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## What drives policy change for REDD+? A qualitative comparative analysis of the interplay between institutional and policy arena factors

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### ABSTRACT

Reducing Emissions from Deforestation and forest Degradation (REDD+) has emerged as a promising climate change mitigation mechanism in developing countries. In order to identify the enabling conditions for achieving progress in the implementation of an effective, efficient and equitable REDD+, this paper examines national policy settings in a comparative analysis across 13 countries with a focus on both institutional context and the actual setting of the policy arena. The evaluation of REDD+ revealed that countries across Africa, Asia and Latin America are showing some progress, but some face backlashes in realizing the necessary transformational change to tackle deforestation and forest degradation. A Qualitative Comparative Analysis (QCA) undertaken as part of the research project showed two enabling institutional configurations facilitating progress: (1) the presence of already initiated policy change; and (2) scarcity of forest resources combined with an absence of any effective forestry framework and policies. When these were analysed alongside policy arena conditions, the paper finds that the presence of powerful transformational coalitions combined with strong ownership and leadership, and performance-based funding, can both work as a strong incentive for achieving REDD+ goals.

### Key policy insights

- The positive push of already existing policy change, or the negative stress of resource scarcity together with lack of effective policies, represents institutional conditions that can support REDD+ progress.
- Progress also requires the presence of powerful transformational coalitions and strong ownership and leadership. In the absence of these internal drivers, performance-based funding can work as a strong incentive.
- When comparing three assessments (2012, 2014, 2016) of REDD+ enabling conditions, some progress in establishing processes of change can be observed over time; however, the overall fluctuation in progress of most countries reveals the difficulty in changing the deforestation trajectory away from business as usual.

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## 1. Introduction

Reducing Emissions from Deforestation and forest Degradation (REDD+<sup>1</sup>) has evolved as an important emissions reduction mechanism within the United Nations Framework Convention on Climate Change (UNFCCC), especially in countries rich in a tropical forest. The Paris Agreement encourages countries to implement and support the existing framework for REDD+, including through a results-based payment approach, and reaffirms the importance of incentivizing REDD+ activities (UNFCCC, 2015).

However, not only does measuring carbon and non-carbon results of REDD+ remain challenging, understanding what enables policy performance within REDD+ processes to realize such results is an equal challenge (Cadman, Maraseni, OkMa, & Lopez-Casero, 2017; Nathan & Pasgaard, 2017; Wertz-Kanounnikoff & McNeill, 2012). In particular, while there are various country or project level case studies across the world, no comparative studies yet exist that identify and assess enabling factors and factor configurations of an ongoing policy experiment such as REDD+, comparing outcomes repeatedly over time and across geographical regions.

To fill this gap, this present analysis of REDD+ progress in 2016 builds on a previous qualitative comparative analysis (QCA) of 12 countries' progress with REDD+ in 2012 (Korhonen-Kurki, Sehring, Brockhaus, & Di Gregorio, 2014) and a follow-up QCA of 13 countries in 2014 (Brockhaus et al., 2017). The outcome that was assessed in 2016 differs from the one applied in the earlier studies, as different countries have made varying progress over time in preparing for the larger changes needed to deliver REDD+ results. Earlier, we assessed progress in REDD+ policy formulation in terms of which factors led to the establishment of comprehensive policies targeting transformational change in the REDD+ policy domain, and in this study, we assess which factors led to countries having policies established and in operation.

We ask the following questions:

- (1) How has REDD+ and the different conditions shaping it evolved over time (2012–2014–2016)?
- (2) What are the combinations of factors that enable, or hinder, efforts to establish and operationalize REDD+ 'policies and measures' in 13 countries across Africa, Asia and Latin America in 2016? Specifically, we investigate the role of transformational coalitions in moving from the policy to practice of REDD+, and the availability of financial, results-based incentives for countries to move towards implementation.

In the following sections, we briefly present the underlying assumptions for the relevance of the selected and assessed factors, and we introduce the methods applied and the findings of the QCA analysis. We embed these findings throughout the text in the results of our earlier studies and in country-specific contextual information.

## 2. Analytical framework

Carbon-effective, cost-efficient and equitable implementation of REDD+ requires aiming for, and subsequently achieving, transformational change (Angelsen et al., 2009). Here, transformational change is defined as 'a shift in discourse, attitudes, power relations and deliberate policy and protest action that leads policy formulation and implementation away from business as usual policy approaches that directly or indirectly support deforestation and forest degradation' (Brockhaus & Angelsen, 2012, pp. 16–17).

This study explores the different pathways followed by individual countries towards transformational change in the REDD+ arena in a context of diverse domestic conditions and processes of change (Winkler & Dubash, 2016). The objective of the analysis is to explain which factors contributed to the establishment and operationalization of REDD+ policies and measures. Underpinning the analyses is the theoretical assumption that both institutions and agency affect the direction of REDD+ policies and implementation. Path dependencies, including colonial legacies, global trade and investment patterns, power asymmetries and entrenched interests all might cement business-as-usual institutions and behaviour, even in the presence of political will for reforms, new economic incentives, or new discourses providing alternatives to business as usual (Barr, Dermawan, Purnomo, & Komarudin, 2010; Brockhaus & Angelsen, 2012; Pierson, 2000). Hence, possible enabling factors refer to institutions or 'the formal and informal regulations, rules and norms that are established over time and that are not easily changed or transformed' (see also Baumgartner, Jones, & Wilkerson, 2011; North,

1990; Ostrom, 1990; Scharpf, 2000). A second set of factors refers to the REDD+ policy arena, which is characterized by more or less hierarchical or inclusive policy processes, and involves a range of powerful actors that can facilitate or prevent specific policy formulation and implementation (Arts, 2012; Scharpf, 1997).

The analysis builds on theoretical considerations of the conditions defined for the first two studies (Brockhaus et al., 2017; Korhonen-Kurki et al., 2014). Korhonen-Kurki et al. (2014) concluded that only countries already undertaking institutional change in the field related to REDD+ have been able to establish REDD+ policies in a relatively short period, and then only in the presence of either high pressure from forest resource shortages or of key features of effective forest legislation, policy and governance. Furthermore, where an enabling institutional setting is in place, the policy arena conditions of national ownership and transformational coalitions became crucial. The second analysis (Brockhaus et al., 2017) further confirmed the importance of already initiated policy change for establishing REDD+ policies, but also the relevance of available performance-based funding in combination with strong national ownership.

In this paper, we pay particular attention to two factors related to the actors in the policy arena: the promise of performance-based funding (i.e. a monetary incentive) and transformational coalitions. According to previous studies, these two factors have played a key role as drivers of policy change in REDD+ (Seymour & Busch, 2016). In the context of avoiding deforestation, incentive-based instruments such as Payments for Environmental Services (PES) have shaped earlier ideas of REDD+. As Busch and Ferretti-Gallon (2017) pointed out, PES is intended to internalize the public value of forests in private land use decisions and is thought to be effective in halting deforestation. Transformational coalitions can lead policy discussion and formulation in new directions, away from business as usual. We can assume that, given the dominance of business-as-usual interests in the forestry sector, it is necessary for domestic pro-REDD+ political actors to be able to form coalitions, influence the direction of policy formulation, and lead the political discourse towards transformational change (Brockhaus and DiGregorio, 2014, Di Gregorio, Gallemore, Brockhaus, Fatorelli, & Muharrom, 2017).

### **3. Material and methods**

#### ***3.1. Brief introduction to a two-step qualitative comparative analysis (QCA)***

This study applies a QCA. QCA is a method, as well as an approach, that allows for multiple conjunctural causations, thus allowing the study of how certain factors in their specific combination(s) with other factors influence an outcome (Ragin, 1987; Rihoux, 2007; Schneider & Wagemann, 2012; Sehring, Korhonen-Kurki, & Brockhaus, 2013). QCA enables a systematic comparison of a medium number of cases without neglecting the complexity of the individual case. In QCA, each case is understood as a specific combination (called a 'configuration') of factors, known as 'conditions'. The values of the causal conditions and outcomes are summarized in a 'truth table'. In a crisp-set QCA (csQCA) (Schneider & Wagemann, 2012), as used here, all conditions are assessed as either absent (0) or present (1) for the specific case. The current analysis builds on the two-step QCA approach developed by Schneider and Wagemann (Schneider & Wagemann, 2006, 2012), who differentiate between remote and proximate conditions, analysed in two separate steps. In our analysis, remote conditions are defined as the institutional setting, which is relatively stable and developed before REDD+ policies started to be shaped, while proximate conditions are those of the REDD+ policy arena, and are thus related directly to the actors and the politics around REDD+. In the first stage of a two-step QCA, only the remote conditions are analysed in order to identify 'outcome-enabling conditions'. In the second step, each of these configurations is analysed in conjunction with the proximate factors.

#### ***3.2. Identification of outcome and conditions***

The analysis forms part of the Global Comparative Study on REDD+ led by the Center for International Forestry Research (CIFOR). The countries were selected based on their early engagement with REDD+ and participation within World Bank programmes such as the Forest Carbon Partnership Facility (FCPF) and Forest Investment Program, as well as their geographical distribution.

The process of identifying the initial conditions and indicators was part of the first study in 2012 (Korhonen-Kurki et al., 2014). The analysis in the second study (Brockhaus et al., 2017) raised the question of whether earlier identified conditions were still appropriate in the face of the highly dynamic REDD+ policy. A workshop with over 30 REDD+ experts with global and in-country experience was therefore held in 2015 in order to explore possible new factors and conditions that enable REDD+. After various validation rounds, voting, and ranking exercises, factors were confirmed (see Table 1, with a few minor changes), with most changes taking place at the indicator level. The data presented here are the result of a comparison not only across countries, but also over time. Following the first two studies, the 2016 analysis looked at six conditions, three for the institutional setting (remote conditions) and three for the policy arena (proximate conditions). Drawing on theoretical considerations and the inductive process above, we hypothesized the following with regard to the institutional setting:

- *Pressure from scarcity of forest resources* (PRES): It is expected that if a country's forests are under high levels of pressure, it will face a stronger need to engage in active forest protection and overcome path dependency and resistance.
- *Sound and consistent legal forestry framework and policies and some evidence of implementation efforts* (EFF): It is expected that achieving REDD+ outcomes requires certain key elements of a sound legal forestry framework, as well as enforcement mechanisms and recorded evidence of implementation efforts.
- *Already initiated policy change* (CHA): It is expected that effective REDD+ strategies can emerge more easily if governments are already successfully implementing policies aimed at departing from business-as-usual practices in the forest economy and thus providing scope for an institutional path change.

Whereas the institutional setting provides key conditions for an enabling context, actions by political actors shape both the policy arena and the processes that lead to transformational change (Brockhaus et al., 2017). We therefore hypothesized the following with regard to the policy arena:

- *National ownership and political leadership* (OWN): It is expected that REDD+ policy documents are more likely to be translated into effective and sustainable activities if REDD+ policy processes are led by committed powerful national actors.
- *'Promise of reward' based on availability of results-based funding for REDD+* (PERFO): It is expected that those countries where payment-for-performance funds are available and a letter of intent (LOI) (or equivalent) has been signed to confirm the commitment of both parties will see REDD+ policies and measures established and REDD+ outcomes achieved faster than those countries where performance-based funds are not available.
- *'Powerful' transformational coalitions* (COAL): It is expected that, given the dominance of business as usual in the forestry domain, domestic pro-REDD+ political actors must be able to form coalitions, influence the direction of policy formulation, and lead the political discourse away from business as usual and towards transformational change.

Indicators were defined for each condition, as well as a threshold for when a condition is to be considered absent or present.

It needs to be noted that the outcome, defined as 'REDD+ policies and measures are both established and in operation' (denoted hereafter by the abbreviation 'REDD'), differs notably from the outcome used in previous studies, as now we focus on REDD+ phase 2 'policies and measures', whereas previous studies focused on the formulation of policies. As such, the indicators for the presence of this outcome also differ. Country teams were asked to assess whether a monitoring, reporting and verification (MRV) system had been developed, whether a national strategy or a policy document was in place, whether REDD+ demonstration sites/pilots/projects were applying monetary payments, whether an SIS (Safeguard and Information System) had been developed and whether performance-based payments had been accessed (see Appendix in Supplementary material). It was determined that at least three indicators had to be present in order to qualify for the outcome to be positive.

**Table 1.** Data matrix with evaluation of all factors and the outcome for 2012, 2014 and 2016 (1 = present, 0 = absent).

Country	PRES			EFF			CHA			OWN			COAL			PERFO			REDD		
	2012	2014	2016	2012	2014	2016	2012	2014	2016	2012	2014	2016	2012	2014	2016	2012	2014	2016	2012	2014	2016
Brazil	1	1	<b>1</b>	1	1	<b>1</b>	1	1	<b>1</b>	1	1	<b>1</b>	1	1	<b>0</b>	–	1	<b>1</b>	1	1	<b>1</b>
Guyana	–	0	<b>0</b>	–	1	<b>1</b>	–	1	<b>1</b>	–	1	<b>1</b>	–	1	<b>1</b>	–	1	<b>0</b>	–	1	<b>1</b>
Peru	0	0	<b>0</b>	0	0	<b>1</b>	1	1	<b>1</b>	1	1	<b>1</b>	1	1	<b>1</b>	–	0	<b>1</b>	0	0	<b>1</b>
Burkina Faso	1	1	<b>1</b>	0	0	<b>1</b>	0	1	<b>1</b>	0	0	<b>0</b>	0	1	<b>0</b>	–	0	<b>0</b>	0	0	<b>0</b>
Cameroon	1	1	<b>1</b>	1	1	<b>1</b>	0	0	<b>0</b>	0	0	<b>0</b>	0	0	<b>0</b>	–	0	<b>0</b>	0	0	<b>0</b>
DRC	0	0	<b>0</b>	0	0	<b>0</b>	1	1	<b>1</b>	0	0	<b>0</b>	1	1	<b>0</b>	–	0	<b>1</b>	0	1	<b>1</b>
Ethiopia	–	1	<b>1</b>	–	0	<b>0</b>	–	1	<b>1</b>	–	0	<b>1</b>	–	1	<b>0</b>	–	0	<b>1</b>	–	0	<b>0</b>
Mozambique	1	1	<b>1</b>	0	0	<b>1</b>	0	1	<b>1</b>	1	1	<b>1</b>	1	1	<b>0</b>	–	0	<b>1</b>	0	0	<b>0</b>
Tanzania	1	1	<b>1</b>	0	0	<b>0</b>	0	0	<b>0</b>	0	0	<b>0</b>	1	1	<b>1</b>	–	0	<b>0</b>	0	1	<b>1</b>
Indonesia	1	1	<b>1</b>	0	0	<b>0</b>	1	1	<b>1</b>	1	1	<b>0</b>	1	1	<b>0</b>	–	1	<b>1</b>	1	1	<b>1</b>
Nepal	0	0	<b>0</b>	1	1	<b>1</b>	0	0	<b>1</b>	0	0	<b>0</b>	1	1	<b>0</b>	–	0	<b>0</b>	0	0	<b>0</b>
PNG	0	0	<b>0</b>	0	0	<b>0</b>	0	0	<b>0</b>	0	0	<b>0</b>	1	1	<b>1</b>	–	0	<b>0</b>	0	0	<b>0</b>
Vietnam	0	0	<b>0</b>	1	0	<b>0</b>	1	1	<b>1</b>	1	0	<b>0</b>	1	1	<b>1</b>	–	0	<b>1</b>	1	1	<b>0</b>

The most recent evaluations in 2016 used for QCA in the study are in bold.

The evaluations, gathered initially in May–June 2016, were cross-checked by country experts involving participants both from research and civil society at a joint workshop in June 2016. The QCA was conducted using Tosmana software (Cronqvist, 2011).

### **3.3. Joint context**

The 13 countries analysed here differ in many respects, but they do have in common several factors that are important for the success or failure of REDD+. This joint context was identified, based on the evaluations completed during the first and second rounds of QCA study analysis, which showed the same values in most countries (see the joint context in Korhonen-Kurki et al., 2014; see also Pedroni, Dutschke, Streck, & Estrada Porrúa, 2009 and Phelps, Guerrero, Dalabajan, Young, & Webb, 2010). Having completed the evaluations again for this third round, it can be concluded that the countries in this study continue to be tropical, developing, or emerging economy countries, with a certain political commitment to REDD+ but with typically powerful drivers of deforestation, low(er) performance in governance indicators, low cross-sectoral horizontal coordination and limited administrative/technical capacity – all characteristics that hinder the quick implementation of an effective, efficient and equitable REDD+ (Korhonen-Kurki et al., 2014). However, the current round of analysis suggested that in almost all 13 countries, the REDD+ process was evaluated to be inclusive (at least consultative); therefore, inclusiveness was incorporated as a part of the joint context.

## **4. Qualitative comparative analysis**

### **4.1. Assessments of conditions (2012–2016)**

The evaluation by country experts was done using indicators developed for each factor (see Appendix in Supplementary material). As Table 1 shows, few changes in the overall value of conditions are observable, which indicates that REDD+ is progressing slowly at the national level. While much is happening in the policy arena and changes are emerging at the indicator level, they are not yet being noticed in factor values. In this paper, we use the data from the year 2016 for the QCA analysis; the earlier papers (Brockhaus et al., 2017; Korhonen-Kurki et al., 2014) present the analysis for the earlier years.

After the 2012 and 2014 evaluations, the criteria were tightened from assessing the presence, to identifying the ‘substantial’ presence, of transformational coalitions, by considering the level of political power of coalitions through an indicator that assessed ‘pro-REDD+ policy coalitions that include powerful policy actors’. As a result of this change, in many countries, the assessment changed to zero, as their coalitions lack powerful political actors.

### **4.2. Enabling conditions and configurations for change: qualitative comparative analysis in 2016**

#### **4.2.1. Analysis of the institutional context**

As a first step, analysis of the institutional contexts (remote factors) of the 13 countries was undertaken, examining:

- Pressure from scarcity of forest resources (PRES)
- Sound and consistent legal forestry framework and policies, and some evidence of implementation efforts (EFF)
- Already initiated policy change (CHA).

In the QCA analysis, lower case (e.g. pres) denotes the absence of the factor and upper case (e.g. PRES) denotes its presence. Ideally, countries that share the same configuration would have the same outcome in common. In our analysis, a few contradictory results for some configurations are observed: countries which share the same combination of conditions resulted in different outcomes. We expect that these contradictions



can be explained with the different configurations of proximate factors to be revealed in the second step (see [Table 2](#)).

When these combinations are further reduced, two enabling remote configurations were found for established and operationalized REDD+ policies and measures:

$$\text{CHA} + \text{PRES}^* \text{eff}$$

CHA, already initiated policy change, was found to be an enabling configuration for Brazil, Guyana, Indonesia, Peru and the Democratic Republic of the Congo (DRC).

The other enabling remote configuration was PRES\*eff, pressure from scarcity of forest resources, combined with an absence of effective forest governance and legislation, which was observed in Tanzania and Indonesia, and where the presence or absence of CHA is irrelevant (see [Figure 1](#)). Empirically, CHA is more relevant as an outcome-enabling condition than PRES\*eff, since the coverage value for CHA is 0.83, while the value for PRES\*eff is 0.33.

#### 4.2.2. Analysis of the policy arena (proximate conditions)

In a second step, the three proximate conditions were added to the analysis:

- National ownership and political leadership (OWN)
- Availability of payment-for-performance funds for REDD+ (PERFO)
- ‘Powerful’ transformational coalitions (COAL).

These three proximate conditions were analysed in combination with the two observed enabling configurations for the institutional context. Firstly, the second-step analysis was conducted with ‘already initiated policy change’, CHA (see [Table 3](#) and [Figure 2](#)).

When further reduced with Boolean logic, the following two configurations leading to a positive outcome are observed:

(1)  $\text{CHA}^* \text{PERFO}^* \text{coal}$  for Brazil, the Democratic Republic of the Congo, and Indonesia

When ‘already initiated policy change’ is combined with ‘performance-based payments’ and in the absence of transformational coalitions, this leads to the outcome REDD. The same configuration does not lead to the same outcome in Ethiopia and Mozambique. However, this could be explained by the fact that these countries have only very recently received promises of performance-based funding, and they are currently initiating structural changes to fulfil the commitments in order to achieve the payments.

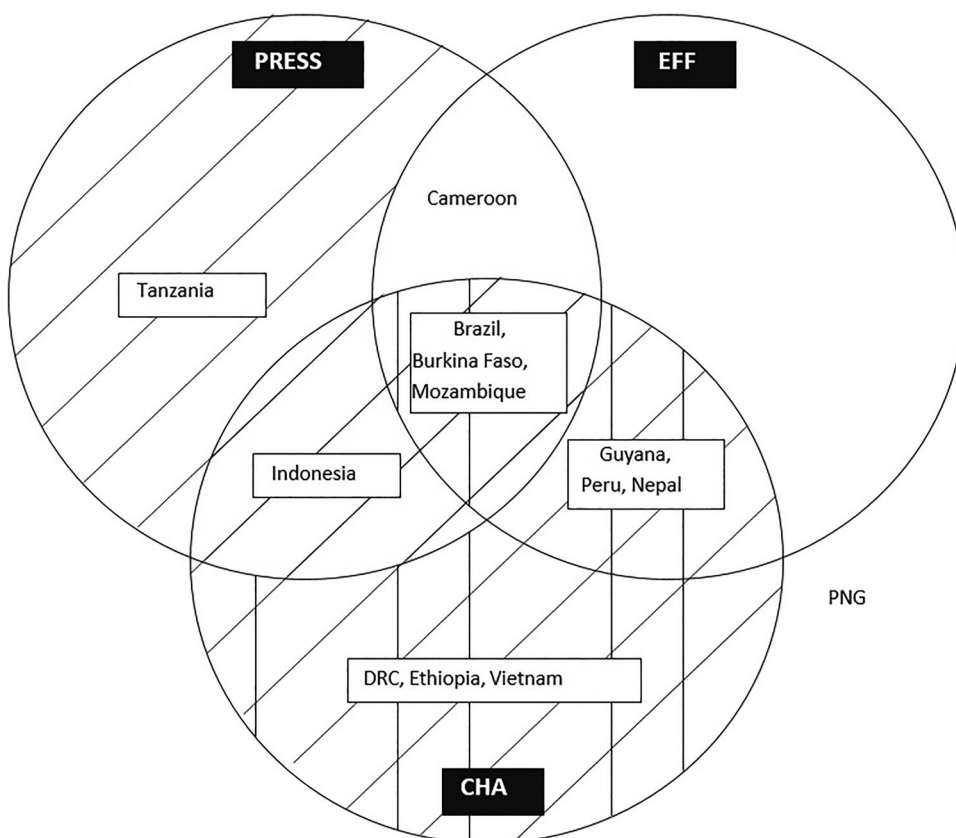
(2)  $\text{CHA}^* \text{OWN}^* \text{COAL}$  for Guyana and Peru

In the other configuration, already initiated policy change along with ownership and strong transformational coalitions leads to REDD; whether or not performance-based funding is available appears irrelevant.

The second-step analysis was then conducted to investigate the proximate conditions alongside the other enabling remote configuration, PRES\*eff.

**Table 2.** Truth table for remote conditions (1 = present, 0 = absent, C = contradictory result).

PRES	EFF	CHA	REDD	
1	1	1	C	Brazil (1), Burkina Faso (0), Mozambique (0),
0	1	1	C	Guyana (1), Peru (1), Nepal (0)
1	1	0	0	Cameroon
0	0	1	C	DRC (1), Ethiopia (0), Vietnam (0)
1	0	0	1	Tanzania
1	0	1	1	Indonesia
0	0	0	0	Papua New Guinea



**Figure 1.** Venn diagram for remote conditions.

No further reduction is possible as the case configurations are too different, and the analysis is restricted to the description of the observed two configurations, both leading to a positive outcome:

(1)  $PRES*eff*PERFO*own*coal$  (Indonesia)

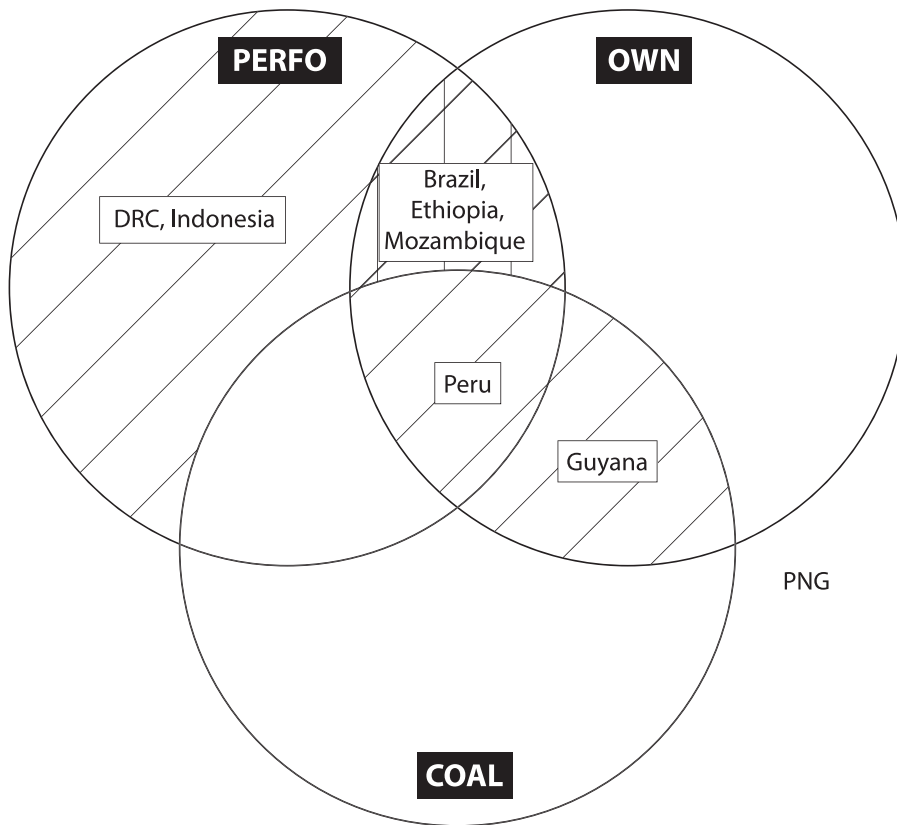
In Indonesia, in the light of pressure from the scarcity of forest resources, and the absence of effective forest policy and legislation, the availability of performance-based payments alone proves to be enough to achieve REDD, even without ownership and coalitions.

(2)  $PRES*eff*perfo*own*COAL$  (Tanzania)

In Tanzania, the presence of powerful coalitions, in combination with pressure from scarce forest resources and the absence of effective forest policy and legislation, also led to a positive result, despite an absence of performance-based payments and ownership (see Table 4 and Figure 3).

**Table 3.** Truth table for proximate conditions and enabling conditions of 'CHA'.

CHA	PERFO	OWN	COAL	REDD	
1	1	1	0	C	Brazil (1), Ethiopia (0), Mozambique (0)
1	0	1	1	1	Guyana
1	1	1	1	1	Peru
1	1	0	0	1	DRC, Indonesia
1	0	0	0	0	Burkina Faso, Nepal
1	1	0	1	0	Vietnam



**Figure 2.** Venn diagram for enabling remote condition of already initiated policy change – CHA – and proximate conditions.

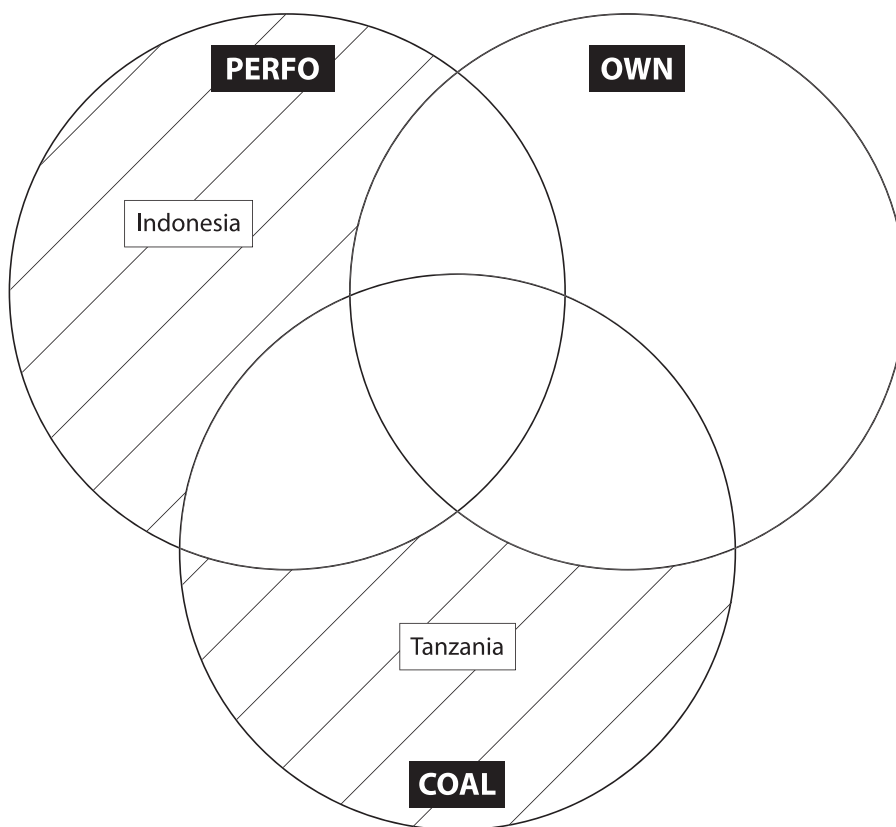
## 5. Results and discussion

### 5.1. REDD+ evolution over time

REDD+ and the different conditions shaping it have evolved over time (2012–2014–2016). As it was theorized, the institutional context changed only slightly. In the more dynamic policy arena, however, bigger changes are evident. Ownership and political leadership have increased in Ethiopia and decreased in Indonesia. In Indonesia, this is because of a change in political leadership, the former pro-REDD President of Indonesia being replaced by a President emphasizing economic development over climate goals (Korhonen-Kurki et al., 2017). In Ethiopia, there seems to be a strong political buy-in to the REDD+ process. Ethiopia's Climate-Resilient Green Economy strategy outlines that addressing the negative impacts of climate change is top of the government's development agenda. In Vietnam, in 2012, there was higher governmental ownership and interest around REDD+. However, between 2012 and 2016 progress in Vietnam slowed down, as argued by stakeholders, as a result of uncertainty around the carbon market and the fact that international financial support to REDD+ significantly decreased from 2012. In this context, REDD+ has become less of a priority for political leaders in Vietnam.

**Table 4.** Truth table for proximate conditions and enabling condition of 'PRESS\*eff'.

PRESS*eff	PERFO	OWN	COAL	REDD	
1	0	0	1	1	Tanzania
1	1	0	0	1	Indonesia



**Figure 3.** Venn diagram for enabling remote condition of pressure from scarcity of forest resources combined with no effective forest governance and legislation, and proximate conditions of performance-based payments, ownership and transformational coalitions.

Performance-based funding, another possible initiator of change, also changed over time. Many countries now have performance-based funding available for REDD+, including the DRC, Ethiopia and Mozambique as well as Peru and Vietnam, while Guyana faced uncertainties around the continuation of such payments. However, while more countries have moved to the second phase of REDD+ with policies and measures, the third phase of results-based payments is still far to reach, as the next section will show in more detail.

### ***5.2. Combinations of factors that enable or hinder efforts to establish and operationalize REDD+ 'policies and measures'***

The QCA shows two enabling remote configurations: the positive push of an already existing policy change, and the negative stress of resource scarcity and lack of effective forest laws and policies. In other words, either a path change was already initiated, or the costs and risks of the old path became so apparent that they induced readiness for a change in direction. These two institutional configurations provide the space for a path change. To make that happen, further agency-centred factors in the policy arena are required. As the analysis has shown, these can be either internal political factors, such as the existence of powerful transformational coalitions and strong ownership and leadership, which in various configurations have been proven to enable transformational change, or, in cases where these strong internal drivers are absent, performance-based funding can make a difference.

Next, we group the countries according to our assessment considering the advanced, contradictory and no progress cases, and discuss in more detail our findings about how factors of performance-based payments and transformational coalitions act as drivers for change.

### ***5.2.1. Advanced but incomplete first-generation REDD+ countries: Brazil, Guyana and Indonesia***

Brazil has recently progressed with the design of REDD+ policies and measures at the national level. REDD+ funding, however, whether private (i.e. voluntary markets) or public (i.e. bilateral agreements) has been limited to areas with low levels of deforestation, and local interventions have not yet proven to be sufficient for changing forest actors' behaviour (Gebara & Agrawal, 2017; Sills et al., 2014). Although Brazil has been 'learning by doing' from its different REDD+ experiences, there is still very little evidence of the potential of sub-national initiatives to reduce deforestation, and little coordination among all of these initiatives.

However, performance-based funds play a role in Brazil's advancements. The Brazil–Norway agreement, for example, is seen as 'the largest REDD+ initiative in the world'. At the national level, the Amazon Fund is the best example of a national results-based payment mechanism. Seymour and Busch (2016) point out that results-based payments create an 'equal partnership' because, unlike traditional development aid, they do not dictate how results should be achieved. But while these authors argue that Brazil's success in reducing deforestation was significantly motivated by Norway's promise of up to USD 1 billion in return for results-based REDD+ performance, others suggest that what contributed to reducing deforestation in Brazil was a mix of policies and measures whose implementation commenced 15 years earlier. Our results show that the combination of both factors played a role. Although one can argue that the promise of receiving financial resources from Norway may have accelerated the institutionalization of REDD+ in Brazil, the country needed to have the means and rules to receive and distribute such resources already in place. However, in the face of the currently observed resurgence of deforestation, Brazil's performance in the long run remains questionable.

In Indonesia, progress was rapid in 2014, with the national REDD+ Agency working full speed to put into place the implementation framework detailed in the REDD+ strategy. The following year, progress halted when the REDD+ Agency was disbanded and absorbed by the Ministry of Environment and Forestry (MoEF), but at the end of 2016, the MoEF through its new Directorate General of Climate Change restarted the process. Equally, REDD+ progress is also challenged by resistance by powerful business actors, as is the forest tenure reform agenda. The year 2017 marked a decade of the Norwegian Agency for Development Cooperation's commitment to performance-based funding, and there are plans to take stock and revitalize the initiative.

In Guyana, the new government, elected to office in May 2015, did not make a clear statement on how Guyana would proceed with REDD+ and with the LOI for performance-based funding with Norway (2009–2016). Public statements indicated that the Low Carbon Development Strategy (LCDS) initiated in 2009 would not maintain its prominence and would be replaced by a 'green economy' approach. This has resulted in some uncertainty in terms of national ownership and commitment, and availability of performance-based funds for REDD. However, in April 2017, a framework document for the Green State Development Strategy was made public, replacing the LCDS. Additionally, the government began meeting with its Norwegian counterparts to extend the LOI beyond 2016, and to negotiate the possibility of a new agreement.

### ***5.2.2. New progress with mixed outcomes: Peru, Ethiopia, Mozambique and the Democratic Republic of the Congo***

Peru and the DRC have achieved the outcome of REDD+ policy and measures established and in operation, while Mozambique and Ethiopia are progressing well, having many of the indicators in place but not yet reaching the outcome fully. In Peru, an influx of performance-based funding commitments and other international financial support for REDD+ and forest governance has proven effective in providing incentives for the country to make progress on REDD+. A strong coalition of pro-REDD+ government bodies under President Humala, further supported by civil society actors, led to progress between 2014 and 2016. However, success has been hindered by competing interests both within government and the private sector (e.g. mining, oil palm). In the lead up to the Lima Climate Conference (COP 20) in 2014, Peru signed an agreement with Norway and Germany for USD 300 million towards performance-based payments. In June 2016, Peru elected a former World Bank economist as its new President, Pedro Pablo Kuczynski. The reshuffling of alliances and ministry personnel created a vacuum of activities in the second half of 2016. REDD+ activities resumed under a more neoliberal traditional pro-growth government but, facing impeachment, Kuczynski resigned in March 2018, creating new disruption to Peru's REDD+ activities.

Much of Ethiopia's progress in terms of finance and activities is the result of a commitment from the Norwegian government to support the country's REDD+ programme, as well as a national commitment to create an enabling environment to achieve this goal. Aside from the implementation fund, the Norwegian government also committed USD 50 million to buy emission reduction credits. Progress is also seen with the recent signing of a REDD+ Investment Fund for USD 100 million, as part of the REDD+ partnership bilateral agreement between Ethiopia and Norway.

Mozambique signed an LOI with the World Bank's FCPF for an Emission Reductions Payment Agreement in 2016. While Mozambique has failed to take action to curb illegal logging within forest conservation areas, current discourse and practice are to sanction illegal forest operators and improve the management of conservation areas.

Progress in the DRC is also mainly due to performance-based funds. The DRC signed an LOI with the World Bank in January 2017 for the potential purchase of up to 10 million Emission reductions over five years from the Mai-Ndombe REDD+ programme. Expected income includes USD 60 million from the Carbon Fund, plus an estimated performance revenue of USD 202 million. At a national level, initiated policy reforms can be observed, such as the inclusion of REDD+ in the strategic document for growth and poverty reduction, and its mainstreaming into the national economic governance matrix.

### ***5.2.3. REDD+ countries on a rocky road: Cameroon, Nepal, Papua New Guinea, Burkina Faso and Vietnam***

A number of countries have experienced phases of progress and retrenchment or very slow progress. Cameroon is still drafting its national strategy and remains in the preparation phase. The REDD+ process is not nationally owned, with international actors driving the process.

Nepal embarked on REDD+ quite early, with FCPF support since 2008; the country is now developing a sub-national Emission Reduction Program Document. However, there is little actual progress in approving key policy and legal documents, forest bureaucracy is unstable due to larger political transitions, and no specific measures have been taken on emissions reduction.

In Burkina Faso, the implementation of REDD+ has not progressed substantially. Nevertheless, some actions are underway to define an institutional, legal and operational framework for REDD+. This task is devolved to the national coordination of the Forest Investment Program.

In Papua New Guinea, REDD+ progress has been slow and patchy. The country has made gains in MRV capacity, established a Forest Reference Emission Level, taken steps towards a more sustainable forest management system, and developed relevant institutional arrangements and policies, including the Climate Change and Development Authority and the National REDD+ Strategy. However, progress at the official REDD+ pilot project sites has effectively stalled.

Vietnam is a newcomer in this group of countries, as it had previously been one of the forerunners in REDD+ implementation. However, despite Vietnam having had a strong REDD+ and forest policy framework since 2012, the government's ownership and interest in REDD+ is not as strong as it used to be, slowing down actual REDD+ implementation.

## **6. Conclusions**

The paper reveals that countries across Africa, Asia and Latin America have made some progress, but some face backlashes in realizing the necessary transformational change to tackle deforestation. The QCA was carried out to explain which factors contributed to the establishment of REDD+ policies and their operationalization across 13 countries.

The study confirmed the theoretical assumption that both institutional setting and policy arena affect the direction of REDD+ policies and their implementation. It also revealed the importance of two institutional configurations: the positive push of an already existing policy change, and the negative stress of resource scarcity and lack of effective forest laws and policies. However, to make REDD+ progress happen, agency-centred factors in the policy arena are also required. It was noted that where transformational coalitions genuinely involve those working at the highest levels, political transformational processes are indeed more likely to

happen. But when looking at the overall progress of REDD+, the coalitions for change might not be stable and can fall apart if domestic changes occur, for example, if a powerful political leader who had supported REDD+ leaves office. On the other hand, in the countries where the promise of performance-based funding by a donor has accelerated transformational change, the change processes may continue regardless of developments in the domestic policy arena. Hence, one could argue that as long as the donor is committed in the long term, the country might make progress with the implementation of REDD+.

The study sheds light on the question of what drives change, either transformational change for REDD+, or change induced by REDD+. An important area for future research must now be the factors that can lead to a pushback in domestic and global policy arenas, hampering or reversing policy change to halt deforestation in tropical regions. At the same time, the pressure to learn from efforts such as REDD+ continues to grow in the light of the global urgency to reduce greenhouse gas emissions.

## Note

1. Reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries (REDD-plus).

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