

<https://helda.helsinki.fi>

The Performance of REDD+: From Global Governance to Local Practices

Arts, Bas

Multidisciplinary Digital Publishing Institute

2019-09-24

Arts, B.; Ingram, V.; Brockhaus, M. The Performance of REDD+: From Global Governance to Local Practices. *Forests* 2019, 10, 837.

<http://hdl.handle.net/10138/348572>

Downloaded from Helda, University of Helsinki institutional repository.

This is an electronic reprint of the original article.

This reprint may differ from the original in pagination and typographic detail.

Please cite the original version.

Editorial

The Performance of REDD+: From Global Governance to Local Practices

Bas Arts ^{1,*}, Verina Ingram ¹  and Maria Brockhaus ^{2,3} 

¹ Forest and Nature Conservation Policy Group, Wageningen University and Research Centre (WUR), 6708 PB Wageningen, The Netherlands; verina.ingram@wur.nl

² International Forest Policy, Department of Forest Sciences, University of Helsinki, Latokartanonkaari 7, 00014 Helsinki, Finland; maria.brockhaus@helsinki.fi

³ Helsinki Institute of Sustainability Science (HELSUS), University of Helsinki, 00014 Helsinki, Finland

* Correspondence: bas.arts@wur.nl

Received: 29 July 2019; Accepted: 17 September 2019; Published: 24 September 2019



1. Introducing REDD+ and the Need to Address Performance

Whilst ‘REDD’ is the acronym for reducing emissions from deforestation and forest degradation, ‘REDD+’ refers to efforts to reduce emissions from deforestation and forest degradation, foster conservation, promote the sustainable management of forests, and enhance forest carbon stocks [1]. The basic idea behind REDD+ is that more carbon is sequestered and stocked in tropical forests by improving their conservation, management, and sustainable use, thus contributing to mitigating climate change. Developing countries and relevant stakeholders will be financially compensated for these endeavors, either through public funds or carbon markets.

First known as “Avoided Deforestation” (AD) and discussed as a mitigation option at the United Nations Framework Convention on Climate Change (UNFCCC) in the early 2000s, AD subsequently became RED, REDD, and REDD+, with the concept expanding to incorporate forest conservation, management, and use [2]. Whereas RED was ‘just’ an innovative proposal tabled by Costa Rica and Papua New Guinea in 2005, REDD activities were outlined in the Bali Action Plan resulting from the 13th Conference of Parties to the UNFCCC (COP 13) in 2007, to become a legally-binding article in the 2015 Paris Agreement. In between these events, international bodies such as the World Bank, United Nations Development Program (UNDP), and United Nations Environment Program UNEP, and developed countries (notably Norway, Germany, the UK, Australia, and the US), started REDD+ programs and funds, and developing countries entered into so-called “readiness activities” to prepare for participation in REDD+. Currently, hundreds of REDD+ projects are being implemented around the world [3], whilst REDD+ has changed considerably over time, being previously described as “the world’s largest experiment in Payments for Ecosystem Services” [4], and more recently, as results-based aid [5]. The performance of REDD+ has been largely measured in terms of emission reductions calculated on the basis of forest reference (emission) levels (National or subnational reference levels expressed as tonnes of CO₂ equivalent per year for a reference period against which emissions and removals from a results period are compared, serving as benchmarks for assessing the national performance in terms of implementing REDD+ activities). This reduction of expected results is then assumed to have been compensated for by results-based finance (RBF), as was the case for Brazil, through payments from the Green Climate Fund in early 2019. The Bali Action Plan requires REDD+ projects to measure changes in net carbon emissions resulting from project activities. In 2013, the COP19 adopted the Warsaw Framework for REDD+, where results-based payments can be made once safeguards have been addressed and respected. The Measurement, Reporting, and Verification (MRV) of RBF were elaborated at COP24 in Katowice, Poland, December 2018, with MRV capacities being reported as increasing [6].

However, many observers, stakeholders, and scholars are critical. Carbon markets have not developed as was envisioned in 2005, and the efficiency and effectiveness of REDD+ to mitigate climate change have been questioned, with projects' impacts being unclear. As Angelsen et al. [7] state, "As an idea, REDD+ is a success story (...). Yet a decade after being launched in the Bali Action Plan (UNFCCC 2007), broad consensus is that—in practice—REDD+ has not met the world's high expectations". While some studies have reported positive impacts of REDD+ in terms of forest carbon [8–13], the expected transformational change away from business as usual of deforestation and forest degradation has not taken place thus far. Forest cover loss and tropical deforestation mainly driven by agricultural and forestry commodities trade continue [14–17]. The results of REDD+ in terms of sharing the burdens, costs, and benefits have been questioned [18]. The progress of policy reforms seen as underpinning REDD+, such as tenure reform, has also been questioned [19]. For some, the lack of performance is a result of major flaws in the design of the instrument itself (as a market-based payment-for-ecosystem-services scheme (PES) and has led to the claim that "REDD+ is dead" [20]. Others argue that rather than blaming the instrument itself, there is a need to consider the wider environment in which REDD+ was supposed to perform and deformations of the initial PES idea this environment created, with powerful actors interested in maintaining the status quo, leading to inefficiency [21]. However, as Angelsen et al. [7,21] suggest, REDD+, as both an innovative governance mechanism and a political process, will finally perform, as climate change becomes more pressing, carbon markets improve, and technical issues related to the efficiency and effectiveness of REDD+ are solved. Nonetheless, as Wong et al. [22] pointed out, a performance or results-based payment approach is no guarantee for an effective and transparent REDD+. Their analysis of narratives underlying REDD+ benefit sharing mechanisms highlights the importance of linking payments for performance to the contexts in which the results are defined and agreed upon, along with the conditions enabling social and political acceptance [22].

Given this context, this special issue is timely in addressing the need to assess the political and socio-economic dimensions of the performance of REDD+, which are of relevance for policy-makers, practitioners, and scholars. This implies taking into account the various levels (from the global to the local) and dimensions (e.g., results-based payments, MRV, co-benefits, and community engagement), as well as different (disciplinary) connotations of performance. We therefore pose the following question: what does performance mean? In answering it, we provide examples of assessments of performance. In our conclusion, we reflect on the representativeness of these examples and their limitations when looking at the current range of REDD initiatives, along with what is missing in terms of evaluating the performance of REDD+. We finish by concluding why performance assessment remains so relevant today.

2. 'Performance' Means Different Things

'Performance' refers to the act or process of executing a task or function. Hence, the concept of performance moves beyond an account of results and related payments, and includes the process leading to the result, even though performance and results are often used interchangeably. In this Special Issue, performance means whether a public policy, program, or project 'works'; delivers its promises; or achieves its previously set objectives [23]. As a wider concept, performance can be understood and evaluated differently [24]. As the following subsections—and the individual papers in this special issue—show in greater detail, it can refer to (i) the economic (cost)effectiveness of policies; (ii) multi-criteria achievements; or (iii) evaluation models based on the notions of output, outcome, and impact. Alternative ways of evaluating performance, presented in the last two subsections below, assess how (iv) impacts are 'performed' or 'staged' by stakeholders, independently of what's happening on the ground, or how (v) certain policy discourses 'produce' certain implementation and evaluation practices, and not others, which is referred to as 'performativity' [25].

2.1. Policy Effectiveness

Economics has dominated policy evaluation, where performance is equated with (cost) effectiveness, efficiency, relevance, and sustainability based on the objectives of a policy [26–28]. In the REDD+ literature, the distinction between cost-efficiency and outcome effectiveness is prominent (see, for example, [1,29,30]). Two evaluation methods are commonly used: ex-post, often qualitative or mixed methods assessments of the degree to which policy objectives are attained within the policy's timeframe, and ex-ante, often the quantitative, statistical analysis of future costs and benefits of policy measures, measured against current and future values, based on discount rates [31].

For REDD+, this implies comparing result-based payments from carbon funds and markets for forest managers at the end of the policy's time frame, compared to the costs incurred, by using a cost-benefit analysis of REDD+ initiatives. Correa et al. [32] detail the allocation of financial resources from the USD 667 million Brazilian Amazon fund across different stakeholders for scientific and technological development, sustainable production, monitoring and control, and land tenure regularization. However, in terms of the forest conservation effectiveness, as well as emissions reductions from deforestation, they found that deforestation rates had risen since 2013, despite increased fund disbursements. Samndong and Vatn [33] took a qualitative approach to show the lack of effectiveness and legitimacy of REDD+ projects in the Équateur province in the DR Congo. Umunay et al. [34] hypothesized ex-ante the run of three policy mechanisms to reduce commodity-driven deforestation. They examined 19 cases where REDD+ programs, jurisdictional approaches (JAs), and private sector commitments intersect, evaluating potential options against established criteria. They found that most were located in countries with high deforestation rates—attracting REDD+ program, JA, and private sector commitment activities. These policies alone did not appear effective in countering tree cover loss; however, when operating together, these efforts were seen to have potential to reduce commodity-driven deforestation, enhancing and complementing each other. Overman et al.'s [35] economic analysis of the impact of national REDD+ programs in Guyana suggests that indigenous communities with legal forest tenure benefited financially in terms of cash income. However, there were modest benefits from commercial forest uses, and extremely skewed private-public sharing of net revenue from forest-based resources and inhibitive forest damage costs at rising carbon prices. Moreover, carbon stocks were substantially lower in locally-managed forests.

2.2. Multi-Criteria Policy Achievements

Alongside the economic view on policy performance are juridical, administrative, and political perspectives, with scholars and practitioners increasingly using a combination of criteria and approaches from different traditions. An example is the JEP Triangle, which uses Juridical, Economic and Political indicators for policy performance [36]. Besides efficiency, criteria such as legitimacy, justice, legality, democracy, and participation, are also considered important. Ex-post and ex-ante evaluations and ex-nunc (often legal-based) approaches may be used. The latter evaluate policy processes “from now on” rather than (projected) impacts.

For REDD+, this, for example, implies the assessment of community participation in projects, not only to evaluate the degree of democracy in project implementation, but also the effectiveness of community achievements towards the ‘triple-win’ of climate change mitigation, biodiversity conservation, and community development. Millbank et al.'s [37] review of 25 sub-national REDD+ projects across the world that adhere to Climate, Community, and Biodiversity Alliance (CCB) REDD+ certification standards embraced a much broader set of objectives than just REDD+. However, a gap was found, with few projects actively monitoring the impact against these goals and progress, and only a third of the sustainable development goals targeted by REDD+ projects showing ‘improvement’. Samndong and Vatn [33] examined the DR Congo REDD+ program in terms of its effectiveness in protecting forests for carbon storage and alleviating rural poverty, and its appropriateness as a governance tool. They found that the lack of harmonization between REDD+ as an instrument

promoted by the international community created a competition between state and customary authorities. This allowed powerful actors to ‘shop’ between systems and legitimize their increased use and control of forest resources. Weatherley-Singh and Gupta [38] discuss the implications of European Union policies on “embodied deforestation” targeting EU agricultural commodity imports as drivers of deforestation. They find that despite substantial debate, policy measures for reducing the impact of the EU’s consumption of agricultural commodities associated with multiple drivers of tropical deforestation have not been developed. However, they see potential for a more integrated EU policy approach to tackling tropical deforestation.

2.3. Policy Outputs, Outcomes, and Impacts

Policy performance is also equated with ‘impact’ [39]. The concept of impact arguably derives from Easton’s [40] political system approach, with the output-outcome-impact model common in impact evaluation and impact assessment widely used in organization studies, conflict studies, international relations, and development studies [41]. The model is based on the notion that policies lead to interventions (on a macro, meso, or micro level) that aim to have a positive societal impact. Interventions result in *outputs*, tangible actions, reports, products, and/or commitments expressed in projects, programs, law, funds, etc. Outputs ideally result in behavioural changes, in outcomes, manifested at a (usually short-term) temporal scale and at different spatial scales, such as on a national macro-economic, ecosystem or landscape, sector, firm, community, household, and individual level. Outcomes can be influenced by contextual factors, such as cultural, political, and the business environment factors. The ultimate effects of policies and outcomes are impacts: the actual contributions to intended problem solving and opportunity seeking. Often, evidence on the counterfactual (what would have happened without the intervention) is gathered to provide a comparison in evaluations. A theory of change is used to articulate assumptions about the process through which such impacts will occur and accompanying assumptions envisaged in an impact pathway, often with verifiable and measurable indicators of the output, outcome, and impact.

For REDD+, this implies the analysis of outputs (such as a single REDD+ project), outcomes (for example, behavioral changes of forest managers due to REDD+ initiatives), and/or impacts (such as an increase of carbon sequestration and carbon stocks in a forest) in a specific landscape. Correa et al. [32] attribute the apparent lack of effectiveness to the distribution mechanism of the Brazilian Amazon fund that prioritized diverse organizations rather than a strategic selection of projects due to its predetermined theory of change. Rosa da Conceição et al. [42] looked at REDD+ in Ecuador and Peru and the pathways of two government-led, incentive-based forest conservation and poverty reduction programs for forest-based populations. They found that political interests affected policy design, resulting in trade-offs for longer-term societal efficiency in favor of short-term administrative goals. Non-environmental outcomes were often prioritized, due to perceptions of political feasibility, the influence of non-environmental government agencies, and beliefs in specific government roles or public responses. Overman et al.’s [35] evaluation of the performance of REDD+ in Guyana map out an economic foundation for a national REDD+ low-emissions impact pathway towards changing forest governance. They suggest that REDD+ can provide the incentives needed for governments to counter the drivers that threaten forest-dependent people because concessions, or land grabs allowed by the government (as often observed in other countries), are costly. In this specific context, maintaining the forest, and hence its management by forest-dependent people, results in low emissions and incomes from REDD+, in contrast to higher emissions due to conversion or forest concessions.

2.4. The Way to Success is ‘Performed’ by Stakeholders

One of the main challenges in the evaluation of programs and projects relates to the credibility of what is reported, what was measured and how, and the overall policy relevance of the evaluation itself. Relevance here refers to the relevance of the overall goals of the policies vis a vis the key problems [28], and hence focuses on the assessment of policy documents and matches between the policy problem at

hand and the goals stated. The policy relevance of an evaluation itself can also refer to the relevance of the measures selected to assess impacts, asking if what is assessed is actually of policy relevance and useful for identifying appropriate policies and measures to tackle the overall problem. While methods used to assess and monitor impacts can increase rigor and robustness [26,43], some of the factors that can undermine the credibility and legitimacy in REDD+ assessments are the often cited issues of poor documentation, costs, time, and technical capacities [44,45]. Beyond these, credibility and legitimacy are jeopardized by a strong inclination to frame results as overly positive, whatever the 'real' effects on the ground [46]. Therefore, there are (implicit) biases in any evaluation method to produce positive results, which affects their credibility. In addition, many stakeholders engaged in evaluations may be biased: evaluators paid to assess projects; project participants hoping for an extension and new resources; politicians with political motives and careers; and scientists with a bias for publication impact. In other words, many interests converge towards performing or staging projects as 'successes'.

The papers in this issue highlight that REDD+ evaluations indeed encounter risks of positive framing in practice. This appears as not necessarily deliberate, but emerges from the interests and sympathies of those involved. For REDD+, this implies that a critical assessment is needed of how and why project evaluations are biased towards success stories, or how some stakeholders tell positive stories to evaluators, while the situation on the ground is rather different. Another emerging aspect is how local actors express agency in (re)framing and changing the narratives of performance according to their own interests, beyond those paying for a "good performance". These experiences highlight the importance of both local context and culture, as well as subnational, national, and international interests, in understanding performance narratives. Correa et al. [32] recount the significant investments in the Brazilian Amazon fund, widely seen as successful. However, when dissected, the funds' performance reflects the arbitrary support of different projects adopting highly different theories of change, many of which are not chiefly interested in reducing deforestation, but based on the stakeholder's own preferences and activities. In the DR Congo, a study on the performance of the REDD+ program [33] highlights the exclusion of some timber and charcoal actors, which has detrimental effects on the effectiveness and legitimacy of REDD+, but which is not reported back to the program [47]. Additionally, Millbank et al. [18] find a marked gap in 25 subnational, CCB-certified REDD+ projects between aspirations on paper and the monitoring of progress.

2.5. The 'Performativity' of Policy Discourse

Where classical evaluation studies examine how policy performs after implementation, they often take policy discourses for granted and use external yardsticks (such as effectiveness, efficiency, and/or legitimacy) to assess their performance. This approach is problematized by 'performativity' scholars [25,48], who argue that performance is not only a function of the (un)intended effects of implementing policy, but also of the policy discourse itself. Discourses 'make' certain objects and subjects, whilst (un)intentionally excluding others, and so constitute certain implementation and evaluation practices. This has implications for the representation and inclusiveness of such policies.

For REDD+, this implies the analysis of how certain types of stakeholders are pre-defined in REDD+ project narratives, while others are implicitly or explicitly excluded. It could also imply the problematization of the use of certain benchmarks to assess the success and failure of REDD+, because these produce their own assessment realities, while excluding others, for example, those of local practitioners. Skutsch and Turnhout [49] illustrate this performative aspect of REDD+ policies, which frame communities as both beneficiaries and implementation agents. They note that international policies generally do not clarify who or what communities actually are. Their analysis of international and national policy documents on REDD+ worldwide demonstrates the unreality and disconnection between scales and the heterogeneity of communities targeted in national REDD+ policies. They close on a note of warning (p. 13), expressing that the attachment within policy discourses to the "community myth" could catalyze positive change, but "may also cause blindness in terms of the practical implications for communities, that will ultimately do them a disservice". At the same time, communities

are not passive, docile receivers of REDD+. Den Besten and colleagues [50] portray the on-the ground practices between global policymaking and local implementation in Ghana. Whilst global actors led the implementation of REDD+ in a cocoa production landscape in the high forest area, they depended on local actors to make REDD+ work. Consequently, it was integrated into existing community-based conservation, forest restoration, and agro-forestry practices, thus transforming REDD+ to resemble these local practices.

3. Conclusions

This special issue aims to take stock of the current state of REDD+ performances. The papers reflect the diverse understandings of what constitutes performance and performativity. They also show a broad range of methods used to assess performance, from qualitative in-depth studies to quantified, statistically rigorous approaches, with most papers reflecting on a relatively small number of comparative cases; thus, the representativeness of these examples is limited. Systematic reviews and studies assessing large numbers of cases and employing a counterfactual approach are notably absent among the papers in this issue and can be seen as missing in the suite of approaches which can be used to evaluate performance. Taking all papers together, an overall conclusion about the performance of REDD+ remains challenging, with most papers providing a rather bleak outlook, and some being somewhat more optimistic in their assessment. REDD+ exhibits potential to bring about change: it can contribute to achieving international objectives and targets (Paris Agreement, SDGs); bring substantial income to communities who sustainably manage their forests against the trend of forest conversion; it can reduce deforestation once various approaches are smartly combined (private sector and juridical approach); and it appears to re-energize 'old-fashioned' forest management approaches (such as community forestry and forest restoration). At the same time, the papers also show that the rhetoric is stronger than the evidence of practices on the ground; that short-term, administrative interests overshadow long-term environmental ones; that REDD+ rules adversely interact with state and customary institutions; and that REDD+ lacks local legitimacy by excluding non-elites.

These different, partly contradicting conclusions can, in our view, be particularly attributed to the nature of this special issue: namely, that we invited scholars applying different interpretations and methods of performance assessment to contribute. Some of approaches are more critical than others towards policy evaluations in general and REDD+ evaluations in particular, for example, the 'staging performance' and 'performativity' approaches. It is thus no wonder that these come up with less favorable assessments of REDD+ performance; this can be attributed to the nature of these approaches. What we also see, however, is that mainstream performance evaluation methodologies also result in different outcomes; for example, economic versus public administration evaluations, due to data and assessment choices, as well as due to the different cases evaluated. Moreover, the papers highlight that the subject of performance itself is understudied: it is a difficult beast to measure, and as a research topic, is subject to selective narratives, values, and interests. The case studies in these papers also reflect the challenges of understanding, defining, and measuring performance, so the publication serves wider societal interests rather than selected ones.

Finally, REDD+ is still in an early phase of implementation, and one cannot expect its performance—the delivering of its perceived potential—to have fully materialized yet. Experiences of policy evaluations also highlight that we need to be realistic in our expectation that policies have not only positive, but also negative, direct and indirect, and intended and unintended, effects. In addition, we can neither expect that all policy evaluation traditions and approaches produce similar outcomes, nor that their conclusions will 'automatically' converge over time; that would be naïve. However, time is pressing, as impacts of REDD+ occur, whilst payments for results are being requested and issued. Therefore, we strongly encourage further REDD+ performance assessments and call for innovative yet rigorous analyses, and for comparative evaluations using different approaches to judge performance, in order to help develop our understanding of REDD+ performance.

Conflicts of Interest: The authors declare that they have no conflicts of interests.

References

1. Angelsen, A.; Brockhaus, M.; Sunderlin, W.D.; Verchot, L.V. (Eds.) *Analysing REDD+: Challenges and Choices*; Center for International Forestry Research (CIFOR): Bogor, Indonesia, 2012.
2. Den Besten, J.W.; Arts, B.J.M.; Verkooijen, P. The evolution of REDD+: An analysis of discursive-institutional dynamics. *Environ. Sci. Policy* **2014**, *35*, 40–48. [[CrossRef](#)]
3. International Database on REDD+ projects and programmes. Available online: <http://www.reddprojectsdatabase.org/view/countries.php> (accessed on 18 September 2019).
4. Corbera, E. Problematizing REDD+ as an experiment in payments for ecosystem services. *Curr. Opin. Environ. Sustain.* **2012**, *4*, 612–619. [[CrossRef](#)]
5. Angelsen, A. REDD+ as result-based aid: General lessons and bilateral agreements of Norway. *Rev. Dev. Econ.* **2017**, *21*, 237–264. [[CrossRef](#)]
6. Romijn, E.; Lantican, C.B.; Herold, M.; Lindquist, E.; Ochieng, R.; Wijaya, A.; Murdiyarso, D.; Verchot, L. Assessing change in national forest monitoring capacities of 99 tropical countries. *For. Ecol. Manag.* **2015**, *352*, 109–123. [[CrossRef](#)]
7. Angelsen, A.; Martius, C.; De Sy, V.; Duchelle, A.E.; Larson, A.M.; Thuy, P.T. REDD+ enters its second decade. In *Transforming REDD+: Lessons and New Directions*; Center for International Forestry Research (CIFOR): Bogor, Indonesia, 2018.
8. Poffenberger, M. Restoring and conserving Khasi forests: A community-based REDD strategy from northeast India. *Forests* **2015**, *6*, 4477–4494. [[CrossRef](#)]
9. Pandey, S.S.; Cockfield, G.; Maraseni, T.N. Assessing the roles of community forestry in climate change mitigation and adaptation: A case study from Nepal. *For. Ecol. Manag.* **2016**, *360*, 400–407. [[CrossRef](#)]
10. Bos, A.B.; Duchelle, A.E.; Angelsen, A.; Avitabile, V.; Sy, V.D.; Herold, M.; Joseph, S.; Sassi, C.; Sills, E.O.; Sunderlin, W.D.; et al. Comparing methods for assessing the effectiveness of subnational REDD+ initiatives. *Environ. Res. Lett.* **2017**, *12*, 074007. [[CrossRef](#)]
11. Börner, J.; Wunder, S.; Reimer, F.; Kim Bakkegaard, R.; Viana, V.; Tezza, J.; Pinto, T.; Lima, L.; Marostica, S. *Promoting Forest Stewardship in the Bolsa Floresta Programme: Local Livelihood Strategies and Preliminary Impacts*; Center for International Forestry Research (CIFOR): Bogor, Indonesia; Fundação Amazonas Sustentável (FAS): Rio de Janeiro, Brazil; Zentrum für Entwicklungsforschung (ZEF): Manaus, Brazil; University of Bonn: Bonn, Germany, 2013.
12. Duchelle, A.E.; de Sassi, C.; Jagger, P.; Cromberg, M.; Larson, A.M.; Sunderlin, W.D.; Atmadja, S.S.; Resosudarmo, I.A.P.; Pratama, C.D. Balancing carrots and sticks in REDD+: Implications for social safeguards. *Ecol. Soc.* **2017**, *22*. [[CrossRef](#)]
13. Simonet, G.; Bos, A.B.; Duchelle, A.E.; Resosudarmo, I.A.P.; Subervie, J.; Wunder, S. Forests and carbon: The impacts of local REDD+ initiatives. In *Transforming REDD+: Lessons and New Directions*; Center for International Forestry Research (CIFOR): Bogor, Indonesia, 2018.
14. Curtis, P.G.; Slay, C.M.; Harris, N.L.; Tyukavina, A.; Hansen, M.C. Classifying drivers of global forest loss. *Science* **2018**, *361*, 1108–1111. [[CrossRef](#)]
15. Pendrill, F.; Persson, U.M.; Godar, J.; Kastner, T.; Moran, D.; Schmidt, S.; Wood, R. Agricultural and forestry trade drives large share of tropical deforestation emissions. *Glob. Environ. Chang.* **2019**, *56*, 1–10. [[CrossRef](#)]
16. Brockhaus, M.; Korhonen-Kurki, K.; Sehring, J.; Di Gregorio, M.; Assembe-Mvondo, S.; Babon, A.; Siteo, A. REDD+, transformational change and the promise of performance-based payments: A qualitative comparative analysis. *Clim. Policy* **2017**, *17*, 708–730. [[CrossRef](#)]
17. Milne, S.; Mahanty, S.; To, P.; Dressler, W.; Kanowski, P.; Thavat, M. Learning from ‘Actually Existing’ REDD+ A Synthesis of Ethnographic Findings. *Conserv. Soc.* **2019**, *17*, 84–95.
18. Luttrell, C.; Sills, E.; Aryani, R.; Ekaputri, A.D.; Evinke, M.F. Beyond opportunity costs: Who bears the implementation costs of reducing emissions from deforestation and degradation? *Mitig. Adapt. Strateg. Glob. Chang.* **2018**, *23*, 291–310. [[CrossRef](#)] [[PubMed](#)]
19. Ravikumar, A.; Larson, A.M.; Duchelle, A.E.; Myers, R.; Tovar, J.G. Multilevel governance challenges in transitioning towards a national approach for REDD+ evidence from 23 subnational REDD+ initiatives. *Int. J. Commons* **2015**, *9*, 909–931. [[CrossRef](#)]

20. Fletcher, R.; Dressler, W.; Büscher, B.; Anderson, Z.R. Questioning REDD+ and the future of market-based conservation. *Conserv. Biol.* **2016**, *30*, 673–675. [[CrossRef](#)] [[PubMed](#)]
21. Angelsen, A.; Brockhaus, M.; Duchelle, A.E.; Larson, A.M.; Martius, C.; Sunderlin, W.D.; Verchot, L.V.; Wong, G.; Wunder, S. Learning from REDD+: A response to Fletcher et al. *Conserv. Biol.* **2017**, *3*, 718–720. [[CrossRef](#)] [[PubMed](#)]
22. Wong, G.Y.; Luttrell, C.; Loft, L.; Yang, A.; Pham, T.T.; Naito, D.; Brockhaus, M. Narratives in REDD+ benefit sharing: Examining evidence within and beyond the forest sector. *Clim. Policy* **2019**, *19*, 1038–1051. [[CrossRef](#)]
23. Ramos, T.B.; Alves, I.; Subtil, R.; de Melo, J.J. Environmental performance policy indicators for the public sector: The case of the defence sector. *J. Environ. Manag.* **2007**, *82*, 410–432. [[CrossRef](#)]
24. Crabb, A.; Leroy, P. *The Handbook of Environmental Policy Evaluation*; Taylor and Francis Group: Routledge, London, 2012.
25. Arts, B.; Behagel, J.; Turnhout, E.; de Koning, J.; van Bommel, S. A practice based approach to forest governance. *For. Policy Econ.* **2014**, *49*, 4–11. [[CrossRef](#)]
26. Ton, G. The mixing of methods: A three-step process for improving rigour in impact evaluations. *Evaluation* **2012**, *18*, 5–25. [[CrossRef](#)]
27. Bamberger, M. Introduction to mixed methods in impact evaluation. *Impact Eval. Notes* **2012**, *3*, 1–38.
28. OECD. *Principles for Evaluation of Development Assistance D.A. Committee*; OECD: Paris, France, 1991.
29. Angelsen, A.; Brockhaus, M.; Kanninen, M.; Sills, E.; Sunderlin, W.D.; Wertz-Kanounnikoff, S. (Eds.) *Realising REDD+: National Strategy and Policy Options*; Center for International Forestry Research (CIFOR): Bogor, Indonesia, 2009.
30. Pasgaard, M.; Sun, Z.; Müller, D.; Mertz, O. Challenges and opportunities for REDD+: A reality check from perspectives of effectiveness, efficiency and equity. *Environ. Sci. Policy* **2016**, *63*, 161–169. [[CrossRef](#)]
31. Börner, J.; Thales, A.P.W.; Blackman, A.; Miteva, D.A.; Sims, K.R.E.; Wunder, S. National and subnational forest conservation policies What works, what doesn't. In *Transforming REDD+: Lessons and New Directions*; Center for International Forestry Research (CIFOR): Bogor, Indonesia, 2018.
32. Correa, J.; van der Hoff, R.; Rajão, R. Amazon Fund 10 Years Later: Lessons from the World's Largest REDD+ Program. *Forests* **2019**, *10*, 272. [[CrossRef](#)]
33. Samndong, R.A.; Vatn, A. Competing Tenures: Implications for REDD+ in the Democratic Republic of Congo. *Forests* **2018**, *9*, 662. [[CrossRef](#)]
34. Umunay, P.; Lujan, B.; Meyer, C.; Cobián, J. Trifecta of Success for Reducing Commodity-Driven Deforestation: Assessing the Intersection of REDD+ Programs, Jurisdictional Approaches, and Private Sector Commitments. *Forests* **2018**, *9*, 609. [[CrossRef](#)]
35. Overman, H.; Butt, N.; Cummings, A.R.; Luzar, J.B.; Fragoso, J.M.V. National REDD+ Implications for Tenured Indigenous Communities in Guyana, and Communities' Impact on Forest Carbon Stocks. *Forests* **2018**, *9*, 231. [[CrossRef](#)]
36. Nelissen, N. The administrative capacity of new types of governance. *Public Organ. Rev.* **2002**, *2*, 5–22. [[CrossRef](#)]
37. Milbank, C.; Coomes, D.; Vira, B. Assessing the Progress of REDD+ Projects towards the Sustainable Development Goals. *Forests* **2018**, *9*, 589. [[CrossRef](#)]
38. Weatherley-Singh, J.; Gupta, A. Embodied Deforestation as a New EU Policy Debate to Tackle Tropical Forest Loss: Assessing Implications for REDD+ Performance. *Forests* **2018**, *9*, 751. [[CrossRef](#)]
39. Vincent, J.R. Impact evaluation of forest conservation programs: Benefit-cost analysis, without the economics. *Environ. Resour. Econ.* **2016**, *63*, 395–408. [[CrossRef](#)]
40. Easton, D. An approach to the analysis of political systems. *World Politics* **1957**, *9*, 383–400. [[CrossRef](#)]
41. Gertler, P.J.; Martinez, S.; Premand, P.; Rawlings, L.B.; Vermeersch, C.M. *Impact Evaluation in Practice*; The World Bank: Washington, DC, USA, 2016.
42. Rosa da Conceição, H.; Börner, J.; Wunder, S. REDD+ as a Public Policy Dilemma: Understanding Conflict and Cooperation in the Design of Conservation Incentives. *Forests* **2018**, *9*, 725. [[CrossRef](#)]
43. Duchelle, A.E.; Herold, M.; de Sassi, C. Monitoring REDD+ impacts: Cross scale coordination and interdisciplinary integration. In *Sustainability Indicators in Practice*; De Gruyter: Berlin, Germany, 2015; pp. 55–79.

44. Bayrak, M.; Marafa, L. Ten years of REDD+: A critical review of the impact of REDD+ on forest-dependent communities. *Sustainability* **2016**, *8*, 620. [[CrossRef](#)]
45. Krause, T.; Nielsen, T.D. The legitimacy of incentive-based conservation and a critical account of social safeguards. *Environ. Sci. Policy* **2014**, *41*, 44–51. [[CrossRef](#)]
46. Mosse, D. *Cultivating Development: An Ethnography of Aid Policy and Practice (Anthropology, Culture and Society)*; Pluto Press: London, UK, 2005.
47. UN-REDD. The Democratic Republic of the Congo. Available online: <https://www.unredd.net/regions-and-countries/africa/democratic-republic-of-the-congo-the.html> (accessed on 30 April 2019).
48. Ball, S.J. The teacher's soul and the terrors of performativity. *J. Educ. Policy* **2003**, *2*, 215–228. [[CrossRef](#)]
49. Skutsch, M.; Turnhout, E. How REDD+ Is Performing Communities. *Forests* **2018**, *9*, 638. [[CrossRef](#)]
50. Den Besten, J.W.; Arts, B.; Behagel, J. Spiders in the Web: Understanding the Evolution of REDD+ in Southwest Ghana. *Forests* **2019**, *10*, 117. [[CrossRef](#)]



© 2019 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).