

REDD+ and institutions: are we making the best of REDD+?

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Abstract: This paper investigates the relationship between REDD+ payments and the quality of institutions in countries that are expected to receive these payments. Using graphical correlation analysis we can see that REDD+ payments are primarily flowing to countries with poor institutions. In particular, countries that receive REDD+ payments score poorly in two institutional quality indicators which are especially important from the point of view of whether these payments will help to solve environmental and social problems: Rule of Law and Control of Corruption. Although the REDD programme has evolved significantly since a similar analysis was carried out by Ebeling and Yasué in 2008, the institutional problems have remained equally important. This is also in line with a recently formulated ‘ecosystem service curse’ hypothesis, whereby payments for ecosystem services (including those offered within REDD+) might lead to socio-economic problems in recipient countries.

Keywords: REDD, REDD+, payments for ecosystem services, ecosystem service curse, institutions

JEL Codes: F33, F35, F55, F64, O20, Q56, Q57

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Introduction

REDD+, or Reducing Emissions from Forest Degradation and Deforestation in Developing Countries, is a programme that supports the implementation of the United Nations Framework Convention on Climate Change (UNFCCC). It was proposed and established to provide incentives for developing countries to protect their forests and in this way ensure that they do not contribute to increasing greenhouse gas emissions. In line with broader discussions on ecosystem services and sustainable development, the ‘+’ refers to the importance of conservation and improvements in forest management (Agrawal et al., 2011). This program has raised high expectations, in terms of helping developing countries to reach environmental and economic objectives, all of which are also important from a global perspective. Environmental and economic benefits were to be achieved thanks to payments, which developing countries would receive to compensate their lost opportunity costs related to protecting forests.

Nevertheless, while it was expected that the programme would allow developing countries to halt deforestation and benefit economically, it was also feared that many of the potential gains would not be realised because of the poor quality of institutions in countries where the payments would be directed. Several studies questioned the ability of local forest-dependent communities to benefit from REDD+, raising concerns over the likely negative impacts of REDD+ on local livelihoods, equity, poverty, and participatory resource governance (Phelps et al., 2010; Tacconi et al., 2009). Based on a cross-country comparison of potential income from an early variant of the REDD+ program (RED) and institutional quality indicators (law enforcement and corruption perception), Ebeling and Yasué (2008, p. 1920) suggested that “even if lower deforestation rates are achieved, weak governance structures may make it difficult to pass on benefits to rural populations, and corrupt government agencies may show little interest in sharing benefits fairly or support bottom-up conservation initiatives, thereby diminishing the potential for human development co-benefits”.

REDD+ often serves as an illustration of a large-scale payments for ecosystem services (PES) scheme. This is so because developing countries will receive payments for protecting their ecosystems, so that those ecosystems provide services used by the payers. In practice, REDD+ is much more complex, and PES constitute only one of the important instruments to be used within REDD+ (Corbera, 2012; Pagiola, 2011). Meanwhile, PES have already been criticised for reasons similar to those that led to the criticism of REDD+. In particular, it was feared that they may not necessarily deliver on the promise of protecting the environment and improving livelihoods in a situation of imperfect institutions in recipient countries. For example, Vatn (2010) warned about the risk of leaving too much power within PES transactions with intermediaries, who are likely to abuse this power, especially taking into consideration the differences in bargaining power between those intermediaries and ecosystem service providers. It was also noted that PES can crowd out other motivations to protect nature, making environmental protection uncertain when a scheme terminates (Kosoy

and Corbera, 2010; Vatn, 2010). These and other problems with PES were summarised by Muradian and colleagues (2013).

Kronenberg and Hubacek (2013) linked specifically to REDD+ as an example of a global PES scheme. They suggested that – because of its scale – REDD+ may bring about some of the significant problems discussed in the context of PES, which might not have materialised yet because PES had not been large enough to induce them. According to their ‘ecosystem service curse’ hypothesis, countries or communities rich in ecosystem services but with poor quality institutions would be likely to suffer negative consequences of the new capital flows. As in the case of the ‘resource curse’ hypothesis (Torvik, 2009), these problems might be related to rent seeking (more powerful stakeholders ruling ecosystem service providers out of their land to capture the payments), unequal bargaining power (of ecosystem service providers, compared to that of buyers and intermediaries), and volatility of payments (changing and unpredictable value of PES over time). Although all of these problems have already occurred on a relatively small scale within different PES projects, because of its large scale, REDD+ might be the first instance when these problems actually occur more frequently or systematically in a PES scheme.

All of the above indicates the key role of institutions in preparing developing countries to be able to benefit from REDD+. In response to the different concerns about potential threats related to institutions, numerous measures have been taken by the developers of REDD+ to ensure that quality institutions are in place before the payments are disbursed. For example, the safeguards against the violation of human rights and adverse effects on indigenous peoples and other local forest-dependent communities were incorporated into the REDD+ documents in December 2010 (Agrawal et al., 2011). Perhaps the most important measure of caution was that the first phase of REDD+ development in any country would be to develop the institutional capacity to design REDD+ strategies, as agreed in Cancun in December 2010. This was meant to be achieved through stakeholder dialogue, strengthening of institutions, and demonstration activities, all of which was to translate into capacity-building and, ultimately, high quality strategies, action plans, policies and measures (Agrawal et al., 2011).

In light of the above concerns, our hypothesis is that – in spite of good intentions and preliminary conditions for participant countries – REDD+ payments are mostly going to developing countries with relatively poor institutions. If this is the case, then REDD+ potential may be wasted, at least in terms of social co-benefits which will not likely occur unless good institutions are in place to protect the rights of forest-dependent local communities.

To test this hypothesis, we look at the relationships between REDD+ income potential (funds already committed to develop REDD+ initiatives in different countries) and different governance indicators in recipient countries. In the following section we describe the method we used, and then the results obtained. Next, we discuss these results linking back to Ebeling and Yasué (2008), and Kronenberg and Hubacek (2013), to check if what they suggested can be seen in the modern practice of REDD+.

Method and data

To check how REDD+ payments correlate with the quality of institutions in countries receiving these payments, we used graphical correlation analysis (scatter plots). Such an approach allows us to depict subtle relationships between the analysed variables.

Data on REDD+ payments come from the Voluntary REDD+ Database (VRD) (<http://reddplusdatabase.org/>), which is managed by the Food and Agriculture Organization and UNEP World Conservation Monitoring Centre. The VRD data are collected based on information provided by funders and recipients of REDD+ payments and specified in the agreements that they sign to fund and carry out REDD+ activities. These two data streams are kept separately in the VRD. We used the data provided by funders because these data are more complete. The VRD is based on voluntary reporting, therefore it is not complete. Nevertheless, it is the most complete and detailed database on REDD+ payments available. As of mid-April 2014, the VRD presented almost USD 11 billion worth of REDD+ payments (10 973 880 000) to be distributed between 2006 and 2022.

REDD+ payments presented in the VRD are sent directly to developing countries, or to developed countries and international organizations which then distribute the funds further to developing countries. We only analysed payments directly sent to recipient developing countries (USD 6.6 billion or 60% of all payments reported in VRD), as the other stream could not be attributed to specific developing countries.

To ensure comparability between countries, and to make our study consistent with that of Ebeling and Yasué (2008), we expressed REDD+ payments as a share of gross domestic product (GDP). GDP data comes from the World Bank's World Development Indicators database (<http://data.worldbank.org/data-catalog/world-development-indicators>). Expressing REDD+ payments as a share of GDP reveals the extent to which these payments can influence a country's economic situation.

Indicators describing institutional quality come from another database of the World Bank, the World Governance Indices (WGI) (<http://info.worldbank.org/governance/wgi>). This is the same database that was used by Ebeling and Yasué (2008). We used all six indicators presented in the database (Voice and Accountability, Political Stability and Absence of Violence, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption) but focused special attention on the final two. Those two were also used by Ebeling and Yasué (2008), and they seem the most relevant to discuss the problems of a potential 'ecosystem service curse'. Rule of Law summarises level of respect for law, property rights, court verdicts and contracts, as well as probability of crime. Corruption Control refers to how public power is used for private gain, and it includes the different forms of corruption and the "capture" of the state by elites and private interests. The values of all of the World Bank's six governance indicators range between -2.5 and 2.5, with lower values indicating worse situation.

The VRD presents data for 104 countries but only 96 of those are the ultimate REDD+ recipient countries (Non-Annex 1, using the UNFCCC nomenclature), which we considered

in our analysis. The other 8 countries listed in the VRD are mostly developed countries which only pass funds on to developing countries.

Results

Figure 1 depicts relationships between the aggregated REDD+ payments scheduled to be paid to developing countries between 2006 and 2022 (expressed as percentage of those countries’ 2010 GDP), and all six WGI indicators. Based on these diagrams we can see that most countries receiving REDD+ payments still perform relatively poorly with regard to those governance indicators that are most important from the point of view of preventing negative phenomena related to the so-called ecosystem service curse, in particular Rule of Law and Corruption Control.

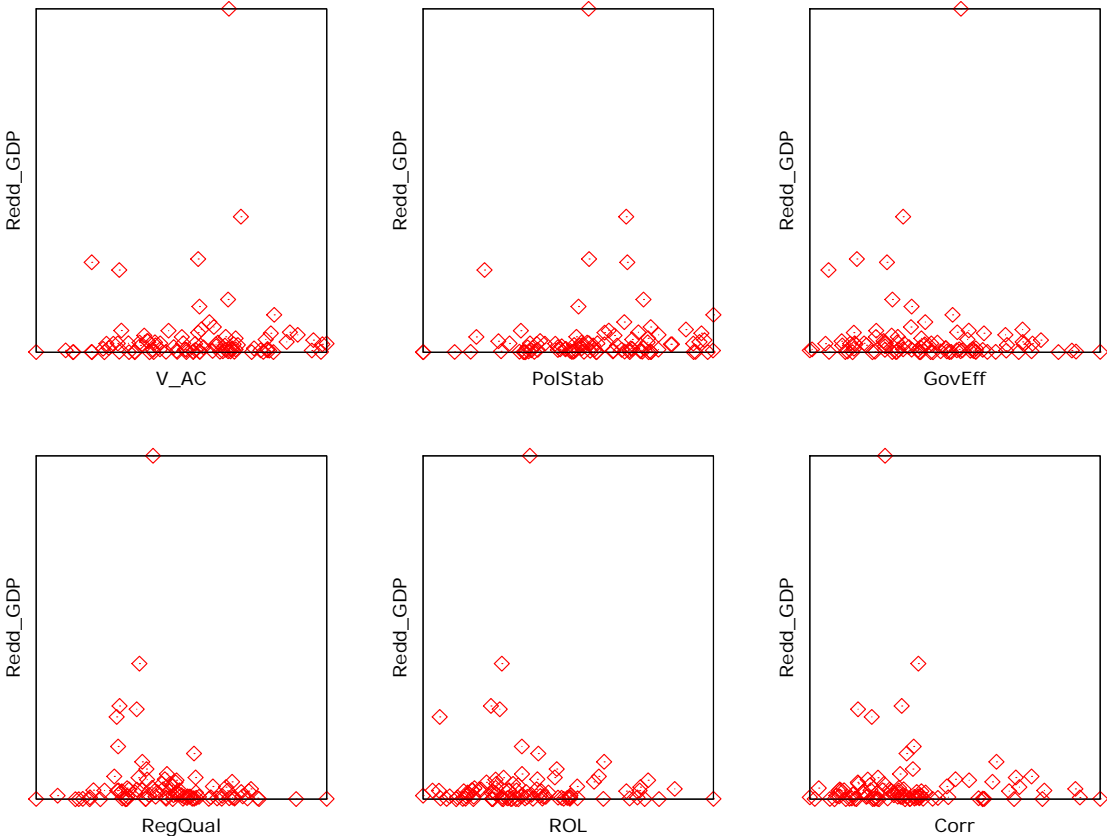
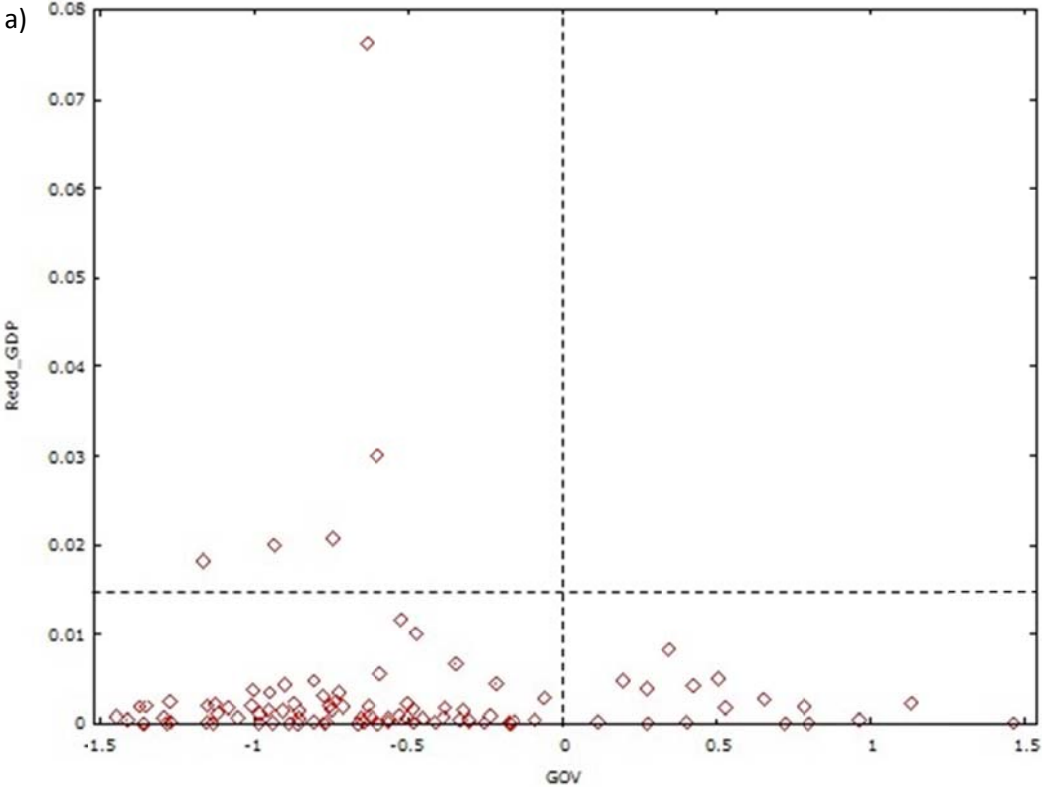


Figure 1. Relationships between REDD+ payments share in GDP and the following governance indicators: Voice and Accountability (V_AC), Political Stability and Absence of Violence (PolStab), Government Effectiveness (GovEff), Regulatory Quality (RegQual), Rule of Law (ROL), and Control of Corruption (Corr)

Figure 2 replicates Figure 3 from Ebeling and Yasué (2008), with two differences: (1) instead of annual RED payments, we considered REDD+ payments over a period of 2006–2022; (2) we did not need to log the REDD+ to GDP ratio, as the diagram is clear enough without such an operation. Like in the case of Ebeling and Yasué (2008), we used an average of two

governance indicators: Rule of Law and Corruption Control. These two indicators provide a very good illustration of a country's ability to make the best of REDD+ payments. Also, as we could see in Figure 1, the performance of the studied countries is very similar with regard to these two indicators.

Based on Figure 2, we can distinguish three groups of countries stratified by REDD+ income and institutional quality levels. Group 1, which contains mostly countries with low quality institutions, receives the lowest level of REDD+ payments (e.g. Kenya, Mozambique and Guinea). Group 2 is made of countries with similarly low levels of REDD+ payments but with a higher quality of institutions (e.g. Namibia, Rwanda and Malaysia). Group 3 only has five countries – Guyana, Sao Tome, Liberia, Lao and Central African Republic – in the case of which the share of REDD+ payments in GDP is the highest but which also have poor quality institutions. None of the studied countries receiving REDD+ payments is located in sweet spot, that would contain countries with the best institutions and the highest share of REDD+ payments in GDP.



b)

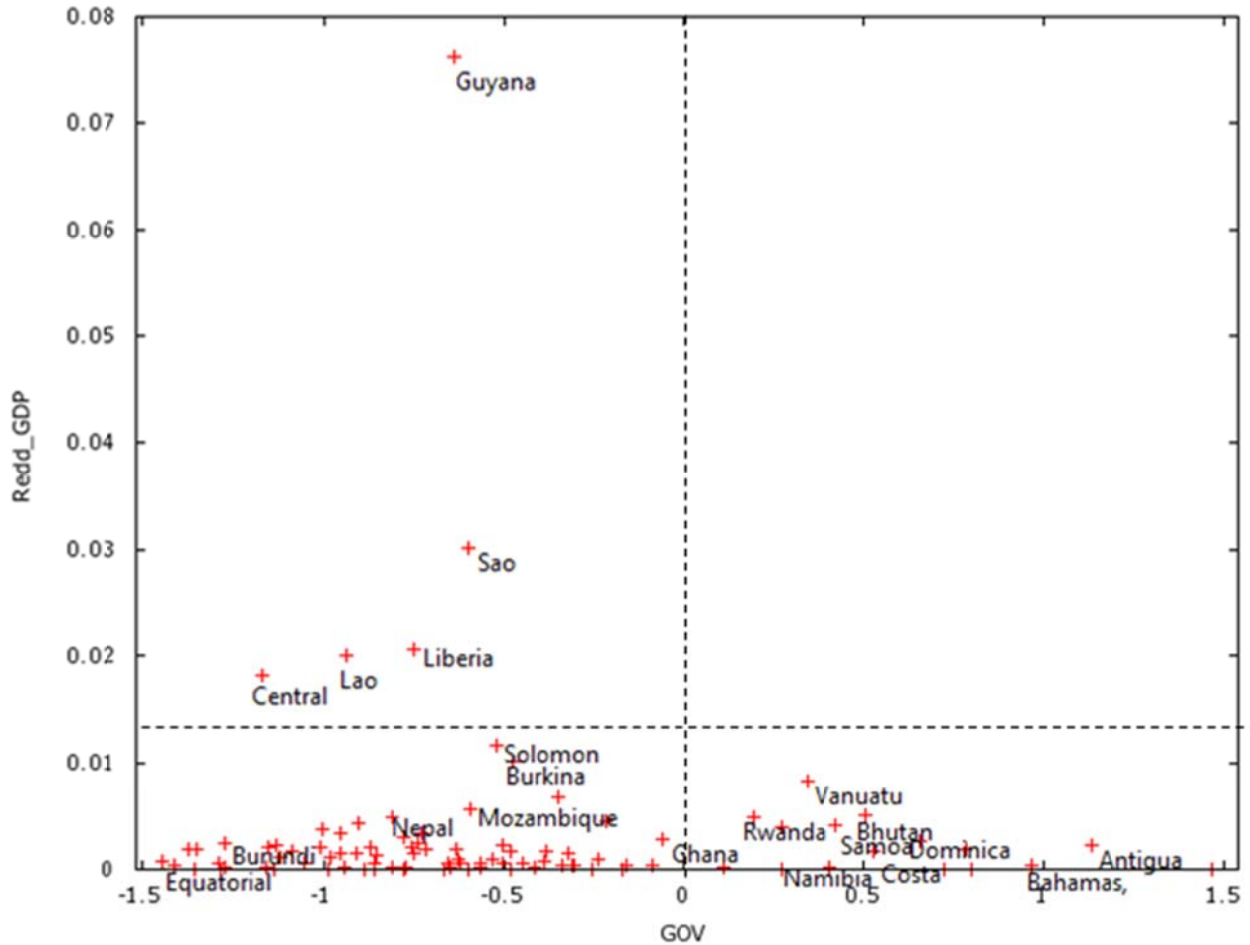


Figure 2. Relationship between REDD+ payments' share in GDP and an average of Rule of Law and Corruption Control (GOV) (a – without country names, and b – with names of selected representative countries)

Table 1 shows the numbers of countries divided into groups depending on their quality of institutions, and the REDD+ payments that they are receiving. Over 97 per cent of REDD+ payments are distributed to countries with the weakest institutions. We divided countries according to institutions quality into four groups, assuming that those with Government Capability index below zero has the worst institutions.

Table 1. Number of countries falling into different groups depending on the average of Rule of Law and Corruption Control indices (GOV), and the REDD+ income they receive

Quality of institutions (GOV)	Number of countries	REDD+ income (millions of USD)	Share in total REDD+ disbursements
-2.5 to -1.25	10	45.17	0.68%
-1.24 to 0	70	6405.52	96.63%
0 to 1.24	15	162.19	2.45%
1.25 to 2.5	1	15.72	0.24%

Discussion and conclusions

When Ebeling and Yasué (2008) wrote their article, political discussions focused on earlier variant of REDD+, a compensation mechanism named reducing emissions from deforestation (RED), which had officially been put forward in 2005. REDD became part of UNFCCC negotiations in 2007, broadening the scope of the RED initiative to cover forest degradation, which is another large source of emissions, particularly important in developing countries (Pistorius, 2012). Nevertheless, the potential income has not increased, at least not in terms of what has been committed so far and reflected in the VRD, which we used as a source of REDD+ data. Indeed, the share of potential REDD+ income in recipient countries' GDP remains similar to that identified by Ebeling and Yasué (2008), our analysis includes aggregated payments for 2006–2022 and Ebeling and Yasué (2008) considered potential annual incomes. However, in both cases this share has remained negligible, less than 1% for most countries in our study.

In the early years of REDD+ development, REDD/REDD+ funds were expected to be “astronomically larger than for existing payment for ecosystem services projects” (Agrawal et al., 2010, p. 337). Financing needs for REDD+ for 2010–2015 were estimated at EUR 15–25 billion, and USD 4 billion was committed by the developed countries for 2010–2012 alone during the UNFCCC conference of the parties in 2009 (Agrawal et al., 2011; Clements, 2010). Meanwhile, as indicated above, as of mid-April 2014, the VRD presented USD 11 billion worth of REDD+ payments to be distributed between 2006 and 2022.

Although the scale of the programme seems smaller now than it seemed 7 years ago when Ebeling and Yasué (2008) wrote their article, the institutional problems that they highlighted remain at least similarly important. Our diagrams are remarkably similar to those of Ebeling and Yasué (2008), in spite of several important initiatives taken up so far to make sure that REDD+ payments are received by countries with relatively good institutions.

Discussions on governance of REDD/REDD+ refer to different levels: from on the ground management of specific projects and forests (e.g. Skutsch, 2011) to large-scale international negotiations (Hiraldo and Tanner, 2011), warranting the political support and funding for the programme. Many unexpected problems have made the development of REDD+ difficult, including both during international negotiations (challenging negotiations within the UNFCCC), and on the ground implementation (such as the complexity of forest governance in developing countries) (Pistorius, 2012). Different authors focused on different institutional issues that according to them required most urgent attention. For example, Brown et al. (2008) suggested that the most important issue was to design appropriate procedural standards (such as those regulating assessment, monitoring and verification mechanisms). This was particularly important from the perspective of ensuring effective implementation of REDD+ at the international level – to make sure that the programme is well-organised and ready for further more specific adjustments on the part of participating countries. However, as national governments play an important role in the institutional architecture of REDD+, national level institutional quality indicators are of particular relevance here. The fact that these remain poor should be of particular concern in the further development of the REDD+ programme.

From the point of view of an ‘ecosystem service curse’ hypothesis, whereby payments for ecosystem services (including those offered within REDD+) might lead to socio-economic problems in recipient countries (Kronenberg and Hubacek, 2013), indicators such as Rule of Law and Corruption Control are of particular importance. Poor performance in these two indicators might be related in particular to the problems of rent seeking and exploitation of unequal bargaining power. Because of the still limited scale of the REDD+ programme, as of yet these problems may not lead to large negative socio-economic consequences. Nevertheless, they may lead to significant counterproductive effects of REDD+ implementation at the level of individual projects and forest dependent communities. Increasing the market value of forests, in the situation of poor Rule of Law and poor Corruption Control, may lead to rent seeking behaviour by powerful elites or governments affirming control of forests to ensure that national REDD+ commitments are met, ruling the poor out of the land that they have been using so far and potentially forcing them to encroach on new, pristine areas (Kronenberg and Hubacek, 2013; Phelps et al., 2010; Tacconi et al., 2009). From the point of view of the local communities sustainability, it is also important to take into account uncertainty about long-term financing for REDD+ (Groom and Palmer, 2012). Indeed, volatility of payments and lack of long-term security was also considered part of the ‘ecosystem service curse’ hypothesis.

Further research is necessary on how well countries that should benefit from REDD+ are actually prepared to derive these benefits, and how the benefits and costs (or negative consequences) of this programme might be felt by the different stakeholders. More complete data on REDD+ payments (compared to what is available within the VRD) would also allow for a more specific approach to study these relationships. Nevertheless, our results confirm the main conclusions of Ebeling and Yasué (2008) and Kronenberg and Hubacek (2013). We do need to take special care when distributing the funds in countries with poor institutions as the potential positive results of REDD+ might be undermined by the institutions’ inability to prevent important problems related to these new capital flows.

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