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REDD+ in Indonesia: a New Mode of Governance or just another project?

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Abstract

Reducing Emission from Deforestation and Forest Degradation (REDD+), was adopted in Indonesia with an ambitious vision to promote a new mode of governance for Indonesia's forest, replacing a mode of 'projectification'. Projectification, as described by Li (2016), is understood as a process through which plans for systematic long-term change collapse into incremental, simplified technical solutions. These proposals often fail to address complex socio-economic problems and political-economic contexts, allowing large-scale deforestation drivers to persist.

We analyze whether Indonesia is on track towards transformational change or is conversely locked into projectification. We construct our analysis using results from a long-term study comprising surveys in 2012, 2015, and 2019 analyzing the evolving role of REDD+ in Indonesian forest governance. Combining qualitative and quantitative analysis, we examine changes in (i) discursive practices and policy beliefs; (ii) institutions and power relations; and (iii) informal networking relationships.

Our findings show that despite high hopes and some promising developments, REDD+ has not yet succeeded in creating transformational change. Ideas of REDD+ remain focused on efficiency and technical aspects of implementation and do not question business as usual and the current political economic conditions favoring deforestation. The changing structure of the REDD+ policy network and exchanges between actors and groups over time suggest government actors and large funding organizations are becoming increasingly dominant, potentially indicating a return to established patterns of project-based governance.

Keywords: REDD+; transformational change; projectification; policy network analysis

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We cannot solve our problems with the same thinking we used when we created them. ([Albert Einstein](#))
Hati-hati ada proyek! (literally: beware—there is a project) (from Aspinall, 2013)

1. Introduction

In 2007, the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change was held in Bali, Indonesia. Susilo Bambang Yudoyono (SBY), then Indonesia's president, took the opportunity to place his country in a central position in Reducing Emissions from Deforestation and Forest Degradation (REDD+; Cronin et al., 2016), pledging to improve governance and stem forest loss (Scheyvens and Setyarso, 2012; Mulyani and Jepson, 2013; van Noordwijk et al., 2014).

Indonesia's REDD+ ambitions envisioned substantial changes to incentives, discursive practices, and power relations to reshape the political economy of Indonesia's forests. These objectives, which Brockhaus and Angelsen (2012) call transformative change (TC), however, were not new. Indonesia, like many tropical forest countries, has seen decades of internationally funded conservation and biodiversity protection initiatives addressing, among others, illegal logging, forest governance, and payments for environmental services. Starting with laudable goals, they often wound up as piecemeal and weakly integrated projects, thereby de-politicizing Indonesian forest policy (Li, 2007; Mulyani and Jepson, 2013; Howell, 2015; Sahide et al. 2020).

Li's (2016) concept of "projectification" seems apt here. As she describes it, projectification is a process through which plans for systematic, long-term change collapse into incremental, simplified solutions to complex socio-ecological problems (Howell, 2015; Marsden et al., 2012, in Godenhjelm et al., 2015; Li, 2016).

Over a decade after Bali, we feel it is appropriate to ask whether REDD+ in Indonesia might be on track toward transformational change or, conversely, is locked in projectification. While we are certainly not the first to raise this question (Li 2019a, b; Skutsch and Turnhout, 2020), we do so using a unique evidence base. We construct our analysis using results from a long-term study analyzing the evolving role of REDD+ in Indonesian forest governance. Combining qualitative and quantitative analysis, we examine changes in (i) discursive practices and policy beliefs; (ii) institutions and power relations; and (iii) informal networking relationships. After a brief background section introducing the concept of projectification in more detail, we present the methods used to gather data on actors' changing ideas over time, the power relations reflected in institutional change, and changes in informal social networks. After presenting our results, we discuss what the findings could mean for Indonesia's efforts to reduce emissions from avoided deforestation and forest degradation.

2. Background and analytical framework

2.1 *The 'project' way*

Many early efforts under the REDD+ umbrella began as individual pilot projects or demonstration activities (Gallemore and Munroe, 2013). In general, projects are "self-contained, collaborative, and funded activities intended to achieve a designated end" (Aspinall, 2013). They are typically time limited (Li, 2016) and, in Indonesia, often funded on an annual basis to fit governmental budget cycles. Skutsch and Turnhout (2020) suggest that projects are often the preferred answer to forest governance problems because they slice larger problems into manageable units subject to simplified, technical solutions, whose outcomes are readily evaluated.

Projects became a common development model in Indonesia under President Suharto (1965–1989; Aspinall, 2013; Li, 2016). The country is not alone. Projects have become omnipresent in both the private (Jensen et al., 2016) and public sectors (Godenhjelm et al., 2015). Several authors suggest the project

model is becoming dominant in conservation and development policy (Hodgson, et al, 2019; Li 2016, 2019a). Jensen et al. (2016) go so far as to claim that “projects have become a human condition.”

Advocates claim projects promote innovation and improve efficiency (Sahlin-Andersson and Söderholm, 2002; Hodgson, 2004) relative to sluggish bureaucracies (Sjöblom et al., 2013). In the public sector, policies have become increasingly short term and, in this context, projects seem to be modern, flexible, and creative (Sahlin-Andersson and Söderholm, 2002; Godenhjelm et al., 2015; Jensen et al., 2016; Hodgson et al., 2019). Yet, in Indonesia, projectification proceeds alongside bureaucratization incorporating different sectoral interests (Sjöblom et al. 2013; Li 2019a). Projects allow government to share responsibility for policy outcomes (Hodgson et al, 2019) and facilitate bureaucratic patronage (Barr and Sayer, 2012; Aspinall, 2013). Elite actors with control over project allocation decisions and revenue streams can act as brokers, particularly for rural development projects, which reinforces their status (Aspinall, 2013; Li, 2016, 2019a, b).

2.2 REDD+ as a new mode of forest governance

At its inception, REDD+ was implicitly intended to overcome the project approach, mounting economic, political, and governance reforms within and beyond the traditional forestry sector to bring about transformational change (Kanninen et al., 2007; Barr and Sayer, 2012; Brockhaus and Angelsen, 2012; Di Gregorio et al., 2012). Transformational changes in governance, through collaboration with networks of policy actors beyond the state (Peterson, 2003; Dedeurwaerdere, 2005; Weible and Sabatier, 2005; Leifeld and Schneider, 2010; Newig et al., 2010; Bodin and Prell, 2011; Fischer, 2011), it was hoped, would in turn lead to more effective governance. As Indonesia’s National REDD+ Strategy drafting process got underway in the late 2000s, the central government hosted numerous consultations, inviting stakeholders to contribute (Moeliono et al., 2014).

At the international level, it was hoped REDD+’s innovative use of direct incentives to countries, states, districts, communities and forest owners, stewards, and users to protect forests would also contribute to TC (Angelsen et al., 2018). Over time, however, responding to issues such as sovereignty, competing sectoral interests, equity, and land titling, REDD+ schemes became much more diverse, at times almost impracticably so (Angelsen and McNeill, 2012; Den Besten, et al., 2014; Gallemore, 2017; Angelsen et al., 2018). REDD+ results are largely still being awaited, as deforestation, mainly driven by large-scale investments in agricultural commodity production, continues apace (Curtis et al., 2018). In Indonesia, perverse incentives, weak governance, and power relations still favor status-quo interests in continued deforestation (Kanninen et al 2007; Brockhaus and Angelsen 2012; Di Gregorio et al., 2015; Varkkey, 2015; Ekawati et al., 2019; Tacconi and Muttaqin, 2019a, b). These issues notwithstanding, many still contend REDD+ could be a “new mode of governance,” and enabling transformational change to some extent (Brockhaus et al., 2017; Korhonen-Kurki et al., 2019).

As mentioned above, REDD+ became a central agenda item during SBY’s administration (Sills et al., 2014; Korhonen-Kurki et al., 2017; Tacconi and Muttaqin, 2019a). REDD+ activities are reported to have increased stakeholder capacity, strengthened networks, improved forest data quality and transparency, and facilitated legislative review and improvement (Mulyani and Jepson, 2013; Ekawati et al, 2019; Tacconi and Muttaqin, 2019b). The country’s REDD+ Taskforce incorporated non-state actors in national decisions, and REDD+ sparked changes in adjacent policy arenas. A significant example is the One Map policy, which was intended to rationalize land-use permitting, upset power relations between agencies and across sectors (Astuti and McGregor, 2015; McGregor, et al., 2015; Wibowo and Giessen, 2015). Concurrently, court decisions on customary land rights opened opportunities for communities to claim

land under traditional tenure systems, though implementation has been uneven and generated its own exclusions (Astuti and McGregor, 2017; Myers et al., 2017; Simarmata, 2019). These events could indicate that REDD+ is bringing about new modes of governance, mimicking Bäckstrand's (2010) vision of less hierarchical more collaborative policymaking based on network governance and stakeholder consultation.

The 2014 election brought to power a president focused on economic development, infrastructure investment, deregulation of permitting, and bureaucratic reform. The attention the administration paid to environmental issues, including forests and REDD+, declined. One of the first priorities was bureaucratic reform, which, among numerous other changes, led to a merger between the Ministry of Forestry and the National Environmental Agency, creating the Ministry of Environment and Forestry (MoEF).

2.3 Identifying modes of governance and assessing transformational change versus projectification of REDD+

Following Brockhaus and Angelsen (2012), we understand TC as “a shift in discourse, attitudes, power relations and deliberate policy and protest actions that leads policy formulation and implementation away from business-as-usual approaches that directly or indirectly support deforestation and forest degradation.” Therefore, to identify the presence or absence of transformational change, we use our survey data to analyze temporal variation in (i) actor's stances and discursive practices; (ii) power relations and institutions; and (iii) collaboration and information network structures.

First, we focus on changes in ideas or discourse. Following Di Gregorio et al. (2015) we consider changes in actors positions on (i) specific policy reforms to address deforestation and forest degradation drivers; (ii) proposed REDD+ mechanisms' risks and trade-offs; and (iii) technocratic measures to governance and institutional change to reduce emissions; and discussions challenging existing power relations. Actors' stances on particular policy issues, and their beliefs as expressed in interviews or speeches over time, can be useful sources for identifying discursive shifts.

Second, we consider how formal institutional and informal relational changes affect power relations over time. On the one hand, formal institutions clearly have an important effect on who has a seat at the table. Korhonen-Kurki et al. (2017), for example, suggest the initial establishment and evolution of Indonesia's REDD+ agency could lead to either of two different outcomes: a stronger institutional position, leading to better enforcement; or demotion to insignificance and ineffectiveness. On the other hand, informal, behind-the-scenes power relations are also clearly important. Reputational power, to which extent others perceive an actor as powerful in a specific policy domain, can indicate this kind of influence (Brockhaus et al. 2014).

Third, we examine the degree to which REDD+ in Indonesia has evolved toward meaningful multi-stakeholder inclusion. New modes of governance are expected to facilitate multi-stakeholder engagement (Korhonen-Kurki et al., 2013) combining diverse “constituencies for change” (Luttrell et al., 2014). Effective information exchange facilitates coordination on the one hand and disseminates new ideas influencing discourse on the other. TC requires inclusive, polycentric governance featuring strong information exchange and collaboration across space, sectors, and social divisions (Ostrom, 1998, 2010, 2012; Berkes and Folke, 2002). We therefore study changes in patterns of these relationships across time.

Based on our understanding of TC and projectification, we would expect to see different patterns in these three domains over the period we observe. We summarize these indicators in Table 1 and describe our methods for analyzing them in the following section.

Table 1. Comparison of transformational change versus projectification

	Transformational Change	Projectification
Discourses	New ideas that question business-as-usual assumptions progressively gain traction in the policy domain	Policy ideas focus on efficiency and technical aspects of implementation
Power relations	Formal institutional and informal relationship changes lead to more inclusion of non-governmental and non-elite actors	Institutions and informal relationships are dominated primarily by government and funding organizations
Networks	Cross-sectoral information exchange and collaboration increases over time, as does bridging between organizational clusters	There is no systematic increase in cross-sector information exchange or collaboration, but there is an increase in collaboration in close-knit organizational clusters Powerful actors, donors, and national government organizations become more prominent in networks Information exchange and collaboration take place more frequently in the context of information exchange

3. Methods

The data for our analysis come from surveys and semi-structured interviews conducted in 2012, 2015, and 2019 with representatives of organizations actively involved in Indonesian national REDD+ policy. We defined our survey population to include any “organization that defines itself AND that [is] perceived by others as relevant to the national [REDD+] policy domain” (Brockhaus and Di Gregorio, 2012; Brockhaus et al., 2014). A first selection of actors was based on Indrarto et al.’s (2012) Indonesian country profile, which presented a thorough analysis of the REDD+ policy arena as of 2010 and results of a media discourse analysis (Cronin and Santoso, 2010). An expert panel consisting of two academics, one non-governmental organization, and two government officials was asked to verify the list of policy actors engaged in national REDD+ policy in Indonesia, creating a final actor list that was used for the surveys. For the subsequent surveys, we started with the previous list and went through a verification process with the expert panel. As shown in Table 2, the number of actors in the policy domain of each period varied quite extensively reflecting the level of interest and engagement of the earlier period to a cooling down period when REDD+ was integrated into the ministry mandate.

Research teams conducted surveys and semi-structured interviews with individuals designated as representatives of the organizations in the population. We targeted senior organization members, and interviews were typically at the director general or director level. Usually we interviewed only person per organization, but in a few cases the director involved staff members as well. Most organizations in the 2019 survey were also interviewed in 2015 and 2012, although organizations were not always represented by the same individuals.

The surveys included items on organizations' general activities, activities specifically related to REDD+, stances on salient REDD+ policy questions, and engagement in in REDD+ policy networks, understood as arrangements of relationships between organizations in the national REDD+ policy domain (Kenis and Schneider, 1991; Leifeld and Schneider, 2010; Fischer, 2011). Semi-structured questionnaires allowed the interviewees to elaborate more freely on their organization's experiences in REDD+ policy development and implementation.

The response rates to a) the overall survey tool, b) the extensive network section within, and c) the semi-structured interviews varied over time, as Table 1 below shows. In 2015 respondents were hesitant to answer the survey and the network section amid post-election governmental restructuring unfolded, preferring the semi-structured questionnaire. In 2019, the smaller domain allowed time to follow up and response rate was consequently high. In all rounds some actors declined to participate in one or another part of the interview, often citing lack of time or knowledge and in some cases failing to respond altogether.

Table 2. Actor domain in the 2012, 2015, and 2019 surveys

Actor categories	2012				2015				2019			
	Actors in policy domain	Respondents			Actors in policy domain	Respondents			Actors in policy domain	Respondents		
		Survey	Network	Interview		Survey	Network	Interview		Survey	Network	Interview
Domestic environmental NGOs	17	11	11	11	15	12	12	12	9	9	9	9
Foreign government agencies	11	7	7	7	14	10	10	10	8	7	7	7
Government	30	18	18	17	38	19	18	32	13	13	13	13
Hybrid and multi-stakeholder groups/organizations	0	0	0	0	1	1	1	1	0	0	0	0
Intergovernmental organizations	4	2	2	2	5	3	3	3	5	5	5	5
International businesses/businesses organizations	2	1	1	1	6	2	2	4	0	0	0	0
International environmental NGOs and networks	13	11	11	11	16	15	15	15	9	9	9	9
International NGOs (non-environmental)	0	0	0	0	1	1	1	1	1	1	1	1
International research institutes	2	2	2	2	2	2	2	2	2	2	2	2
National business organizations	14	8	8	8	21	13	13	14	7	7	7	7
National research institutes	7	3	3	3	9	4	4	4	4	3	3	3
Other NGOs (domestic-based)	2	2	2	2	2	2	2	2	1	1	1	1
Total	102	65	65	64	130	84	83	100	59	57	57	57

Following our analytical framework, we investigate the extent to which governance in the REDD+ policy domain tends toward transformational change or projectification. We do so by analyzing changes in (i) actor's discourses; (ii) power relations; and (iii) information exchange and collaboration networks.

We operationalize these core elements in three different analyses. The first analyzes stances elicited through Likert-scale survey items investigating actors' agreement or disagreement with particular statements on REDD+ addressing, for example, results-based finance or measurement, reporting, and verification. We combine these results with qualitative analysis of data from semi-structured interviews. In our second step, we analyze changes in institutions and power relations, first, using qualitative analysis of actors' responses to questions regarding observed changes in the REDD+ policy arena. Complementing this valuable contextual information, we measure changes in the distribution of reputational power over time using an item from the network survey asking respondents to name actors out of the list of those in the policy domain at the time that they considered particularly influential (Brockhaus et al., 2014).

Finally, we assess changes in information exchange and collaboration activities using actors' social network survey responses. First, we use simple network visualization to discuss qualitative differences across the two networks. Second, we use frailty exponential random graph models (FERGMs; Box-Steffensmeier et al., 2018, 2019) to statistically test for the presence of network patterns that might indicate projectification. Because relationships between any given or organizations in a network may be influenced by relationships between other organizational pairs, relationships in inter-organizational networks cannot be considered independent observations. Exponential random graph models (ERGMs) avoid this problem by taking each network as a single observation and estimating how changes in statistics describing localized network structures affect the probability of observing the network (Robins et al. 2007;

Hunter et al. 2008; Handcock et al., 2018). Model coefficients are estimated on a log-odds scale reflecting the change in the probability of observing a network connection if that connection increases the observed statistic by one, holding the rest of the network structure constant. FERGMs extend this model, including a frailty term like that used in survival models to account for unobserved heterogeneity in organizations' propensity to engage in relationships with others. This extension corrects for omitted variables and reduces coefficient estimation bias while improving model convergence (Box-Steffensmeier et al., 2018, 2019).

Because information exchange and collaboration are reciprocal relationships, we use organizations' reports of these relationships to create undirected networks where organizations are connected if either reports sharing information or collaborating with the other. To measure changes in the network structures outlined in Table 2, we estimate several statistics for each relationship type for each year. First, we estimate a homophily term by organization type, which measures the propensity of organizations to collaborate within their own sector. A negative homophily term indicates bridging across sectors. We also estimate a geometrically weighted dyadwise-shared partner term, which measures the tendency for organizations to bridge between otherwise unconnected organizations. Controlling for dyadwise-shared partners, geometrically weighted edgewise-shared partner terms measure the degree to which organizations connected to a common partner are themselves connected. Including this term allows us to measure the presence of localized clusters in each network. We also include a term called Resource Exchange, which indicates that at least one of a pair of organizations reported giving funds or in-kind support to or receiving funds or in-kind support from the other. Finally, we include our reputational power measure, which indicates the degree to which organizations thought to be influential in REDD+ are also well connected in REDD+ policy networks. To mitigate confounding variables, we estimate dummy variables for each different organization type, setting domestic civil society organizations as our reference category.

We analyzed data collected in the semi-structured interviews through inductive coding based on the elements of our analytical framework supported by NVivo software for qualitative content analysis (QSR International Pty Ltd. Version 10, 2012). We further conducted descriptive measures of our policy networks using UCINET, NetDraw, and the sna package (Butts 2016) in R 3.6.1 (R Core Team, 2019), with ggplot2 (Wickham 2009) used for visualization. We estimate our FERGMs using the fergm package (Morgan et al., 2018) in R 3.6.1.

4. Results and Discussion: What has changed with the introduction of REDD+ over time?

Following the expectations laid out in Table 2, in this section we examine the evidence, based on three survey rounds that REDD+ in Indonesia has been trending toward TC or projectification. We begin by assessing the evidence from discourses and ideas before moving on to consider institutions and power relations and, finally, network structures.

4.1 Discursive practices, beliefs, and stances

Since 2012, there has not been any significant change in actors' attitudes toward REDD+ (see Figure 1). There are however nuanced changes visible over time. The plurality of respondents agree throughout that REDD+ has positive aspects, serving as an efficient, affordable, and fair scheme to mitigate climate change and provide incentives to improve forest governance. While, in 2012, many respondents were still undecided about the feasibility of REDD+ implementation, as indicated by the numbers responding "neither agree nor disagree" (an average of 20% on the basic premises of REDD+), in 2015, more

respondents did not respond at all, and, in 2019, actors appear to have stronger opinions on all nine questions.

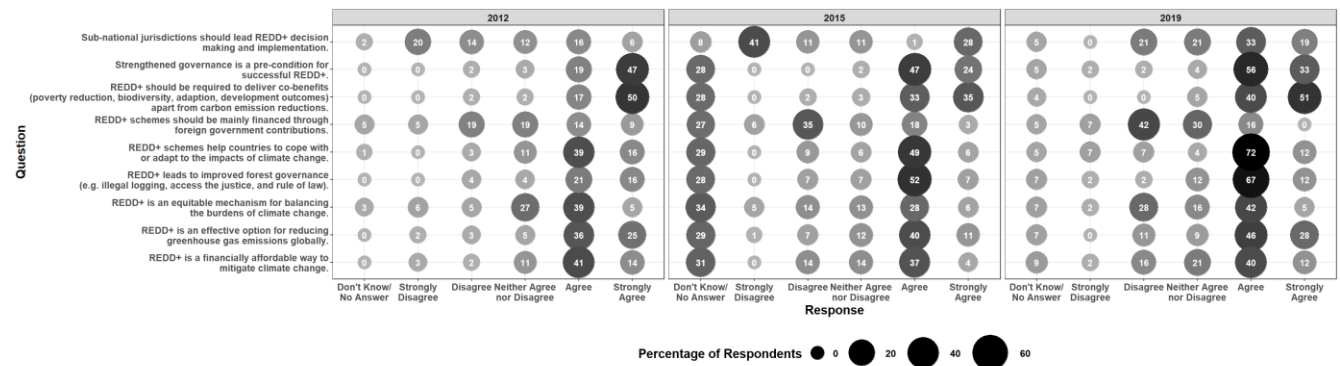


Figure 1 Normalized responses to 9 questions on stances, comparison of 2012, 2015, and 2019

Two issues were of particular interest in Indonesia. The first one is the issue of who should finance REDD+. In 2012, actors were unsure but, in 2015, opinions had already shifted toward disagreement that REDD+ should be mainly financed by foreign government contributions. This opinion was even stronger in 2019, with nearly half of respondents (49%) disagreeing or strongly disagreeing. Interviews confirmed that more actors in all organizational types were of the opinion that REDD+ should be a regular development program funded through the national development budget (Interviews, 21 May 2015, 6 August 2019, and 17 July 2019).

The second key issue is linked to decentralization and whether REDD+ should be governed at national or sub-national levels. The survey results show that on this issue responses are more dispersed, although there is an increasing trend toward agreement (see Figure 1 question 1; from 22% in 2012 to 29% in 2015, and 52% in 2019), despite substantial polarization in 2015. In some ways, REDD+ seems to be caught up in broader decentralization conflicts in Indonesia. Since 1999, when Indonesia's first law on regional government was issued, the locus of decision-making has shifted back and forth, from fully decentralized to less district-level autonomy (Moeliono et al., 2009). While Law 23, 2014, re-established national and provincial authority over forest resources, prior to that change provincial REDD+ efforts faced serious authority and capacity limitations (Gallemore et al., 2014; Jespersen and Gallemore 2018). Respondents favoring decentralization in 2015 tended to be NGOs and international organizations.

Following the 2014 election, the new administration introduced several changes to strengthen the state and improve governance (Kompas.com, 21 May 2014). Forest governance was partially recentralized to the provincial level, while villages were granted greater autonomy and funding (Law 23, 2014 and Law 6, 2014). To strengthen the state's forest presence, the government mandated that forests be administered under Forest Management Units (FMUs). By 2018, however, only about a third of the more than 600 FMUs planned were operational (MoEF 2018). At the same time, district-level forest agencies were disbanded under Law 23, 2014. Interestingly, in 2015, most respondents supported integrating REDD+ into general forest activities. While they favored multi-stakeholder arrangements, they also supported national government agencies', particularly the MoEF's, leadership in decision-making as two informants explicitly pointed out (Interviews, 27 February 2015, 3 March 2015, and 31 March 2015). In 2019, policy actors' focus seem to have shifted toward sub-national implementation of REDD+ (52% agree and strongly agree),

while leadership needs to remain at national level, as one informant pointed out (Interviews, 3 July 2019). This could indicate REDD+ being streamlined within the bureaucracy and assimilated into the wider development agenda, beyond being turned into an isolated project. On the other hand, as indicated by some informants, this finding could indicate confusion over the governance of REDD+ and hence any larger ambition for change in the implementation faces great uncertainty.

This dichotomy of enabling and hindering greater change, with REDD+ being part of larger political commitments and, at the same time, being assimilated into invisibility (and ineffectiveness, as some informants pointed out) is reflected in the overall political developments. Although repeating its support for global conventions on climate change and biodiversity conservation, President Widodo's administration focused on equitable economic development and nation building (Kompas.com, 21 May 2014). During his first term (2014–2019), there has been a significant increase in infrastructure construction to provide access to and from “the margins” of the country. At the same time, the government eased investment procedures and supported small- and medium-scale enterprise development, much of it still related to land and forest conversion (Herdahita, 2015). With emphasis on social forestry and agrarian reform programs, which promised to release 12.7 million ha of forestland to local communities, there seems to be little acknowledgment of larger-scale drivers and underlying causes of deforestation.

Regarding REDD+'s scope, respondents overwhelmingly agree or strongly agree REDD+ must deliver carbon and non-carbon benefits, with a slight dip in 2015. Some respondents expressed concern that REDD+ risked becoming everything and nothing, or, as an official in Central Kalimantan told us in 2012, “turning into an airplane so full of baggage that it could not take off”. As one respondent argued in 2015, there is no common understanding of REDD+: “REDD+ is translated as a scheme for forest management, REDD+ is discussed as an incentive scheme, as a pathway to Green Economy ([and] thus goes everywhere). The actual goal of reducing emissions through reducing deforestation and forest degradation is not mentioned. With the establishment of the REDD+ agency, REDD+ was considered a special, but overarching issue. As part of the overall forestry program of MoEF, its future is unclear” (Interview, 16 February 2015). Most interviewees in 2015 expressed disappointment with REDD+'s slow progress, though only one explicitly claimed that “REDD+ is dead.” One other had adopted a “wait and see” stance, returning to activities they specialized in prior to REDD+ in the face of uncertainty over the program's future in Indonesia. Interviewees in 2019 expressed similar frustrations on the slow progress (Interviews, 24 June 2019, 13 August 2019, and 4 September 2019).

In summary, policy actors' stances and beliefs consistently reflect rather high expectations toward REDD+ and its ability to deliver change at larger scale. New ideas that would challenge business as usual and, hence, reflect belief in ongoing change are less dominant, even though, particularly in the semi-structured interviews, interviewees expressed agreement that some positive changes, e.g. with regard to land tenure, were occurring. At the same time, informants indicated that the current changes miss the large-scale agricultural drivers of deforestation, and focus more on technical aspects of implementation.

4.2 Changes in institutional environment and power relations

One important early objective for REDD+ was that it be managed by an independent body (LOI, Norway Indonesia, 2010). A REDD+ Taskforce was established in 2010 with a 1-year mandate, which was extended twice before the REDD+ Agency was established in 2014. The agency, however, was soon dissolved as part of the Widodo administration's substantial governance reforms. This reshuffling also saw the Presidential Unit for Monitoring Development (UKP4, later BP-REDD+) and the National Climate Council (DNPI), both central REDD+ institutions, subsumed under the MoEF. The DNPI effectively became MoEF's Directorate

General on Climate Change Control, one of nine technical directorates general, with a sub-directorate focused on REDD+.

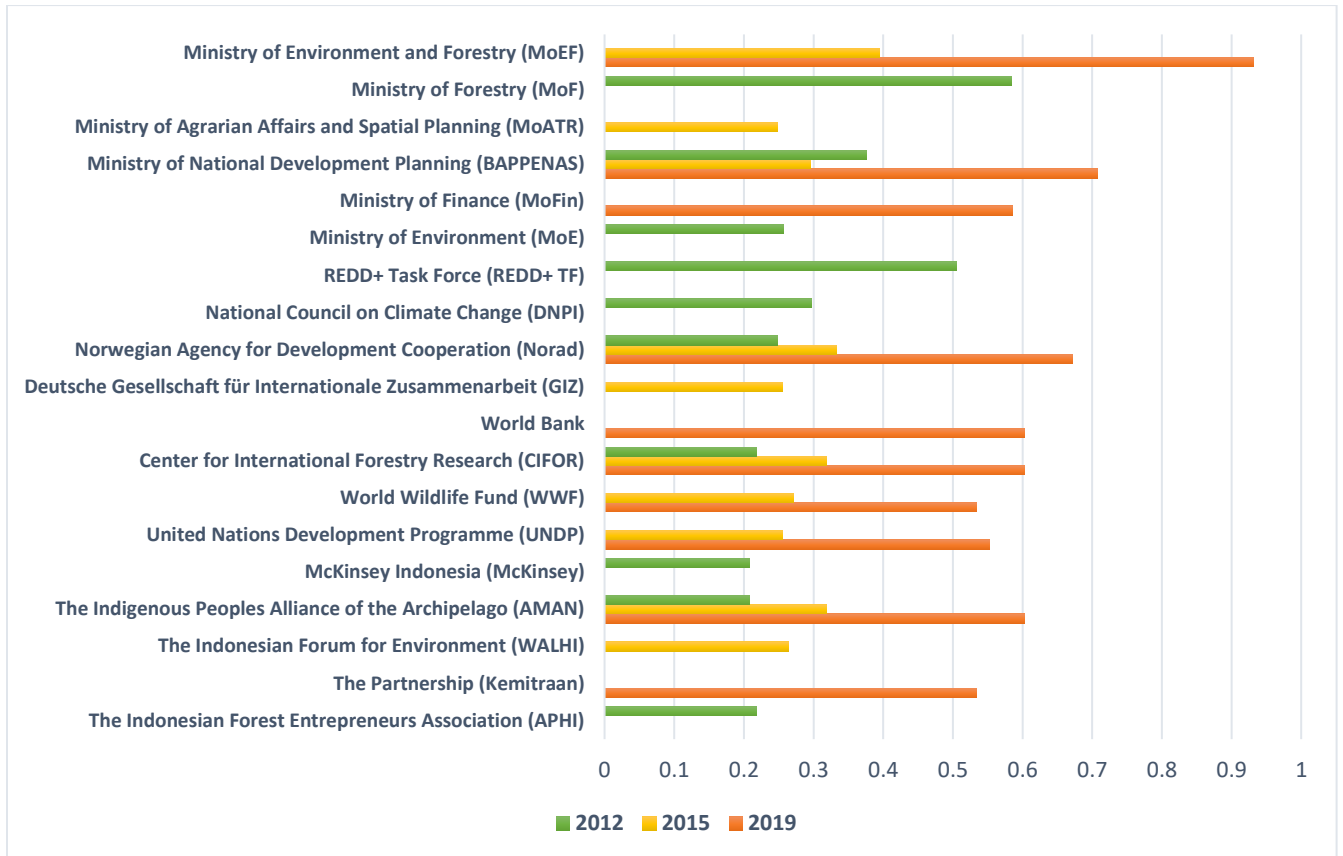


Figure 2 Most influential actors in 2012, 2015 and 2019 as calculated based on normalized indegree (percentage of maximum possibility)

When the REDD+ Agency and UKP4 were disbanded, however, many staff remained involved in REDD+ through working for other organizations in the environmental policy arena, such as the United Nations Office on REDD+ Coordination in Indonesia (UNORCID), United Nations Development Programme (UNDP), the World Resources Institute, and several other NGOs (authors’ observation). Others went to work for the new Directorate General on climate change. Some joined private firms, a few of which were heavily involved in deforestation, to run their sustainability programs. Others took on leading roles in corporate social responsibility organizations (Bisnis.com, 2016). Over the subsequent months, as the policy situation became clearer, many actors began to disengage from REDD+.

This turbulence meant that some organizations that were considered less influential in 2012 had become relatively more important by 2015, before declining in importance again by 2019 (see also Figure A1 in the appendix showing the changes in reputational power). As shown in Figure 2, in 2012, reputational power was concentrated in two organizations, namely the Ministry of Forestry (MoF at that time, but

which is subsumed under MOEF in the figure 2, while the Ministry of Environment (MoE) only shows in the 2012 round) and the UKP4 or as named in the figure 2, The REDD+ Task Force (REDD+ TF), the REDD+ Agency's predecessor (Brockhaus and Di Gregorio 2014; Moeliono et al. 2014). These two most influential government bodies, the Ministry of Forestry and the REDD+ TF, had a number of conflicting views over REDD+ and the role of forests and forestry in Indonesia in general, and while power was concentrated in these two actors, the REDD+ policy space was rather contested between TC (represented by the REDD+ agency) and BAU (represented by the MoF (Brockhaus and Di Gregorio 2014). In addition, at the time, informants suggested there was competition for leadership over REDD+ between several ministries, notably the Planning Agency (BAPPENAS) and the MOF, though the MoEF consolidated authority following the 2015 reforms. Following the administrative reshuffling in 2015, the list of most influential actors expanded to include NORAD, The Indigenous Peoples Alliance of the Archipelago (AMAN), and CIFOR, replacing the disbanded REDD+ Agency and DNPI (see Figure 2). In 2019, MoEF and BAPPENAS were again dominant actors, though, interestingly, the World Wildlife Foundation (WWF) had slightly more reported reputational power than BAPPENAS. The changes in the distribution of reputational power over time were substantial as shown in Figure A1 in the appendix.

Although there was significant confusion regarding power relations in 2015, respondents have consistently recognized REDD+ as a state-led initiative. The MOF and, since 2015, MoEF have been consistently considered influential in REDD+, even though decreasing over time. In the aftermath of 2015 reforms, only slightly over half of respondents considered MoEF most influential compared to almost all in 2012. The decrease in MoEF's perceived influence does much to explain the relative increase in reputational power across organizations in 2015. By 2019, however, MoEF's relative reputational power had recovered substantially, perhaps reflecting acceptance of REDD+'s position as a Ministry sub-directorate.

Despite this considerable volatility, some important REDD+ Agency initiatives, such as the One Map policy and the moratorium on new licensing, continued. The National REDD+ Strategy remains valid and several new policies have been developed. In subsequent years, the government took progressively greater ownership of REDD+, absorbing it into the forestry bureaucracy. While this meant greater institutional embeddedness, it also meant an end to the government's institutionalized multi-stakeholder approach, making REDD+ similar to previous anti-deforestation projects (Li, 2019a), or as Hodgson et al. (2019) showed, implementing it as routine projects.

In 2012, all the actors considered most influential were governmental entities; in 2015, non-governmental actors became relatively more prominent, and were recognized as having influenced REDD+ policy and development. Despite the MoEF's recovery in perceived influence, non-governmental actors remained prominent in 2019. AMAN, for example, came to be recognized as one of the most influential organizations in 2015. Although the organization first became involved in REDD+ to advocate for traditional land rights and social safeguards for indigenous peoples, this agenda made the organization influential in efforts like the One Map policy, and AMAN achieved substantial influence (Interviews, 1 February 2010 and 4 March 2015). Like many NGOs who were active in supporting REDD+, however, AMAN refocused on its original mandate—securing customary tenure rights (Interviews, 1 July 2019) and reducing their involvement in REDD+. AMAN increased in influential reputation from 2012 to the third most influential organization in REDD+ in 2015, but by 2019 had dropped to 14th. AMAN is not alone in this regard. Other NGOs interviewed had also lost interest in REDD+, effectively ceding it to MoEF.

These shifts in reputational power showed an initial move toward TC when decision-making appeared to be more inclusive but, by 2015, business as usual had taken over. By 2019, the REDD+ policy domain was clearly dominated by government, with little contestation between government positions in their overall

REDD+ stances. Several ministerial regulations, which were issued since indicate a shift towards projectification, regulating REDD+ implementation from a technical perspective (P 70, 2017 on REDD+ implementation, P 71, 2017 on the national registry of REDD+ projects, P 72, 2017 on monitoring).

4.3 Networks of Information exchange and collaboration

Many authors call for REDD+ to be built on multi-stakeholder engagement and coordination (Korhonen-Kurki et al., 2013; Glover and Schroeder, 2017; Larson et al., 2018; Ekawati, et al., 2019), features we also associate with TC. As discussed in our theoretical framework, information exchange and collaboration across sectors and bridging between local network clusters might be evidence of TC, while relatively separate local clusters and networks dominated by powerful and well-resourced organizations would be evidence of projectification.

Figure 3 maps information exchange and collaboration networks for our three time periods. For visual clarity, we show only reciprocal ties that is connections in which both partners report the relationship in question, providing a picture of the strongest relationships in the network. These images suggest that, turbulence in 2015 notwithstanding, both information exchange and collaboration have become more integrated over time. In 2012, the reciprocated information exchange network was clearly separated into three disconnected groups, with the largest of those groups composed of two weakly connected clusters. The most influential governmental agencies, notably, were not connected to the bulk of the information network via reciprocal ties. By 2015, the reciprocated information exchange network was much more densely connected, forming a single large group linking organizations from multiple sectors. With two notable exceptions, national government agencies remained peripheral. By 2019, the network was even more consolidated, with overlapping reciprocal ties between organizations from all sectors. Our interviews suggest this evolution might reflect more readily available information.

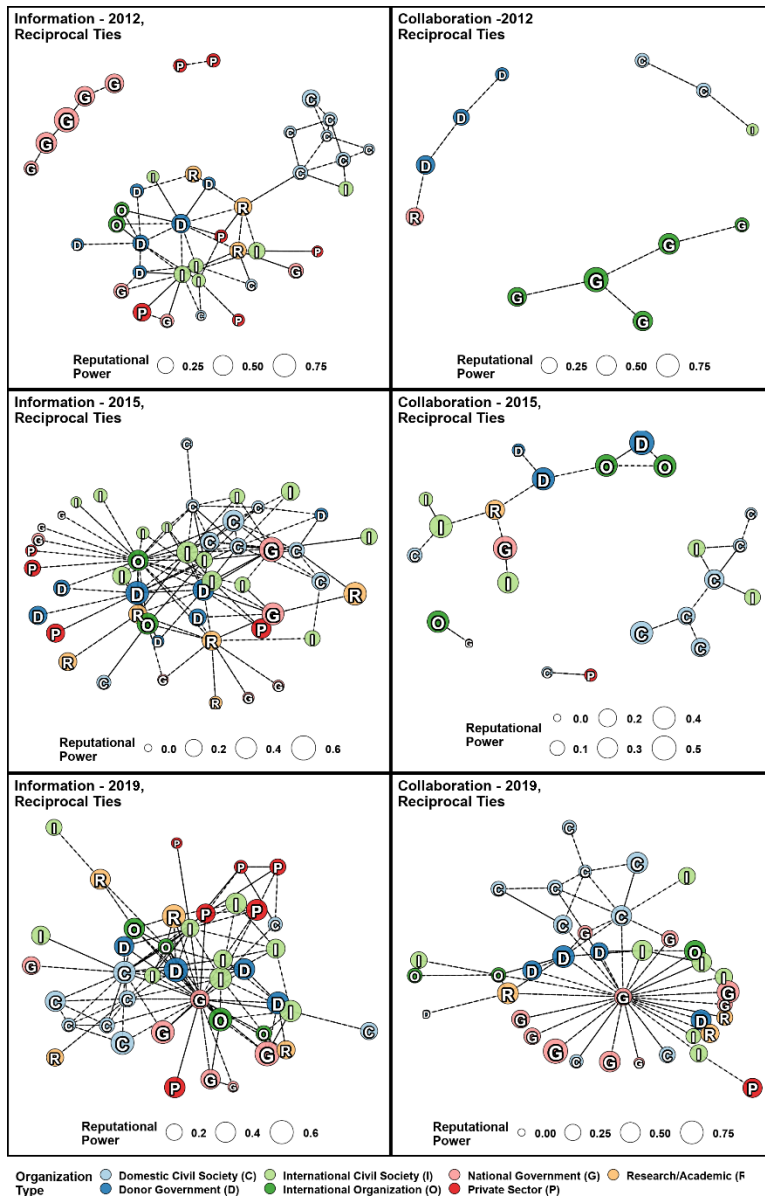


Figure 2 Information exchange and collaboration networks in 2012, 2015, and 2019

When Indonesia’s REDD+ policy domain first developed, information could be a valuable and exclusive resource, often limited to officials with regulatory power. Few actors were knowledgeable and these often acted as brokers or gatekeepers. By 2015, information on REDD+ issues had become more widely diffused. Numerous and frequent meetings, workshops, and conferences on REDD+ provided stakeholders with opportunities to get to know each other, build trust and connections, and exchange knowledge.

Collaboration exhibits a similar, though less substantial, trend. In 2012, reciprocal collaborative ties existed almost exclusively between organizations in the same sector. By 2015, reciprocated collaborative ties more often crossed sectors, though notably domestic civil society organizations continued to be separated from government organizations, whether national or international. Collaborative ties in 2015 may indicate the importance of resources. One cluster links an international conservation organization

with a government agency, while the largest cluster includes one donor (NORAD) and two well-resourced international organizations (UNDP and the World Bank). Even in the NGO group, two key NGOs anchor collaboration by channeling funds for projects from larger donors. In 2019, the network changed significantly, as governmental organizations clearly took on a central position. This is in line with the new policies regulating REDD (Ministerial Regulation P. 70, 2017) and the ministerial circular (SE.3, 2017) on restricting direct carbon trading.

This new pattern suggests that REDD+ is controlled by government, information exchange is more within groups than among groups, and REDD+ is perceived and implemented as project. Indeed, as Fred (2019) explained, bureaucracy often operates through projects already prepared for in the design of a policy. Although a project mode of governance is not necessarily a bad thing, it does imply that REDD+ is governed as a narrow sectoral issue and is thereby unable to overcome extra sectoral drivers of deforestation. Hence, one could argue that REDD+ might therefore be considered a hollow policy, focusing on implementing technical issues at a very local scale but ignoring the larger ambition of halting deforestation (Sahide et al., 2018).

While Figure 3 suggests these associations, it is necessary to turn to our FERG estimates for a clear comparison of these network structures over time. Here, the results differ somewhat depending on whether we consider information exchange or collaboration. Each network exhibits moves toward both TC and projectification. Over the three time periods, information exchange becomes less tied to resources and power, as seen in substantial declines in the coefficients for resource exchange and reputation power from 2012 to 2019. On the other hand, while homophily drops from 2012 to 2015, it rises again in 2019, suggesting increased information exchange within and decreased information sharing across sectors. While bridging between clusters increases in 2015, denoted by a statistically significantly positive dyadwise shared partner coefficient, this is no longer the case in 2019.

Collaboration networks also show mixed results. While avoidance of bridging across sectors declines between 2012 and 2019, as does localized clustering, resource exchange and reputational power increase slightly in importance between 2015 and 2019, and there is a steady increase in homophily across over time. While these findings are mixed, another piece of evidence suggests the projectification patterns in these networks may be more important than the transformational ones. In all three surveys, respondents consistently saw coordination across policies and sectors as a key problem, echoing observations made by other authors (Indrarto et al., 2012; Scheyvens and Setyarso, 2012; Mulyani and Jepson, 2013). While weak coordination is a common problem inherited from periods in which competition among government agencies for funding was the norm (Woo and Nasution, 1989; Aspinall, 2013), some interviewees contended it also reflected agencies' tendency to adhere literally to their specific mandates (Interview, 4 May 2015, 6 May 2015 and 20 April 2015), which often do not include coordination. That respondents voiced these concerns consistently over time suggests that the limited positive changes in network structures we observe may be insufficient to lead to TC.

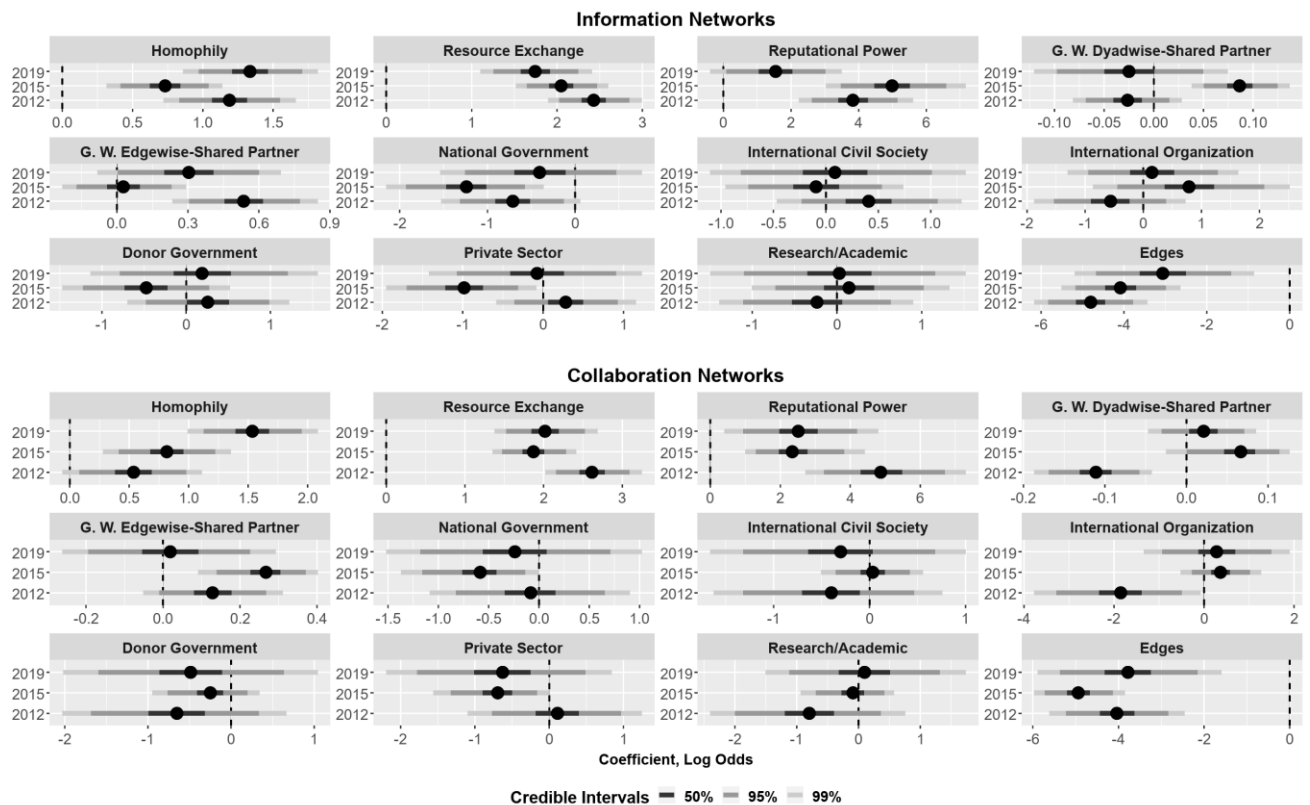


Figure 3. Estimated FERGM coefficients for information and collaboration networks, by year. Model fit indicators are displayed in the appendix.

4.4 A mode for transformational change or a transformation toward a mode of projectification?

In the latter half of 2015, some events led to hope for TC, with a bad fire season in 2015 (World Bank, 2015) attention returned to forest governance, especially in peatlands, prompting new law enforcement efforts (Kuwado, 2016). At the end of that year, President Widodo presented a new plan to manage and protect peat forest at COP 21 in Paris (Setiawan, 2015). Some larger private companies also increased their commitments to zero deforestation and peatland rehabilitation (Pirrard et al. 2015; Pacheco, 2016 Jopke and Schoneveld, 2018). A newly established Peat Restoration Agency began to champion some of the reforms first mooted under the REDD+ Agency. Among other developments, this led to plans to implement a REDD+ demonstration project supported by the World Bank's Forest Carbon Partnership Facility program in East Kalimantan from 2020 to 2024 (Ekawati et al., 2019). The Indonesian Government also considered creating a mandatory carbon tax or government-run domestic carbon market (Kumparan.com, 2018)

Many things did change for the better, there is more stakeholder involvement, more awareness of the issues, and easier information exchange. Yet, although there is renewed interest in combating fire and haze problems, these policies often feature stop gap measures, targeting swidden farmers rather than targeting large-scale actors involved in fires (Thung, 2018). The new policies clarify how REDD+ is to be implemented but do not include ways to overcome the real drivers of deforestation. Similarly, the larger involvement of the private sector and their pledges for zero deforestation might indicate the awaited for

change but might also simply be promissory greenwashing (Greenpeace, 2009; Jopke and Schoneveld, 2018). In early 2020, the government issued a draft law intended to facilitate more investments and ease permit procedures. This “omnibus law” will overthrow a slew of regulations in the fields of mining, forestry, labor, and resource exploitation. It will promote economic growth but at the cost of the environment, since, if accepted, it will also circumvent required environmental impact statements (Nugraha, 2020).

Time, as we would argue, is running out to realize TC so that standing forests serve society, rather than selected interests of BAU. Admittedly, it may be difficult to think of alternative pathways to major change. The practice of implementing policies as projects is taken for granted and has become deeply embedded in the way of governing (Li, 2016; Skutch and Turnhout, 2020). Thus, rather than indicating a possible shift to new modes of governance, these changes might reflect a response to government inaction, with changes in structure resulting in uncertainty on the future of REDD+ (Interviews, 8 July 2019 and 9 July 2019). In 2017, MoEF issued several regulations which anchored REDD+ within the ministry, reflected in the new understanding of the 2019 interviews (Interviews, 24 June 2019, 13 August 2019, and 4 September 2019).

Interviews in 2015 and 2019 showed a general agreement that REDD+ should be mainstreamed as part of development policy, but also saw REDD+ more as tool for sustainable forest management (SFM) and green development (Interviews, 24 March 2015, 16 March 2015, 19 March 2015, 17 April 2015, 24 April 2015, 4 July 2019, and 9 July 2019), rather than an initiative on its own. Indeed, one respondent explicitly stated that, over the past 10 years, REDD+ had only been a series of projects (Interview, 9 July 2019).

While information exchange shows positive change toward more transparency and inclusiveness, the network patterns we investigate also suggest projectification. As Fred (2019) explains, projectification does not only imply an increasing number of projects but suggests a wide range of processes of change in which organizational and individual actors transform and adapt to practices, assumptions, values, beliefs, and rules associated with project management.

Processes within the MoEF remain opaque, and it is difficult to understand how roles and responsibilities affecting REDD+ are distributed. Changes in discourse, instead of highlighting efforts to overcome the underlying causes of deforestation and forest degradation, highlight green development with REDD+ as a tool (Pham et al, 2018) while MoEF specifically seems to be returning to a focus on SFM. If REDD+ is considered more a tool for sustainable SFM—and SFM is a goal across the MoEF—where does REDD+ belong? While REDD+ is technically housed in a sub-directorate, virtually all mandates of the different directorates general in MoEF impinge on different aspects of REDD+. Nevertheless, they may lack the resources or motivation to take part. The DG of social forestry, for example, cannot afford to spend much energy on REDD+-related issues in the face of more urgent demands for rights and resolution of tenurial problems. The government promised increased subsidies for smallholders, more development funds to be managed by villages, and to devolve 12.7 million ha to local communities, yet, the new DG of social forestry has not been involved in any discussions on REDD+ (Interview, 7 July 2015).

At the start of REDD+ there was momentum for a new mode of governance. Our evidence analyzing changes in the Indonesian REDD+ policy arena over time indicate that current plans and activities may be deflecting transformative tendencies into business-as-usual development projects, and as Li (2016, 2019a, b) would say, rendered technical, obscuring political questions and struggles by reframing them as purely rationally decidable questions, as indicated by the 2017 regulations. Nevertheless, REDD+ is still a relatively young and dynamic policy arena, and a rekindling of larger processes of reform might still be in reach.

5. Conclusion

Previous work on REDD+ in Indonesia highlighted an aspiration for change at national levels driven by the REDD+ agenda (Peskett and Brockhaus, 2009; Indrarto et al, 2012; Scheyvens and Setyarso, 2012; Mulyani and Jepson, 2013). Our findings confirm a strong belief in these ambitions. The plurality of actors continue to acknowledge REDD+'s potential to deliver desired changes. Furthermore, their policy stances seem to reflect learning about need for fair benefit sharing and the limits of a carbon forestry, expressed in the general consensus that REDD+ needs to deliver both carbon and non-carbon benefits. In addition, we showed how an indigenous peoples' organization, together with other civil society groups, has risen in importance within the REDD+ domain, successfully claiming political grounds to put forward a tenure agenda requiring major forest and land governance reform. In 2015, for example, AMAN moved into a space abandoned by most governmental actors and hence gained relative influence, though it moved away from REDD+ between then and 2019. In addition, a closer look into who exchanges information and collaborates with whom, and, perhaps most importantly, how REDD+ has been "institutionalized" over time is consistent with a progressive projectification of REDD+.

Overall, our findings show that despite high hopes and some promising developments, REDD+ has not succeeded in creating TC. Rather, REDD+ has been rendered technical, strictly regulated by government with no systematic increase in cross-sector information exchange or collaboration.

Our findings further suggest REDD+ is transforming into a task, a project to be dealt with within a bureaucratic apparatus. Similarly to Barr et al.'s (2010) analysis of the MOF's forest restoration fund, we find evidence of failures to realize change over time. REDD+'s initial transformational ambitions might be milled through bureaucracy into one among many other sustainability and development projects. This interpretation is further supported by the findings from the collaboration networks, where project-like structures emerged, with ties between funders and receivers, a project relationship, with payers and performers. In the totality of Indonesian development, REDD+ has thereby diminished in importance and forests are considered as areas to expand agriculture and or infrastructure development.

One can now question if the projectification of REDD+ is a convenient way to avoid larger transformations required for countries (and their trading partners) to have a real chance to halt deforestation. Alternatively, projectification may reflect simply a fall back on habitual ways of going about policy.

For the objectives of reducing emissions from avoided deforestation and forest degradation, and related co-benefits, it does not matter exactly what drives REDD+'s projectification. The result remains the same: so far, a lack of change in the desired outcomes. It will be important to further observe and analyze the developments in Indonesia and elsewhere to understand which forces are at play, and how to counter strategies intended either to undermine change or to avoid falling back into old habits that fail to halt tropical deforestation.

Appendix

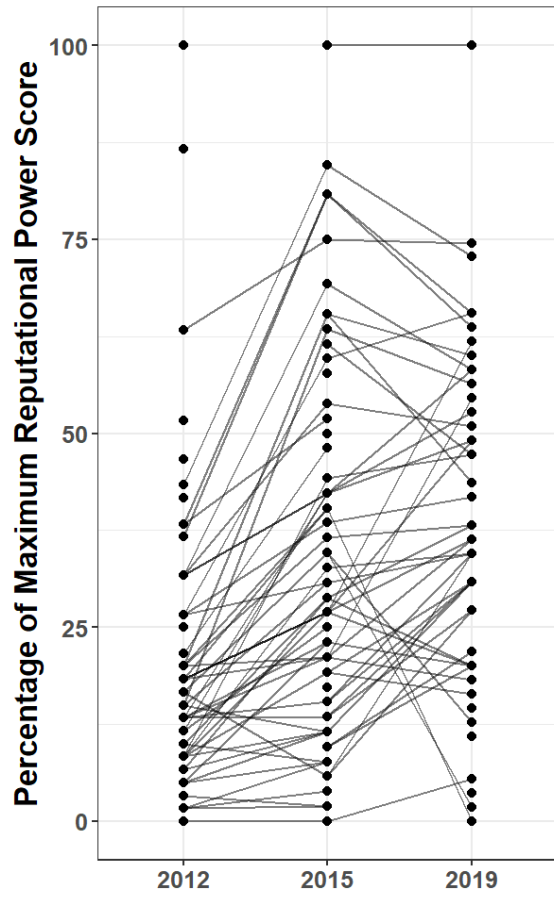


Figure A1. Changes in reputational power, 2012, 2015, and 2019. Each node represents an actor and lines connect actors observed across time periods.

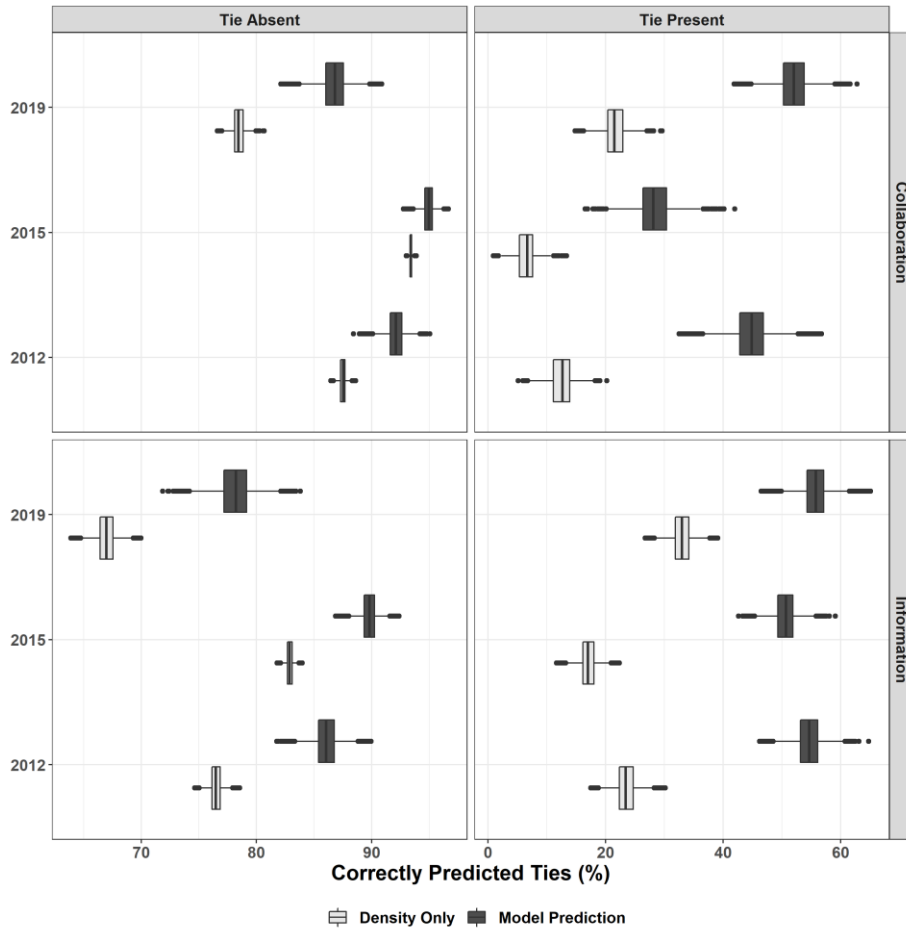


Figure A2. Boxplots showing the proportion of correctly predicted network edges for 10,000 networks simulated from each estimated FERGM, compared to correctly predicted ties that would be obtained by randomly permuting the network ties.

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