their potential depends on the ways in which these goals are translated into meaningful (and verifiable) local actions. The SDGs encapsulate contemporary social and environmental concerns, and they increasingly guide the development policies of Governments and corporates worldwide [9]. They have a broad reach, are well-publicized, and are increasingly better understood. The FAO's recent report, *The State of the World's Forests* [9], recognizes the contributions of forests to all of the SDGs, and it supports the need for responsible, coherent policy-making mobilized around forest management and the SDGs [20]. REDD+ has been recognized as an instrument to help achieve the 2030 Agenda [21], and some projects have started to acknowledge the SDGs in their activities [22]. This analysis draws on these two global-scale developments—REDD+ and the SDGs—assessing the ways in which REDD+ aspires to produce community and biodiversity co-benefits with relation to the SDGs, and importantly the extent to which current projects are delivering on these aspirations. Exploring the extent to which REDD+ projects align with SDG goals and targets in their intentions and outcomes enables us to identify the potential of REDD+, in order to practically and responsibly contribute to broader development agendas.

This paper provides an empirically-informed exploration of the synergies between the SDGs and REDD+ projects, and suggests a method for project proponents to operationalize and document REDD+ outcomes which resonate with global development agendas. Whilst flexibility in REDD+ may allow location-specific and locally relevant project design, the subsequent diversity of content—including

project objectives, activities, reporting metrics and outcomes—renders the task of comparison between and assessment of REDD+ projects difficult [23]. This paper proposes an innovative approach to address this gap, using the UN Sustainable Development Goals (SDGs) as an evaluative framework. It compares and assesses the success of verified REDD+ projects using the documents that were made available by the CCB, by developing an analytical framework that can handle the diversity of report content. Specifically, we ask (1) in what ways the CCB Standards encourage REDD+ project proponents to orient their activities in accord with the SDG targets; (2) how strongly REDD+ project aims and objectives align with SDGs at the target-level; (3) how successfully REDD+ project activities address their SDG-related objectives, based on the evidence provided upon project verification, and; (4) how REDD+ project proponents might better accommodate and crucially meet global development objectives in their project design and reporting. This exploration comes as a timely contribution, a decade on from REDD+ establishment and amidst ongoing concerns for environmental and social justice surrounding REDD+ [6,11,24].

Our analysis shows that REDD+ projects are evidencing strong alignment with the SDG targets in their proposed activities—and go beyond the requirements of the CCB Standards in doing so. We find a notable gap, however, between the SDG-related aims of projects and their reported (and measured) progress in these fields. We conclude that whilst REDD+ aspirations are demonstrably high, this gap suggests that safeguarding bodies could do more to encourage successful operationalization of REDD+, to deliver and report on the diversity of co-benefits that are potentially achievable. By broadening required performance criteria, CCB and other safeguard frameworks could help REDD+ meet its full potential in relation to broader global development agendas.

2. Materials and Methods

2.1. Information Sources

An analysis of CCB-verified project documents was conducted for this paper, with documents downloaded from the Verified Carbon Standards project database (Appendix A Table A1). The 25 reviewed are REDD+ projects implemented at the subnational scale, within the non-compliance (voluntary) market with independent verification and certification. These documents are prepared by project proponents and provided to auditors at each stage of CCB accreditation, including the validation (design) stage and periodically over the project lifetime, with the first verification being undertaken within five years. Auditors conduct site visits to project zones and use the documents provided to them to assess how a project is performing against CCB standards. Proponents must demonstrate how the ‘with-project’ scenario shows an improvement on the Project Area/Zone conditions in the absence of the project. Evidencing this requires several stages of reporting: the starting conditions of the project or study, and stakeholder identification; ‘without project’ and ‘with project’ projections; potential negative impacts, risks, and mitigation/prevention; and appropriate methodologies to document the changes due to the project activities [12,25]. Three editions of CCB standards have now been released, containing 15, 14, and 17 mandatory criteria in standards 1, 2, and 3 respectively [26–28]. Further, ‘gold standard’ certification can be achieved by meeting at least one of three further components relating to climate change adaptation, ‘exceptional’ community benefits and ‘exceptional’ biodiversity benefits.

The Verified Carbon Standard database [13] makes CCB-verified REDD+ project documents publicly available, of which the following two types were drawn upon in this study:

- i. Project design documents: Provide details about how project operations and activities demonstrate compliance with CCB criteria. These are updated according to discrepancies highlighted by independent auditors upon validation. An additional validation report indicates project conformance with CCB criteria, highlighting any discrepancies that should be resolved in the project design document before a final validation report is published.
- ii. Project implementation reports: Provide detail about how project activities are seeking to deliver net climate, community, and biodiversity benefits, reporting monitoring and project

progress against their original objectives. These reports are produced within five years of initial validation, accompanied by verification reports. Verification reports acknowledge continued conformance with CCB criteria, and they highlight any discrepancies to be resolved by the project.

A total of 25 projects are reviewed, all of which have been verified according to the CCB Standards Second ($N = 17$) or Third Edition ($N = 8$), demonstrable by available reports as of 2 July 2018 on the Verified Carbon Standard (VCS) database (Table 1). The online, freely-accessible database is still in operation and up-to-date despite VCS and CCB Standards now both being under the management of the organization and carbon quality assurance provider, Verra. REDD+ projects with either the project design document or project implementation report not available and/or not available in English are excluded.

Table 1. Sampling strategy for reviewed Reducing Emissions from Deforestation and Degradation (REDD+) projects.

Total Verified Carbon Standard Projects	1441
Total Climate, Community and Biodiversity Alliance (CCB) Projects (All Types)	94
Total CCB REDD+ Projects	75
Total CCB-REDD+ Projects (Verified)	30
Total CCB REDD+ Projects (Verified, English Project Design Document and English Project Implementation Report)	25
Total REDD+ Projects Reviewed	25

The SDGs are used here as an evaluative framework to enable comparison between projects with a diverse array of objectives and outcomes, despite these projects having been designed prior to the establishment of the Global Goals. Through in-depth content analysis of these documents, we explore the reported impact of the 25 CCB-verified REDD+ projects, as explained in the following sections.

2.2. Matching SDG and CCB Objectives

The CCB Standards were analyzed to reveal the (minimum) SDG targets that CCB-validated REDD+ projects could be expected to address based on what the Standards require. The analysis finds SDG-correlates in the CCB Standards, which REDD+ projects need to demonstrate compliance with in their validation paperwork. Thus, these SDG-correlates should be the minimum SDGs that CCB-verified projects support. The Standards were analyzed using content/textual analysis, supplemented by keyword searches corresponding to each SDG target (following a similar approach to that reported in [29]). For example, the analysis noted direct linkages to SDGs from keywords such as ‘worker safety’, ‘waste’, or ‘climate change’. Implicit linkages were fewer and they were also noted where the CCB Standards could be seen as strongly supporting an SDG target. Appendix A Table A2 provides more detail of where and how linkages between the SDGs and the CCB Standards have been recognized using this explicit/implicit methodology.

2.3. Evaluation of the Objectives

The project design documents of the 25 REDD+ projects were also reviewed using content/textual analysis, supplemented by keyword searches corresponding to each SDG target [29]. This focused on their stated objectives and proposed activities, revealing their alignment with SDG targets. Direct and implicit linkages to SDGs from keywords were again noted. For example, SDG target 12.8, which ensures ‘people have the relevant information for sustainable development and lifestyles in harmony with nature’ [16] (p. 9) was linked to proposed REDD+ plans to train community members to engage in sustainable non-timber forest production. Content analysis of both the CCB Standards and the REDD+ project design documents allowed us to identify three types of SDG targets: (i) those which are expectedly supported in CCB-verified projects, as these correspond to mandatory requirements of the CCB Standards; (ii) those which are highly targeted despite not being a mandatory requirement

of CCB accreditation (i.e., REDD+ project proponents are going beyond what is required of them in support of the global development agenda); (iii) those SDG targets which are not highly targeted, and which we would not necessarily expect REDD+ projects to contribute to.

2.4. Evaluation of Outcomes

We reviewed the latest project implementation reports available for each project, to assess whether SDG-related objectives were being followed through in the implementation of project activities. Content/textual analysis was again used to record project progress at the SDG Goal level. Each REDD+ project's project implementation reports were read in detail, noting where project activities towards the 17 SDGs had been reported. This qualitative information was converted into quantitative form using the numerical score system described below, to allow a degree of comparability between projects.

We tracked the progress towards long-term goals using a four-part scoring framework, which acknowledges that all projects are at different stages along a general pathway of change that would be expected on the way to achieving an ultimate desired output. Articulating each step within a longer-term process of change allows projects' progress to be assessed. A score of 0–3 is given to each project for each of the 17 Global Goals, where 0 = not targeted; 1 = insufficient information; 2 = monitoring variable(s) have been explicitly identified, and/or monitoring is occurring (results may be too soon to see); 3 = outcome monitored and improvement reported (Figure 1). This score system reflects other studies' hypotheses that early outcomes are often strong predictors of projects' long-term impacts [30]. It is these outcomes that are more likely to be picked up upon project verification and included in project implementation reports. Similar impact assessment frameworks have been utilized successfully elsewhere [31,32]. The method was considered an appropriate approach here, as it allows REDD+ projects' progress to be systematically and quantitatively assessed in relation to the SDG targets initially identified in the project design documents.

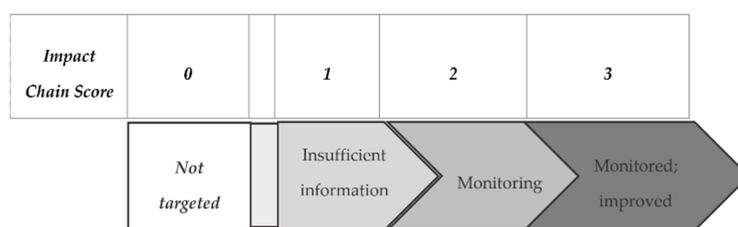


Figure 1. Impact Stages Chain. The 25 project implementation reports were given a score of 0–3 against each of the Sustainable Development Goals to reflect their contribution to the Goals. 0 = not targeted; 1 = insufficient information is given in the project implementation report; 2 = variable is being monitored or has been identified (no improvement yet); 3 = variable is being monitored and improvement is clearly demonstrable.

Our evaluation builds on third-party verification by independent CCB auditors, which we do not seek to dispute or assess independently—our analysis uses these evaluations to explore the relevance and efficacy of REDD+ in relation to the global development agendas. This study does not seek to find the 'best' REDD+ project, and we stress that stronger SDG-alignment does not necessarily make a better project. The impact assessment also allows a qualitative evaluation of approaches, which prove to be consistently effective in the delivery of project outcomes across spatial and temporal scales.

The CCB advises that the REDD+ project proponents distinguish between project activities, project outputs, project outcomes, and project impacts, to demonstrate how they plan to progress from initial project strategies, through activities, to positive impacts in term of climate, communities, and biodiversity [12]. These causal models—known as 'theory of change' models—are useful for explaining how specific interventions can give rise to specific outcomes and impacts, and to resolve the challenge of project 'attribution' required by CCB for project proponents [23]. Our analysis does not use this terminology, as the model has not been universally adopted by proponents in project

implementation reports. It is difficult to make judgments on the stage of impact reached where proponents have not used this criterion in their reporting.

2.5. Limitations

CCB validation and verification is a time-consuming and financially costly venture for proponents and auditors alike. Thus, project proponents do not provide complete detail on all project operations in validation and verification documents, but they often report the minimum that is required to demonstrate conformance with the CCB standards. Whilst the Standards are designed to promote transparency, not all activities will be visible in the project documents assessed here. This is an obvious constraint to the use of the CCB documents as a proxy for project performance, as it is very likely that SDG-relevant activities are under-reported by project proponents. However, short of independent audits of each project using an SDG framework, this remains a useful analytical approach to assess the comparative performance of a large number of relatively mature REDD+ projects in relation to the SDGs.

3. Results

3.1. Matching CCB-SDGs/Evaluation of Objectives

Currently CCB, standards only address a small subset of SDG targets (Figure 2; see also Table A2). Figure 2 points to the minimum number of targets that we would expect CCB-verified REDD+ projects to support. Ten SDG targets would be supported by a REDD+ project seeking no (optional) Gold Level criteria, or only Gold-Level biodiversity criteria, validated against the CCB Standards, Second Edition. In contrast, a project validated according to the CCB Standards Third Edition for all Gold Level criteria would support at least 20 SDG targets. Further descriptive data on the CCB-SDG correlates can be found in Appendix A (Table A2).

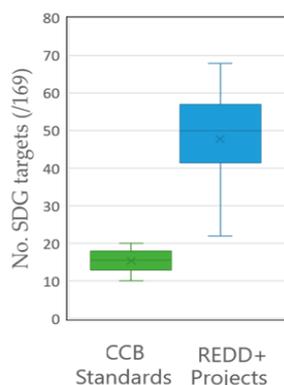


Figure 2. The number of Sustainable Development Goals targets correlating to the Climate, Community and Biodiversity Alliance (CCB) Standards (Second and Third Editions and Gold Standards) and the number of SDG targets supported by Reducing Emissions from Deforestation and Degradation (REDD+) projects in their project design documents. Maximum and minimum values, interquartile range, median line, and cross indicating the mean value of SDG targets that are supported by the Standards and REDD+ projects.

Analyses of the 25 CCB-verified REDD+ projects show which SDG targets were being considered and supported in project designs. Despite the relatively limited requirements within the explicitly stated CCB standards, reviewed REDD+ projects aspire to work on a much broader set of SDG targets (Figure 2). Figure 2 shows how the number of SDG targets addressed varies between the CCB Standards and REDD+ projects. The Second and Third Edition Standards make compulsory criteria relating to only 10 and 14 SDG Targets respectively, across 8 and 10 Goals (respectively). REDD+ projects are on average supporting 48 Targets across 14 Goals in their project design documents. But this value is

not consistent: Project 20 (ID) aspires to support 68 targets across 15 Goals; Project 22 supports just 22 targets across 10 Goals—just above the 16 Targets that CCB requires for its specific Gold Level status.

Figure 3 describes which CCB Standards criterion have been deemed to be explicitly linked to SDG targets. Figure 3 shows that many targets for Goal 15 for biodiversity are encapsulated in the Standards’ overall demand that projects have no negative impact on biodiversity within project zones. Targets of Global Goal 16 (Justice) and Goal 8 (Decent Work, and specifically 8.8 for worker rights) are largely covered in the Standards criteria for best practice procedures—which are designed to complement the UNFCCC REDD+ safeguards (a–d).

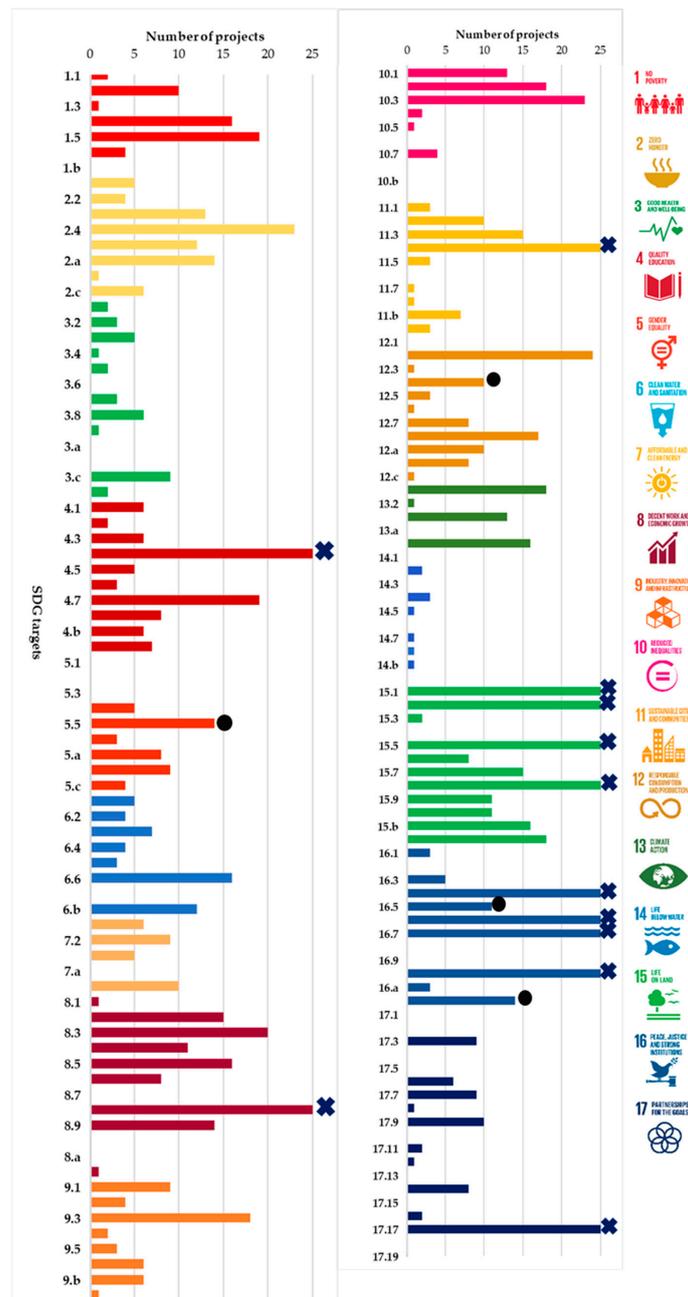


Figure 3. Numbers of REDD+ projects (out of 25) that have sustainability objectives similar to those listed as SDG targets. X = targets corresponding to requirements of both CCB Standards (N = 25); O = targets corresponding to the requirements of the Third Edition only. Gold Level Criteria not highlighted here; see Supplementary Material. All 169 targets of Goals 1-17 are shown, with or without labels.

Figure 3 also summarizes how many projects have presented plans in line with each SDG target, showing (as expected) that SDG targets which are strongly linked to mandatory CCB Standards criteria (X and O on Figure 3) were targeted by all projects (of that particular CCB Standards Edition). Overall, the projects reviewed here demonstrated strong alignment with the SDGs in their stated objectives. All but three Goals were supported by more than 12 (of the 25 reviewed) projects. Global Goals 3 (Health and Well-being), 7 (Clean Energy), and 14 (Life below Water) are targeted by only nine, nine, and three projects respectively. Figure 3 points to where: (1) SDG targets which link to optional CCB criteria on climate, community, and biodiversity, are being frequently targeted in REDD+ project design documents, and (2) (perhaps more importantly) where SDG targets are being highly targeted in REDD+ project design documents, to further the requirements of the CCB.

Certain SDG targets are linked to Gold Standard CCB criteria (Figure 3) and so they are only targeted where deemed applicable by project proponents. Targets 13.1 and 13.b, seeking to strengthen adaptive capacity to climate change, fall into this category—the gold-level criteria require proponents to identify the likely regional climate change scenarios and impacts on communities/biodiversity, and to demonstrate the measures that are being taken to assist communities in adapting to these. Many REDD+ project zone communities expect to see extreme climate changes over the project lifetime (increased rainfall, drought severity, temperature rises). Such changes could adversely affect community wellbeing, which is disallowed by the Standards, and additionally could undermine overall project success, as causing communities to suffer. Goals 10.2 and 10.3, for equality and inclusiveness in project participation and outcomes, are also highly targeted, and they are a requirement of the optional gold criteria for ‘exceptional’ community benefits. Thus, not all projects are required to plan activities to benefit the entire range of project zone households, but those that aspire to community gold standard will need to demonstrate their commitment to addressing inequality and inclusiveness.

Perhaps more notable are instances where projects aim to improve areas aligned with SDG targets which are not CCB criteria (mandatory or optional). Global Goals 2 (Hunger), 4 (Education), 8 (Decent Work) and 12 (Responsible Consumption and Production) are examples of this (Figure 3). Many REDD+ project proponents recognize unsustainable farming practices (e.g., slash and burn) as a major threat to deforestation and seek to address these through encouraging more sustainable alternatives, thus preserving the forest. Global Goal 4 for quality education may be supported in recognition of the large role that education plays in sustainable community use and management of the forest environment, and in helping communities cope with changing resources in the context of climate change. Moreover, many REDD+ project proponents will recognize the value of Global Goal 8—job, income, and business creation—for project success. Providing secure employment opportunities in alternative (sustainable) livelihood activities can garner greater support from local stakeholders for project activities. Goal 12, for sustainable production and consumption, brings these three together: in educating and employing local people in sustainable NFTP production/consumption, it is hoped they will be deterred from illegal and damaging (subsistence and/or income-generating) activities (e.g., poaching, logging). Such support activities, among others, could contribute to projects’ successful longevity and provide benefits to communities and the environment which extend beyond project lifetimes.

As Figure 3 also identified, several goals (especially Goals 3, 7, and 14) are targeted by only a few projects. Whether REDD+ project proponents should see themselves as responsible for the entire spectrum of SDGs, e.g., reducing deaths and injuries from road traffic accidents (Target 3.6), is debatable, and this is discussed further in Section 4. It is also apparent that certain SDGs, such as Goal 14 for ‘Life Below Water’, will only be applicable in certain locations (as most REDD+ projects are focused on terrestrial activities). For example, ‘life below water’, will only be applicable in certain locations (as most REDD+ projects are focused on terrestrial activities).

3.2. Evaluation of Outcomes

Analysis of project verification documents, which report on project progress and demonstrate continued compliance with CCB criteria, tries to differentiate between projects that are and are not monitoring their SDG-related activities, and those that are monitoring, and that can report strong positive outcomes from the project implementation period. Although relatively coarse, this analysis allows for a comparison between hugely diverse REDD+ projects. Table 2 summarizes the progress made by all verified REDD+ projects against each Global Goal, based on the evidence provided in their respective implementation reports. It shows that although reviewed REDD+ projects have far-reaching aspirations in support of the SDGs, very few are actively and systematically monitoring improvement against the goals. The Table exemplifies the diversity of projects, in their activities, monitoring metrics, and importantly that they are all at different stages of their implementation pathways.

Table 2. The number of projects (out of 25) that have reached the impact stages (0–3) recorded by SDG. 0 = not targeted; 1 = insufficient info; 2 = monitoring variable identified/variables are being monitored; 3 = evidence of monitoring and improvement.

Sustainable Development Goal	Impact Stage				Example Monitoring Metrics
	0	1	2	3	
 1 NO POVERTY	0	6	13	6	No. of people with improved livelihoods or income resulting from the project
 2 ZERO HUNGER	2	4	12	7	No. of people adopting improved agricultural practices.
 3 GOOD HEALTH AND WELL-BEING	10	4	5	6	Mortality rates; incidence of diarrhea, typhoid.
 4 QUALITY EDUCATION	0	5	6	14	No. of children attending school; literacy rates of family members.
 5 GENDER EQUALITY	6	5	5	9	% women on community councils; no. women employed.
 6 CLEAN WATER AND SANITATION	4	9	4	8	No. of hectares of water source protected; % latrine access.
 7 AFFORDABLE AND CLEAN ENERGY	8	8	7	2	No. of households/individuals accessing renewable energy.
 8 DECENT WORK AND ECONOMIC GROWTH	1	4	11	9	No. of villagers trained and contracted by the project.
 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	5	8	8	4	No. of individuals with new knowledge/skills in business administration/value-added processing.
 10 REDUCED INEQUALITIES	4	13	7	1	Income/asset inequality; most disadvantaged communities.
 11 SUSTAINABLE CITIES AND COMMUNITIES	1	8	8	8	Mapping of cultural identity areas; no. of households with upgraded roof materials.
 12 RESPONSIBLE CONSUMPTION AND PRODUCTION	0	6	7	12	No. of rubbish collection days/year; no. of ecotourism sites established.
 13 CLIMATE ACTION	7	12	3	3	No. of beneficiaries of conservation agriculture.
 14 LIFE BELOW WATER	21	1	2	1	No. of fishing restriction zones established.

Table 2. Cont.

Sustainable Development Goal	Impact Stage				Example Monitoring Metrics
	0	1	2	3	
 15 LIFE ON LAND	0	0	13	12	% change in ha better managed by the project for biodiversity; presence of endangered species
 16 PEACE, JUSTICE AND STRONG INSTITUTIONS	0	5	9	11	No. of grievances; no. of illegal activities recorded
 17 PARTNERSHIPS FOR THE GOALS	1	13	6	5	No. of public-private partnerships agreed.

Figure 4 visualizes the marked gap between the number of SDGs identified at the design stage, relative to the various stages of implementation that REDD+ projects have reached. While most REDD+ projects presented plans in line with 14 out of 17 of the SDGs, most only evidence improvement against five of the Goals. The Figure shows the performance of each project with respect to its stated objectives based on evidence provided at project verification. There was a marked gap seen between each projects' SDG-related aspirations, their identification of monitoring variables, and evidencing 'improvement' in these fields. On average, projects were evidencing improvement against 34% of their initial objectives—meaning that two-thirds of their initial SDG-related activities were either being monitored, but not yet demonstrating improvement, or that monitoring variables had not been identified at all (approximately one third each). Some projects demonstrated improvement across a large proportion of their originally identified SDG-variables (Figure A1). Projects 11 and 12 reported improvements towards 64% and 70% of the Goals that they initially identified, respectively. Figure A1 makes apparent that these projects are targeting slightly fewer goals (14 and 10 out of 17 respectively), but they appear to be doing so more efficaciously, and with a specific concern for systematic and verifiable indicators that allow progress to be monitored.

Figure 5 breaks this information down by SDG, showing there is a gap between aspiration and reported progress at the goal level. This indicates which goals had been more successfully addressed by REDD+ project activities, based on where an evidence of improvement (impact score 3) has been provided in project implementation reports. The most notable gap between aspiration and improvement is visible in Global Goals 7 (Clean Energy), 10 (Equality) and 13 (Climate Change), with improvement reported by only 15.3%, 4%, and 15% projects respectively. Activities relating to these Goals were often described in the project design documents, but few projects articulated any monitoring metrics that were aligned with these activities; even fewer could indicate an improvement. Global Goals 4 (Education) and 12 (Sustainable Production and Consumption) were highly targeted, and they had the highest percentage improvement amongst projects (56% and 48% respectively; Figure 5). These Goals were often supported by projects through the provision of technical and vocational training for community members, oriented towards alternative livelihood activities—acai processing, beekeeping, and ecotourism were often mentioned. Proponents might choose to monitor (including but not limited to) the number of training sessions taking place; the number of community members with improved knowledge (through surveys); and the non-timber forest products (NTFPs) production units established. Half of the projects that supported gender in their activities (Global Goal 5) were also able to report an improvement: higher female participation in project activities was often reported; some reported providing sexual health clinics; others ensured improved (local) female inclusion on higher-level councils in project zones. Goal 15 (Life on Land) was unsurprisingly high, as a mandatory requirement of the CCB Standards is to have a 'net positive' effect on project zone biodiversity. What is not stated is how to monitor this—but demonstrably the majority of proponents are choosing appropriate monitoring indicators to clearly signal their continued compliance with the CCB criteria.

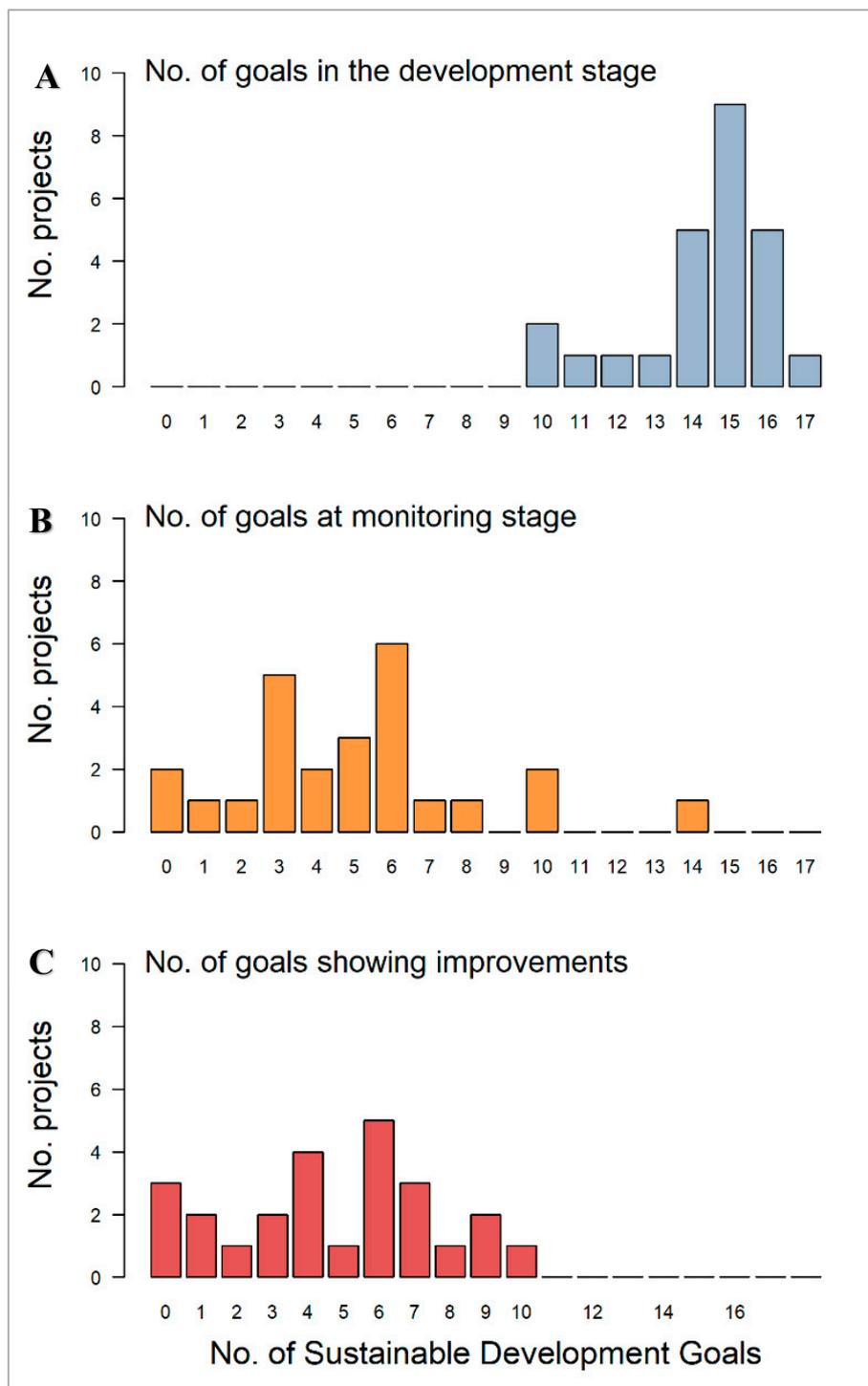


Figure 4. The number of Sustainable Development Goals that are being (A) aspired to in project design documents, (B) are being monitored or have monitoring variables identified in project implementation reports (no improvement yet), and (C) monitored and improvement is clearly demonstrable in project implementation reports, by the 25 reviewed REDD+ projects.

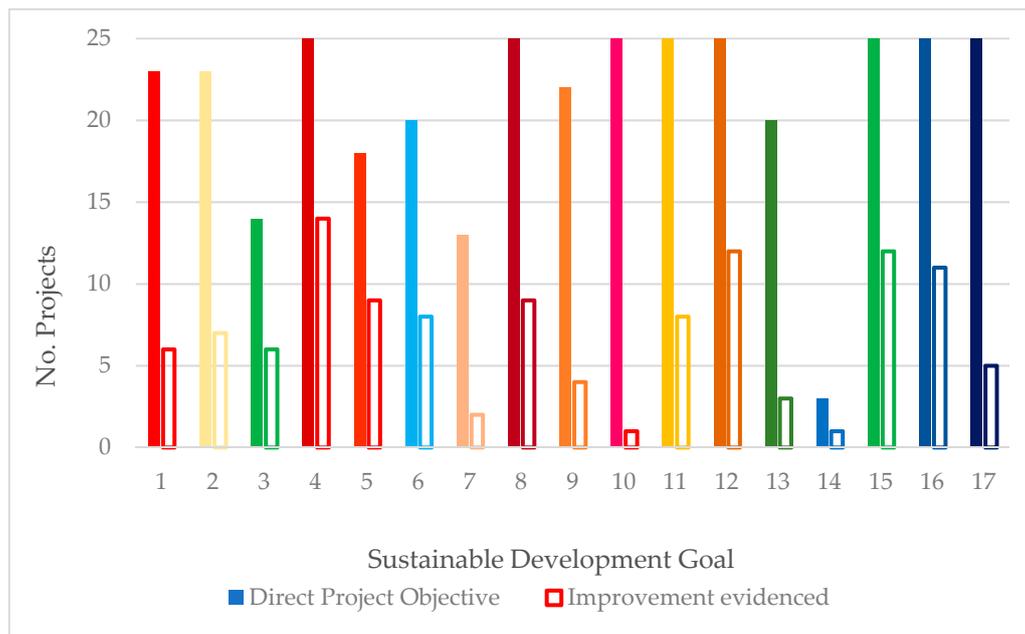


Figure 5. Numbers of REDD+ projects that target specific SDGs in their project design documents (solid boxes), compared to the number of projects reporting improvement (=impact score 3; unfilled boxes) based on project implementation reports. Colors mimic those that are used for SDG icons [16].

4. Discussion

Three years since the 2030 Agenda for Sustainable Development was established, and with REDD+ now a decade old, this exploration comes as a timely investigation into the progress of subnational REDD+ projects on-the-ground and the potential of REDD+ to support the global development agenda. Orienting REDD+ project activities to the SDGs has obvious benefits, with the potential to improve projects' overarching success in reducing emissions from deforestation and degradation through the provision of sustainable co-benefits. To tackle the diversity of REDD+ report content, this study has utilized the 17 Sustainable Development Goals and 169 Targets as an evaluative framework. Independently verified REDD+ projects in different stages of their implementation pathway have been reviewed, revealing the potential synergies between REDD+ and a key component of the contemporary global development agenda.

4.1. Matching CCB and SDG Objectives

As a leading safeguard framework, the CCB Standards (in association with REDD+) seek to avoid both the potential negative impacts of project activities on biodiversity and communities and generate net positive benefits for these entities (Panfil and Harvey, 2014). Since the CCB Standards were created before the SDGs were agreed in 2015, care is needed in explicitly linking the two. However, links are important where they can be found: the CCB Standards make demands of REDD+ project proponents that seek validation, which the SDGs do not—the SDGs being recommendations as opposed to mandatory compliance targets for signatories. Standards could therefore be valuable in suggesting forest management approaches that might better enable countries to deliver challenging SDG outcomes (focused, of course, on the forest sector and allied project activities). Our analysis shows that currently the CCB standards, which are designed to mitigate projects' negative effects, only address a small subset of SDG targets. These targets primarily link to biodiversity and 'best practice' procedures.

4.2. Evaluation of Objectives

The reviewed REDD+ projects are aspiring to work on a much broader set of SDG targets than what the CCB Standards require (Figure 2). The projects demonstrate a strong alignment with the SDGs

in their stated objectives, with all but three SDGs (Goals 3, 7, and 14) addressed by activities proposed by over half of projects (Figure 3). These proposals, described in the project design documents, go beyond the minimum requirements of the CCB Standards—of which there are currently relatively few—and they demonstrate considerable ambition amongst REDD+ project proponents in relation to the wider benefits of the activities that they are intending to undertake in and around their field locations. Importantly, while being demanding, the CCB standards give the project proponents considerable flexibility in the details of project planning, allowing activities to be designed in ways that are locally appropriate. This analysis has shown that project proponents are inclined to contribute multiple and far-reaching co-benefits from their activities, and this indicates the potential use of REDD+ as a vehicle for positive local scale mobilization towards the SDGs.

4.3. Evaluation of Outcomes

Although reviewed REDD+ projects have such high aspirations in relation to the SDGs, very few are actively monitoring progress and impact against the goals. There is a gap between aspiration and reported progress for each project (Figures 4 and A1), and at the goal level (Figure 5). On average, just over a third of projects' initial objectives are being evidenced as having improved by the projects upon verification. Earlier examinations of REDD+ [33] reported that, relative to the monitoring of carbon stock and forest cover, measurement of co-benefits for REDD+ is still in its infancy. These findings suggest that whilst this is still the case for many REDD+ projects (at least from those reviewed here), some projects are demonstrating competent monitoring across far-reaching activities, but are currently failing to demonstrate where improvements have been made (Table 2). This gap is important. Whilst some changes take time to be realized, 80% of our projects had been in operation for over three years at their most recent verification. It might be hoped that, in this time, improvement could be demonstrated in some of the monitoring variables identified. Thus, we deem the aspiration–performance gap to be indicative of missed opportunities in REDD+ projects, that need to be appropriately addressed by project proponents, as well as those responsible for setting standards and monitoring performance against these standards.

Financial constraints likely play a role in creating this gap: project proponents often face a trade-off between investing funds in actually delivering social and environmental improvements, as opposed to investing resources into monitoring. This resonates with our observation (Section 2.4) that SDG-relevant activities are likely to be under-reported by project proponents. While this is probably true, most project proponents are also likely to be aware that, without explicit monitoring of progress against baselines or without project scenarios, they cannot credibly claim that they have been delivering real improvements. Some level of investment in measuring performance, thus, is likely to be important for projects to demonstrate their wider achievements across a range of social and environmental indicators.

Another important constraint of the present analysis is the short time period that has elapsed since the start of most of the projects currently under review, we acknowledge that some SDG-related parameters (especially those relating to institutional and social change) will only show real improvements in generational timescales, as opposed to the annual/biennial timescales that are visible in current verifications and monitoring reports. But, even where it is more appropriate to expect change to be visible over longer periods, monitoring metrics are important to allow baselines to be established, so that real improvement can eventually be evidenced. Reflecting this, the scoring system utilized here rewards projects that have identified monitoring variables, compared to those that have not.

The analysis also shows which goals are most frequently targeted, and which are the least frequently. Global Goals 4 (Education) and 12 (Sustainable production and Consumption) are highly targeted and demonstrate the highest improvement amongst all projects. Goals 3, 7, and 14 are targeted by fewer projects, but the most notable gap between aspiration and improvement is visible in Global Goals 7 (Clean Energy), 10 (Equality), and 13 (Climate Change). This analysis has not sought the 'best'

REDD+ project, nor is there a presumption that addressing a wider range of SDG targets is necessarily an indication of a 'better' project. The projects reviewed have been in operation for different periods of time, so it is unsurprising that they differ in their progress. However, it is important to identify where and how projects have been able to provide strong evidence of improvement, to suggest how projects might better support the global development agenda, and to provide independently verified evidence of their progress towards the global goals.

The CCB has recently introduced a monitoring template [34,35] that is designed for project proponents, to help them highlight important project benefits according to standardized benefit metrics. We find that the two strongest scoring projects (projects 11 and 12) are verified using the CCB's recently introduced CCB/VCS Monitoring Report template, which offers some standardized monitoring metrics to proponents, some of which are strong correlates to the SDGs—including improved access to, and quality of, healthcare (Global Goal 3), education (Global Goal 4), and clean water (Goal 6). These projects are not the only ones to use the new template, nor does it require that all the suggested variables be monitored—hence, it should not be seen as a prerequisite for success. It does, however, provide a reporting framework that is consistent and comparable across a wide range of local interventions. All CCB projects will be expected to monitor the same quantifiable information when they undergo their next rounds of verification. We might expect that an eventual programme-wide rollout of the template across all VCS/CCB projects will encourage more proponents to engage in astute monitoring and targeted activities, generating positive SDG outcomes. It might also facilitate future comparison between the relative achievements of different projects.

4.4. Policy Implications

This analysis places strong emphasis on the need for clearly articulated and measurable targets as a key element of successful project implementation, which corresponds with other investigations of conservation outcomes [25,36]. The introduction of the monitoring template for REDD+ proponents marks a step in the right direction to ensuring that projects generate lasting co-benefits, and by directing needed attention towards critical fields. Currently, however, relatively few SDG targets are mandatory in the existing CCB criteria. Since CCB does not require that specific variables are monitored, closing the gap between aspiration and improvement relies upon motivated, responsible proponents who go beyond the minimum reporting requirements for certification. Despite this, our findings suggest that REDD+ projects already target a diversity of SDGs beyond what is required by the CCB Standards. Whilst some projects are making demonstrable improvements in the SDG fields, many projects' objectives remain abstract aspirations, or else isolated accounts of project activities that are unable to systematically indicate progress towards these targets. It seems that while REDD+ could be a vehicle to elicit strong positive change in vulnerable communities, these opportunities are currently being missed—projects with high aspirations are not delivering real co-benefits (or at least not monitoring and reporting these under the CCB Standards). This is not a criticism of the programme itself, but the process of reporting and monitoring, which is potentially missing an opportunity to provide proponents a structure for demonstrating their progress towards the Global Goals.

If the CCB and other safeguarding frameworks were to broaden and tighten REDD+ performance criteria in synergy with the SDGs, the opportunities that REDD+ offers to support global development—that are currently being missed—might be better fulfilled. This might involve introducing more obligatory standardized metrics into the new monitoring template, which align with the entire spectrum of SDG targets, and rewards for project proponents that engage with these metrics. CCB validation criteria could potentially require proponents to describe why certain Global Goals are not being supported—recognizing that in many cases this will be because it is inappropriate, or not relevant to the project zone communities. We are not arguing that it is the responsibility of REDD+ proponents to tackle all aspects of the contemporary global development agenda; clearly, individual project-level forest sector interventions cannot realistically address the entire range of issues that the SDGs identify as global priorities. However, such an approach to reporting

and monitoring under the CCB, which encourages REDD+ alignment with the SDGs, could maintain a degree of programmatic flexibility, while also incentivizing proponents to actively engage with the global development agenda, as is appropriate to local needs and contexts.

5. Conclusions

This paper has used the Sustainable Development Goals as an evaluative framework to assess the aspirations and achievements of REDD+ projects under the CCB Standards to positively support broader global development agendas. Our analysis suggests that safeguards, such as the CCB, which seek to alleviate concerns for social and environmental justice relating to REDD+, are currently potentially too narrow in their expectations and monitoring requirements, thereby missing an important opportunity for greater alignment of REDD+ activities with the SDGs. Our analysis shows that REDD+ project proponents aspire to address a much wider range of social and environmental issues than what is currently required under the CCB Standards. Thus, such safeguards are falling short in their requirements (or lack of) for project proponents to demonstrate progress towards these stated aspirations. Our analysis reveals a gap between what projects aspire to, and what is reported as being improved upon in project implementation documents. More stringent performance reporting criteria, relating to the full range of SDGs targets, could be imposed upon proponents by safeguarding frameworks like CCB, and to facilitate more effective documentation of evidence for the delivery of positive co-benefits of REDD+ in support of broader development agendas.

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Appendix

Table A1. The 25 CCB-verified REDD+ projects reviewed in this analysis; project design documents and project implementation reports are made publicly available at <http://www.vcsprojectdatabase.org/#/ccb>. Projects were given unique IDs during the analysis.

CCB Project ID	Project Name	Region	Standards Edition	Gold Standard(s)	CCB Verifications
562	The Kasigau Corridor REDD Project—Phase I Rukinga Sanctuary	Africa	Second	Climate; Biodiversity	4
612	The Kasigau Corridor REDD Project—Phase II The Community Ranches	Africa	Second	Climate; Biodiversity	4
674	Rimba Raya Biodiversity Reserve Project	Oceania	Second	Climate; Community; Biodiversity	2
902	Kariba REDD+ Project	Africa	Second	Climate; Biodiversity	2
904	Reduced Emissions from Deforestation and Degradation in Community Forests—Oddar Meanchey, Cambodia	Asia	Second	Climate; Community; Biodiversity	1

Table A1. Cont.

CCB Project ID	Project Name	Region	Standards Edition	Gold Standard(s)	CCB Verifications
934	The Mai Ndombe REDD+ Project	Africa	Second	Climate; Biodiversity	2
953	The Paraguay Forest Conservation Project—Reduction of GHG emissions from deforestation and forest degradation in the Chaco—Pantanal ecosystem	Latin America	Second	Climate; Community; Biodiversity	1
958	BIOCORREDOR MARTIN SAGRADO REDD+ PROJECT	Latin America	Second	Climate; Community; Biodiversity	1
963	The Purus Project	Latin America	Second	Biodiversity	6
985	Cordillera Azul National Park REDD Project	Latin America	Second	Biodiversity	4
1112	The Russas project	Latin America	Second	Community	2
1113	The Valparaiso Project	Latin America	Second	Community	2
1168	Kulera Landscape REDD+ Program for Co-Managed Protected Areas, Malawi	Africa	Second	Climate; Community; Biodiversity	1
1175	Avoiding planned deforestation and degradation in the Valdivian Coastal Reserve, Chile	Latin America	Third	Biodiversity	1
1201	Gola REDD Project	Africa	Second	Climate; Biodiversity	1
1325	Mjumita Community Forest Project (Lindi)	Africa	Third	Climate; Community; Biodiversity	1
1340	Bale Mountains Eco-region REDD+ project	Africa	Third	Climate; Community; Biodiversity	1
1359	Isangi REDD+ Project	Africa	Second	Biodiversity	1
1382	The Envira Amazonia Project—A Tropical Forest Conservation Project in Acre, Brazil	Latin America	Third	Climate; Community; Biodiversity	1
1403	The Paraguay Forest Conservation Project—Reduction of GHG Emissions from Deforestation and Forest Degradation in the Parana Atlantic Ecosystem—Forest Protection in the La Amistad Community, San Rafael	Latin America	Second	Biodiversity	1
1408	Chyulu Hills REDD+ Project	Africa	Second	Climate; Community; Biodiversity	1
1477	Katingan Peatland Restoration and Conservation Project	Oceania	Third	Climate; Community; Biodiversity	2
1541	Lacondon—Forest for life REDD+ Project	Latin America	Third	Climate; Community; Biodiversity	1
1622	REDD+—Project for Caribbean Guatemala: The Conservation Coast	Latin America	Third	Biodiversity	1
1650	Reduced Emissions from Deforestation and Degradation in Keo Seima Wildlife Sanctuary	Asia	Third	Biodiversity	2

Table A2. Links between SDG targets and REDD+ CCB Standards criteria, as they appear in the Second and Third Editions of the CCB Standards. None of the 25 REDD+ projects reviewed by us were validated using First Edition criteria, so these criteria are excluded from the analysis. Acronyms used for CCB Standard are G = a general criterion (blue); B = related to biodiversity (green); CM = related to community; GL = a “gold level” criterion (yellow/gold); N/A = not applicable to Edition (grey).

SDGs Addressed	SDG Targets	Corresponding Criterion in CCB Standards	
		Edition 2	Edition 3
	1.5: “build the resilience of the poor and those in vulnerable situations ... ”	GL2.4: “identify any marginalized and/or vulnerable Smallholders/Community Members ... (demonstrate) that measures are taken to avoid, or when unavoidable to mitigate any such (negative) impacts.”	GL2.4: “identify any marginalized and/or vulnerable Smallholders/Community Members ... (demonstrate) that measures are taken to avoid, or when unavoidable to mitigate any such (negative) impacts.”
		G4.3: “provide orientation and training for the project’s employees and relevant people from the Communities ... building locally relevant skills and knowledge to increase local participation in project implementation	G3.9: “provide orientation and training for the project’s workers and relevant people from the Communities ... building locally useful skills and knowledge to increase local participation in project implementation
	4.4: “increase the number of youth and adults who have relevant skills ... for employment ... ”		GL2.5: “the project generates net positive impacts on the well-being of women and that women participate in or influence decision making”
	5.5: “Ensure women’s full and effective participation and equal opportunities for leadership ... ”	N/A	
	8.8: “Protect labour rights and promote safe working environments ... ”	G4.5: “the project meets ... applicable laws and/or regulations covering worker rights.”	G3.11: “the project meets ... applicable laws and/or regulations covering worker rights.”
		G4.6: “assess situations ... that pose ... risk to worker safety ... show how the risks will be minimized ... ”	G3.12: “assess situations ... that might arise through the implementation of the project and pose ... risk to worker safety.”
	10.2: “ ... promote the social, economic, and political inclusion of all ... ”	N/A	GL2.6: (demonstrate) “that Smallholders/Community Members have fully and effectively participated in defining ... decision-making ... and the distribution mechanism for benefit sharing ... ”
			GL2.8: “demonstrate that ... (governance structures) enable full and effective participation of Smallholders/Community Members in project decision-making and implementation.”
	10.3: “Ensure equal opportunity and reduce inequalities of outcome ... ”	GL2.2: “that poorer households ... are likely to benefit substantially ... ”	GL2.9: “demonstrate how the project is developing the capacity of Smallholders/Community Members ... to participate effectively and actively ... ”
		GL2.3: “that any barriers or risks that might prevent benefits going to poorer households have been ... addressed ... ”	GL2.4: “Demonstrate that the project generates net positive impacts on ... all identified marginalized and/or vulnerable Community Groups ... ”
		GL2.4: “measures have been taken to identify any poorer and more vulnerable households ... ”	GL2.5: “the project generates net positive impacts on the well-being of women ... ”
		GL2.5: “identify positive and negative impacts on poorer and more vulnerable groups ... ”	GL2.6: (demonstrate) “that Smallholders/Community Members have fully and effectively participated in defining ... decision-making ... and the distribution mechanism for benefit sharing”

Table A2. Cont.

SDGs Addressed	SDG Targets	Corresponding Criterion in CCB Standards	
		Edition 2	Edition 3
	12.4: "achieve the environmentally sound management of chemicals and all wastes ... "	N/A	B2.8: "Describe the possible adverse effects of ... fertilizers, chemical pesticides, biological control agents ... " B2.9: "Describe the process for identifying, classifying, and managing all waste products ... "
	13.1: "Strengthen resilience and adaptive capacity to climate-related hazards ... " 13.b: "promote mechanisms for raising capacity for effective climate change-related planning ... "	GL1.4: "communities and/or biodiversity to adapt to the probable impacts of climate change."	GL1.3: "assist Communities and/or biodiversity to adapt to the probable impacts of climate change"
	15.1: "ensure the conservation ... of terrestrial and inland freshwater ecosystems ... " 15.2: "promote the ... sustainable management all types of forest ... " 15.5: "reduce the degradation of natural habitats, halt the loss of biodiversity ... "	B1: (including) "project must generate net positive impacts on biodiversity within the project zone ... " B2.2: "Document how the project plans to mitigate ... negative offsite biodiversity impacts ... "	B2.2: "Demonstrate that the project's net impacts on biodiversity in the Project Zone are positive ... "; B2.3: "mitigate negative impacts on biodiversity ... " B2.4: "Demonstrate that no High Conservation Values are negatively affected ... "
	15.8: "prevent ... /reduce the impact of invasive alien species ... "	B1.3: "show that no known invasive species will be introduced ... "	B2.5: "show that no known invasive species are introduced ... "
	16.4: "combat all forms of organized crime"	G5.5: "Identify any illegal activities that could affect the project's ... impacts ... describe how the project will ... reduce these"	G5.4: "Identify any illegal activities that could affect the project's ... impacts ... describe measures ... to reduce these"
	16.5: "reduce corruption and bribery ... "	N/A	G4.3: "Provide assurance that the project proponent and any ... entities ... are not complicit in ... corruption such as bribery"
	16.6: "Develop effective, accountable and transparent institutions ... "	G3.9: "proponents must play an active role in distributing key project documents to affected communities and stakeholders" G3.10: "Formalize a clear process for handling unresolved conflicts and grievances ... "	G5.2: "Demonstrate that ... the Free, Prior, and Informed Consent has been obtained of those ... affected by the project ... through a transparent, agreed process."
	16.7: "Ensure responsive, inclusive, participatory and representative decision-making"	G3.8: "Document and defend how communities and other stakeholders ... have been identified and have been involved in project design ... " G3.9: "proponents must play an active role in distributing key project documents to affected communities and ... hold widely publicized information meetings ... "	G3.6: "Describe the measures needed and taken to enable effective participation, as appropriate, of all Communities ... " G3.1: "Describe how full project documentation has been made accessible to Communities ... "
	16.10: "Ensure public access to information ... "		GL2.7: "Explain how relevant and adequate information ... has been communicated to Smallholders ... " G3.7: "ensure that the project proponent and all other entities involved in project design and implementation are not involved in or complicit in any form of discrimination ... "
	16.b: "enforce non-discriminatory laws and policies ... "	N/A	
	17.17: "promote effective public, public-private, and civil society partnerships ... "	G4.2: "If relevant experience is lacking ... demonstrate how other organizations will be partnered with to support the project ... "	G4.2: "If relevant experience is lacking ... demonstrate how other organizations are partnered with to support the project ... "

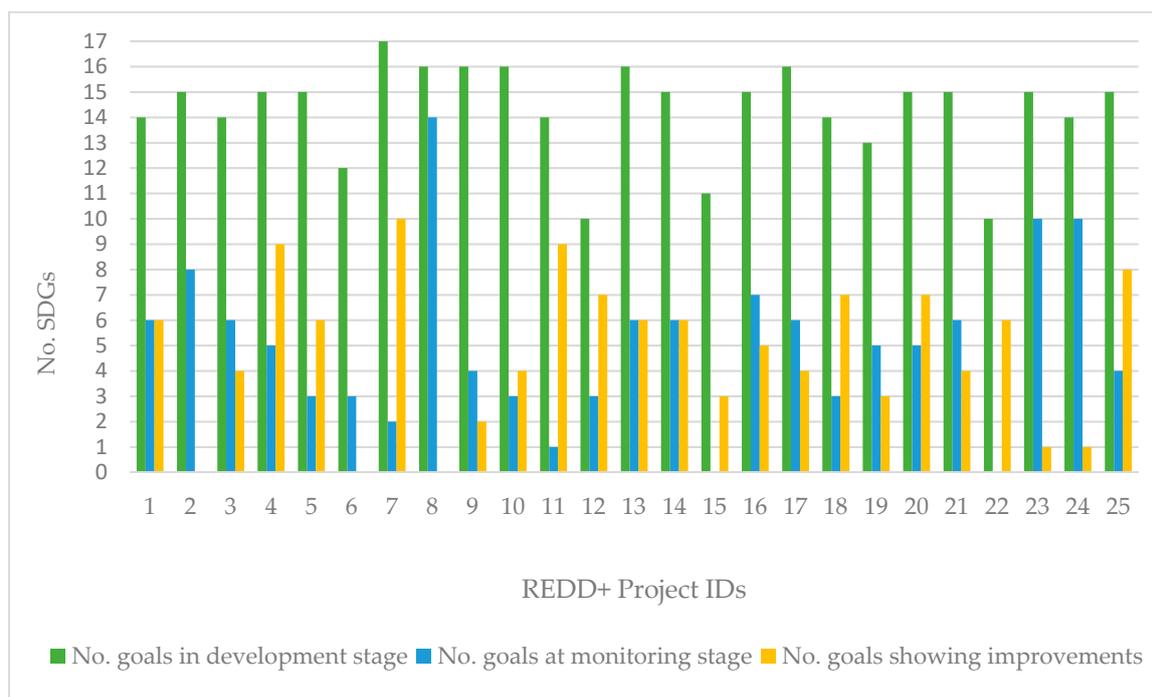


Figure A1. The number of Sustainable Development Goals addressed in the project design documents of 25 REDD+ projects, compared to the number of SDGs that are monitored (=impact score 2) and improved (= impact score 3), based on the project implementation reports.

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