

The costs of elite-oriented multi-stakeholder forums to address deforestation: the case of the Green Municipalities Program in the Brazilian Amazon

M. LONDRES^a, A.M. LARSON^b and J.P. SARMIENTO BARLETTI^b

^a*State University of Campinas, UNICAMP, R. João Pandiá Calógeras, 90 - Cidade Universitária, Campinas, SP, Brazil*

^b*Center for International Forestry Research, Av. La Molina 1895, La Molina, Lima 15023, Peru*

E-mail: marina.londres@gmail.com, a.larson@cgiar.org, j.sarmiento@cgiar.org

HIGHLIGHTS

- The Green Municipalities Program (PMV), one of Brazil's most famous environmental multi-stakeholder forums (MSF), favored Pará state's rural elites and agribusiness over its indigenous communities and smallholders.
- The PMV's focus on the effects over the causes of deforestation left unchallenged the underlying structures driving both deforestation and social injustice.
- Although the PMV's implementation of the Rural Environmental Registry (CAR) was widely viewed as successful, it prioritized medium- and large-scale producers, which interviewees noted increased agrarian conflicts and tenure insecurity for underrepresented communities.
- Research revealed that the dominance of powerful elites may limit the meaningful participation of underrepresented groups, leading to outcomes that reinforce unequal development models.
- MSFs may not be the most appropriate ways to address land rights and deforestation (and may contribute to injustice) under conditions of acute inequalities in access to power, resources and land.

SUMMARY

This paper examines the Green Municipalities Program (Programa Municípios Verdes – PMV) – a major multi-stakeholder forum designed to combat deforestation – in Pará state in the eastern Brazilian Amazon. We qualitatively analyzed in-depth interviews with 39 people with different perspectives: respondents with deep knowledge of the context but no direct involvement in the program, organizers of the program, diverse program participants, and diverse non-participants. We interrogated the PMV's strategy to address deforestation by collaborating directly with the powerful sectors that are driving it, while excluding indigenous and grassroots organizations from the process. The results reinforce the critique of 'anti-politics' approaches that prioritize technical solutions that focus on the consequences of environmental problems (such as deforestation) without addressing their underlying causes. The research highlights the risks of multi-stakeholder processes in highly unequal contexts that do not question the power of elites, and questions the legitimacy of initiatives that gain wide acclaim but are perceived locally as unjust.

Keywords: political ecology, environmental governance, environmental justice, transformative politics, land conflicts, conservation initiatives

Coûts des forums à multi parties prenantes orientés vers les élites, pour faire face à la déforestation: le cas du Programme des municipalités vertes dans l'Amazonie brésilienne

M. LONDRES, A.M. LARSON et J.P. SARMIENTO BARLETTI

Cet article examine le Programme des municipalités vertes (Programa Municípios Verdes-PMV), un forum à multi parties prenantes majeur, créé pour combattre la déforestation, dans l'état du Pará, dans l'Amazonie brésilienne occidentale. Nous avons analysé qualitativement des interviews en profondeur auprès de 39 personnes ayant différentes perspectives: des interlocuteurs possédant une connaissance poussée du sujet, mais sans implication directe dans le programme, des organisateurs du programme, divers participants de ce programme, ainsi que divers non-participants. Nous avons mis en question la stratégie du PMV pour faire face à la déforestation, en collaborant directement avec les puissants secteurs qui la conduisent, tout en excluant systématiquement les indigènes et les organisations de base du processus. Les résultats renforcent la critique des approches «anti-politiques» qui priorisent les solutions techniques se concentrant sur les conséquences des problèmes environnementaux (tels que la déforestation), sans faire face à ses causes sous-jacentes. La recherche souligne les risques des processus à multi parties prenantes dans des contextes hautement inégaux, qui ne remettent pas en question le pouvoir des élites, et suspectent la légitimité des initiatives gagnant les bravos, celles-ci étant perçues localement comme fortement injustes.

Los costos de los foros multiactor orientados a las élites para abordar la deforestación: el caso del Programa Municipios Verdes en la Amazonía brasileña

M. LONDRES, A.M. LARSON y J.P. SARMIENTO BARLETTI

Este artículo examina el Programa Municipios Verdes (PMV), un importante foro multiactor diseñado para combatir la deforestación en el estado de Pará en la Amazonía oriental brasileña. Analizamos cualitativamente entrevistas en profundidad con 39 personas con diferentes perspectivas: informantes con un conocimiento profundo del contexto pero sin participación directa en el PMV, organizadores del PMV, diversos participantes del PMV, y diversos actores que no participaron. Cuestionamos la estrategia del PMV para abordar la deforestación por medio de colaboraciones directas con los sectores poderosos que la impulsan, y la exclusión sistemática del proceso de las organizaciones indígenas y de base. Los resultados de la investigación refuerzan la crítica de los enfoques “antipolíticos” que priorizan las soluciones técnicas que se centran en las consecuencias de los problemas ambientales (como la deforestación) sin abordar sus causas subyacentes. La investigación destaca los riesgos de los procesos multiactor que no cuestionan el poder de las élites en contextos muy desiguales, y cuestiona la legitimidad de las iniciativas que gozan de un amplio reconocimiento pero que se perciben localmente como muy injustas.

INTRODUCTION

Reducing deforestation and forest degradation is a priority in the global agenda to address the climate crisis, focused around global environmental conventions such as the Kyoto Protocol and the Paris Agreement. As a result, different national and subnational responses have been developed to combat deforestation – including the creation of policies and programs, investment in law enforcement, creation of protected natural areas, reforestation projects, inter-sectoral dialogues and multi-stakeholder platforms. As part of this wider search for ideas to address the climate crisis and related environmental challenges, the involvement of multiple stakeholders and inter-sectoral coordination has been advocated as an effective and inclusive way of dealing with these issues (Buchy and Hoverman 2000, Hemmati *et al.* 2002). Environmental governance mechanisms suggest looking beyond government, toward public–private–civil society partnerships. Also, researchers and policy advocates call for the inclusion of the private sector, considering the growing entrepreneurship and incentives to achieve conservation objectives (Kooiman 2003). Nevertheless, calls for the inclusion of powerful elite sectors (see Estrada-Carmona *et al.* 2014, Lima *et al.* 2017) in environmental and sustainable land use multi-stakeholder forums has taken place with little reflection on whether bringing such powerful players to the discussion and decision-making arenas will compromise conservation and environmental justice concerns.

Indeed, in rural Latin America – marked by conflicts over land and resources, violence, and deep inequalities – powerful elites may detract from the potential equity of multi-stakeholder forums, challenging the meaningful participation of historically underrepresented social groups. This may lead to outcomes that reaffirm unequal development models and therefore fail to challenge the status quo (Williams 2004). While the dominant development discourse considers that participatory democracy and good governance principles can address elite capture, in reality, it seems insufficient to challenge the domination of elites that often detrimentally affect the outcomes of development projects (Platteau 2004).

For instance, the UN-REDD program calls for the important role of stakeholders’ participation in land-use decision making, but fails to address the role of elites (United Nations 2011). Moreover, studies show that decentralization often reinforces the power of elites, and that the exclusion of marginal, politically weak and poor stakeholders has negative impacts on equity and community welfare (Berkes 2009, Persha and Andersson 2014, Platteau 2004).

Advocates of multi-stakeholder platforms defend the idea that dialogue may be sufficient to achieve common understandings and to move forward on agendas based on general agreements, failing to acknowledge historical and ongoing political contestations (Ravikumar *et al.* 2018). However, not only do different actors have different interests, concerns and perspectives (Martin *et al.* 2016), but also in some settings, land-use objectives may prove to be mutually incompatible and impossible to reconcile through dialogue and negotiation. Different stakeholders may have deeply divergent territorial-based identities, such as indigenous organizations and forest-based and rural grassroots populations, in comparison to large-scale farmers and commodity producers. To put it differently, multi-stakeholder platforms may include coalitions of highly capitalized development actors who benefit from deforestation and small-scale farmers, peasants and indigenous peoples who either do not benefit or benefit unequally from conventional economic growth (Rudel 2007). These social actors operate across starkly distinct ideologies and development visions, each representing profound implications regarding the conservation and social justice nexus, as they shape land use and socioeconomic outcomes (Bebbington *et al.* 2008, Rudel 2007). Based on the lack of acknowledgment that different actors are committed to furthering their own agendas, scholars have been pointing to the limits of collaborative governance as a means for achieving conservation and social justice objectives (Sayer *et al.* 2013, Rudel 2007).

Myers *et al.* (2018) highlight a lack of attention to political dynamics in multi-level governance platforms, as global actors continue to apply technical solutions to issues that are amply recognized as deeply political (Doolittle 2010). They find that the failure of conservation and REDD+ project

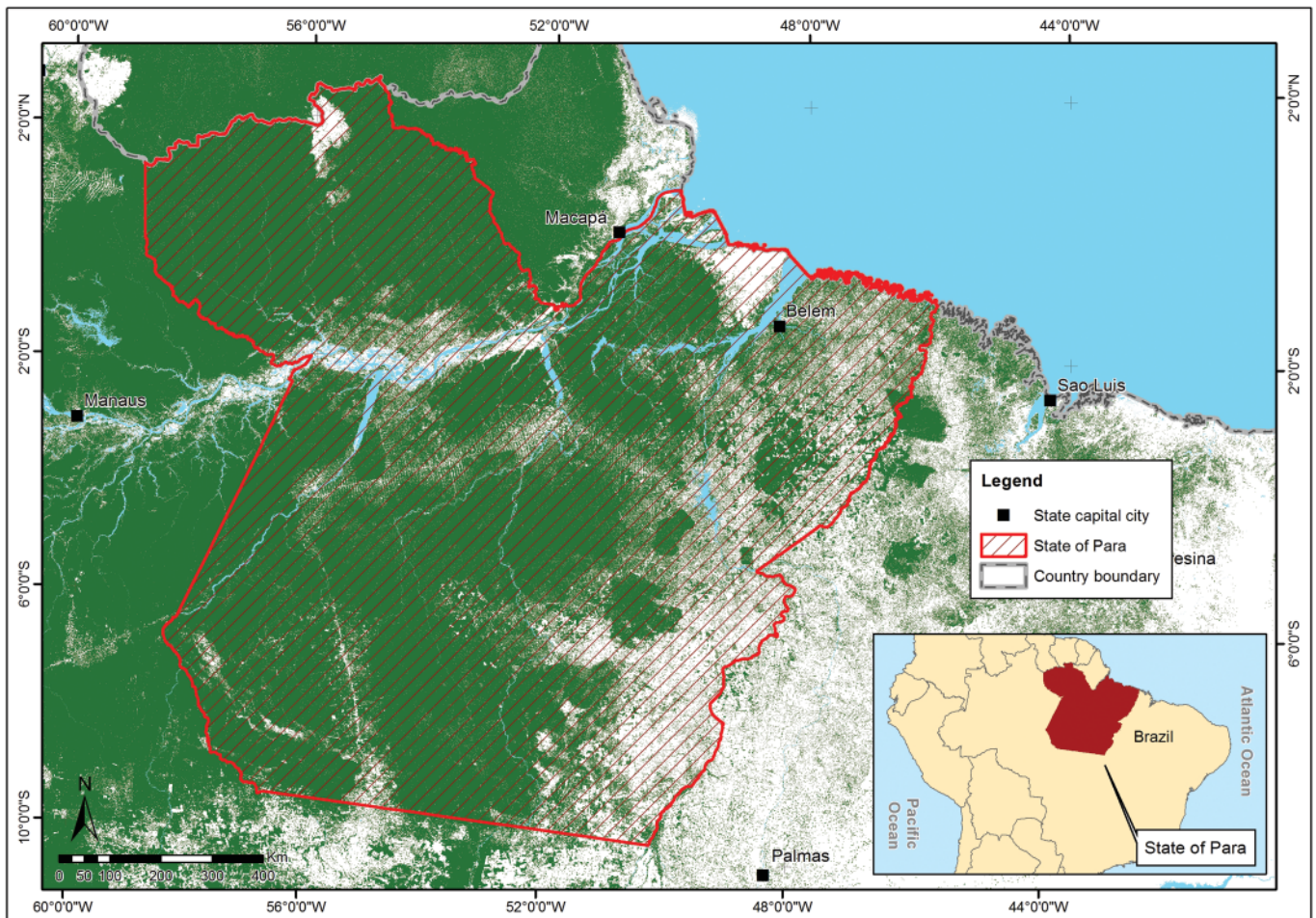
proponents to engage with local politics, without regard for political solutions – such as the representation of local people’s concerns and recognition of their rights – has detrimental effects on the legitimacy of their initiatives. By ignoring the political dimensions of justice that relate directly to power and require socio-political transformations, project proponents and governance systems may contribute to injustice and illegitimacy (Myers *et al.* 2018). Guided by anti-political discourses and self-proclaiming politically “neutral” authorities, they advance the anti-politics agenda (Li 2007, Ferguson 1994). Anti-politics refers to a process that separates technical goals (e.g., reducing deforestation) from political change and social transformation (Bebbington 2005, Büscher 2010), thus perpetuating “business as usual” realities.

This paper explores these issues by analysing the Green Municipalities Program (*Programa Municípios Verdes – PMV*), a major state-level program in Pará state that operated through a multi-stakeholder forum (MSF) – the Steering Committee – in the Brazilian Amazon. The PMV (initiated in 2011) became one of the largest and most important forums to address deforestation in Brazil. Pará (Figure 1), comprising 144 municipalities, is the second largest Brazilian state (1,247,954 km²) and only slightly smaller than Peru, the country with the second largest share of the Amazon. The

PMV was organized to address deforestation in Pará, but its solution was largely limited to the participation of medium and large-scale farmers and ranchers, excluding the state’s local and indigenous communities. This paper analyses and discusses the PMV’s effectiveness, equity, and inclusiveness to consider whether an MSF is an appropriate strategy to address deforestation and unsustainable land use in areas like Pará, where powerful elites – with unsustainable development priorities and highly unequal access to political and economic power – have been part of historical conflicts over land with indigenous and local communities, who already have precarious access to land and resources.

What follows is a brief description of the research methods through which the data for this paper was collected. The next section gives the historical context of the region, the national policies that catalysed the PMV’s creation, and the MSF’s general description. Research results follow, based on the perceptions of interviewed participants and non-participants to the PMV, as well as official documents and data on deforestation and the Rural Environmental Registry. The paper concludes with a discussion of the program’s overall effectiveness, legitimacy and the (side)effects of this elite-based MSF.

FIGURE 1 *Map of Pará State*



METHODS

The paper is based on fieldwork and desk research carried out as part of a comparative study by the Center for International Forestry Research (CIFOR) on the effectiveness and equity of subnational multi-stakeholder forums (see Sarmiento Barletti and Larson 2019). Fieldwork was conducted between April and June 2018 in Pará, where 39 individuals – in representation of their organizations – were interviewed (Table 1). Each interview lasted 3 hours on average and was carried out in Portuguese. Four semi-structured questionnaires were designed and applied with different groups of interviewees. The first – “key context questionnaire” – was carried out with five actors, each representing a different sector -academia, non-governmental organizations, government agencies, grassroots organizations, and the private sector – and with recognized authoritative knowledge on the regional context and who had not participated in the PMV. The questionnaire included 36 questions designed to gather social, political, environmental, land-use change and historical information on the region where the PMV took place, as well as interviewees’ perceptions of the MSF’s process, impact and the MSF’s legitimacy. The second – an “organizers questionnaire” – was applied with 3 PMV organizers, including 22 questions regarding its motivations, organization, structure, impacts, outcomes, and conflicts of interest between participants, among others. The third questionnaire – a “participants’ questionnaire” – contained 37 questions and was conducted with 19 PMV participants from different sectors: government, NGOs, and the private sector. Interviews conducted for this questionnaire sought to discuss topics including the PMV’s working dynamics, composition, power relations and inequalities between its participants, local conflicts relevant to the MSF, and its legitimacy and outcomes. Finally, a “non-participant questionnaire” was designed to gather the perspectives of stakeholders that did not participate in the PMV. This questionnaire was applied to 12 individuals from different sectors – government, grassroots organizations, indigenous organizations, universities, NGOs and private sector – and contained 28 questions approaching non-participants’ perspectives on the PMV’s representativeness,

effectiveness, equity, impact, long-term effects and outcomes. No essential sectors were left out of the research design and inquiry. Publications, reports, and other related documents published by the PMV were also reviewed.

Interviews were transcribed, translated into English and organized in an excel database. Transcribed interviews were also imported into the MAXQDA software for managing and analyzing qualitative data. Preliminary qualitative analysis was carried out by organizing the key themes and general trends observed across all responses. Then, in conjunction with official documents and literature, organizers’ and participants’ responses on the PMV’s main goals, strategy, composition and dynamics were synthesized and described. To analyse the program’s effectiveness and equity, responses were grouped by actor type – government, NGOs, private sector organization – and then further grouped by trends. Finally, key context and non-participant interview responses were analysed together to focus on their perceptions of the PMV’s legitimacy, side effects and long term impacts. The quotes that best represented the results and illustrated the discussion were selected, and the anonymity of the interviewees was maintained. The results presented in the paper are based on the multiple perceptions gathered from interviews as well as official information (i.e., data on deforestation).

THE UNEQUAL PLAYING FIELD: DEFORESTATION AND SOCIAL CONFLICTS IN BRAZIL’S PARÁ STATE

Over the second half of the last century, national development projects to expand Brazil’s economic frontier into the Amazon involved the construction of highways, programs for the expansion of agriculture and ranching, and energy projects. This resulted in an extremely unequal conjuncture that favored the development of agribusiness in detriment of family farming and forest-based livelihoods. Although the region was inhabited by indigenous peoples and local communities (i.e., former rubber tappers and *quilombolas*¹), the military government (1964–1985) supported the region’s occupation by farmers and land speculators from Brazil’s south and southeast (Becker 2010, Margarit 2013). This

TABLE 1 *Research participants by sector and questionnaire type*

Type of actor	Type of interview			
	Key context	organizer	participant	Non-participant
Government	1	3	7	2
University	1			2
NGO	1		5	2
Private Sector	1		7	1
Grassroots Organization	1			5
Totals	5	3	19	12

¹ Afro-Brazilian slave descendants.

process generated wealth for medium and large-scale farmers through boom-and-bust economies, and resulted in violence, many deaths, evictions of local residents, social conflicts, and environmental impacts including high rates of deforestation (Schmink and Wood 1992). The expanding powerful sectors around Pará state include timber companies, cattle ranching farmers, soybean producers in extensive monoculture fields, rice and palm oil land owners, and land speculators. Boom-and-bust economy models based on timber harvesting, agriculture, ranching and mining, are major causes of the persistence of deforestation (Bennett 2017, Fearnside 2005). In 2004, deforestation in the Amazon reached alarming levels, and Pará, along with Mato Grosso, topped the list of the Brazilian states with high deforestation rates (PRODES 2019). There are ongoing social conflicts related to resource and land tenure rights in the region, while production sectors continue to grow, local communities and indigenous peoples have organized to defend their rights and secure their livelihoods. Brazil has topped recent lists of murdered land and environmental defenders (Global Witness 2017), to which the land conflicts in Pará state have contributed in recent history (Loureiro and Pinto 2005).

WORKERS' PARTY NATIONAL MEASURES TO FIGHT DEFORESTATION AND REACTIONS FROM THE DOMINANT RURAL SECTORS

Responding to international pressure for climate action, President Lula da Silva's government implemented the Action Plan for the Prevention and Control of Deforestation in the Legal Amazon (PPCDAm, for its initials in Portuguese) in 2004. PPCDAm involved a high-tech command and control system, with the use of real-time satellite monitoring and federal police operations, as well as political and legal mechanisms to combat deforestation. The latter included a list of the municipalities with the highest deforestation rates, which received various administrative restrictions and sanctions (MMA 2018). As a consequence of PPCDAm's measures and its successive phases since 2004, deforestation in the Brazilian Amazon declined by 79% between 2005 and 2013 (May *et al.* 2016).

The PPCDAm, a historically unprecedented national measure to halt deforestation, challenged landowners that were used to acting without significant intervention from the federal state. The organized rural sector – which historically held strong political influence, as it included a majority of national deputies and senators – organized to reform the Brazilian Forest Code in their favour (Vinha and May 2010). After much debate and campaigning by environmentalists against the reforms, the national agribusiness owners' demand prevailed in 2012 (Law 12.651/2012, Vinha and May 2010). The resulting revisions in the National Forest Code in 2012 included the establishment of the Rural Environmental Registry (CAR, in Portuguese). CAR is an electronic system

to record data from rural properties that comes with a requirement that all rural properties are registered in every Brazilian state's environmental agency. It was introduced as a condition for environmental licensing and regularization for rural properties. However, the agrarian situation in the Brazilian Amazon has historically been disorganized, with overlapping registered areas, vacant lands and invaded areas. This has resulted in deforestation and social conflicts through the Amazon and in Pará state in particular (Loureiro and Pinto 2005). Yet, although this murkiness over land in the Amazon is commonly agreed to be one of the region's principle drivers of deforestation and violence in rural areas, the CAR system is not a land titling instrument. Instead, CAR is a self-declaration mechanism and, as described in the Brazilian Forest Service's official website², it can only be completed "by the property's owner or by someone else in the name of the registrant, provided that they are over 18 years old. In both cases, the owner of the property is entirely responsible for the information declared". Critics describe CAR as a manoeuvre to address environmental issues, but also to avoid carrying out an agrarian reform and/or fair land redistribution that could benefit grassroots stakeholders and address current and historical experiences of land grabbing (Tupiassu *et al.* 2017).

PPCDAm had negatively affected Pará's powerful rural actors that, until then, had dominated most municipal and state administration positions. In the agrarian sector, thousands of rural properties were embargoed, rural credits were drastically restricted, and 17 municipalities were entered in the Ministry of the Environment's critical deforestation list. Meat packers and cattle producers' economic activities were also negatively affected. Considering this context, and wider pressure from the Brazilian national government to address deforestation, the Green Municipalities Program (PMV) was launched by the state governor Simon Jatene in March 2011, through State Decree n° 54/2011. The program was inspired by a local municipal project, Paragominas' Green Municipality Project, which had been launched in 2008 and had brought together the municipality, NGOs and large-scale farmers unions in achieving environmental compliance and registering their land under the CAR.

RESULTS

PMV's objectives, structure and composition

According to interviews with the PMV's organizers and project documents, the overall goals of this program were to achieve an 80% reduction in deforestation in Pará by 2020, increase sign-ups to CAR, remove Pará's municipalities from the Ministry of the Environment's deforestation list, and decentralize enforcement mechanisms to the municipal level by strengthening local environmental agencies and engaging municipalities in the program (Whately and Campanili 2013).

² <http://www.florestal.gov.br/como-fazer-o-car>

The municipalities that attained goals of reducing deforestation to 40 km²/year and registering at least 80% of their municipal area in the CAR would be removed from the environmental embargo, receive fiscal incentives, and be prioritized in the allocation of public resources and equipment.

The PMV was organized through the creation of an Extraordinary State Secretary, which was directly linked to the Office of Pará’s Chief of Staff, and which was assigned to coordinate the program’s activities. The coordinator at the PMV Extraordinary Secretary then convened a Steering Committee (*Comitê Gestor*, COGES), a multi-stakeholder forum responsible for the program’s action plan and strategic decisions. The Steering Committee was originally made up of 21 organizations and later grew to 26 (Table 2)³.

According to interviews with its organizers, until 2017, there were between three and four meetings per year, which were attended by the PMV’s official participants and observers that, at its highest point, reached close to 300 people. According to the PMV organizers and attendance lists reviewed by one of the authors, these meetings included an extended audience that had the right to speak but were not entitled to vote. This included dozens of mayors and municipal environment secretaries, individual large-scale farmers and ranchers, and researchers that at times were invited to assist with technical knowledge based on specific agendas.

The official list of participants in the multi-stakeholder Steering Committee (Table 2) reveals that it was mostly composed of actors from Pará’s most powerful sectors – government bodies, organizations representing the large-scale private and agribusiness sectors, large national and international NGOs and municipal offices. It did not include any grassroots or indigenous organizations or organizations representing social movements and land-rights defenders. In 2017, the PMV started to be pressured, mainly by the State’s Public Prosecutor’s Office, to discuss the creation of a CAR modality to be adapted to collective territories and local communities. As a response, the program invited three organizations to officially participate in the Steering Committee: the *Instituto Nacional de Colonização e Reforma Agrária* (INCRA, National Institute for Colonization and Agrarian Reform) and the *Empresa Paraense de Assistência Técnica e Extensão Rural* (EMATER, Company of Technical Assistance and Rural Extension of the State of Pará) – both government institutions that deal directly with smallholders and rural settlements – and the *Instituto Socioambiental* (ISA, Socio-environmental Institute), a national NGO. Their inclusion expanded dialogue within the PMV and allowed for the implementation of CAR for smallholder properties, but in a late and incipient way. In 2018, also attending a request from the State’s Public Prosecutor’s Office, the PMV promoted

TABLE 2 Composition of the PMV’s Steering Committee (COGES)

Representatives of the Government of the State of Para (13)		Civil Society Representatives (13)
- Secretariat for Economic Development, Mining and Energy (Sedeme)	Private Sector/Large farmers (Federations and Unions) (4)	- Vale Association for Sustainable Development (Vale Fund)
- Secretariat of Urban Development and Public Works (Sedop)		- Federation of Agriculture and Cattle of the State of Para (Faepa) (agribusiness-related)
- Secretariat of Science, Technology, Technical and Technological Education (Sectet)		- Federation of Industries of the State of Para (Fiapa)
- Treasury Department (Sefa)		- Union of Rural Producers of Paragominas (SPRP) (medium and large farmers linked to the agribusiness)
- Brazilian Institute of Environment and Renewable Natural Resources (Ibama)	Other civil society organizations (3)	- Regional Council of Engineering, Architecture and Agronomy (CREA / PA)
- Secretariat of Environment and Sustainability (Semas)		- Federation of Associations of Municipalities of the State of Para (Famep)
- Secretariat of Agricultural and Fisheries Development (Sedap)	NGOs (6)	- Permanent Forum of Municipal Environment Secretaries (FOPESMMA)
- Forestry and Biodiversity Institute of the State of Para (Ideflor-bio)		- The Nature Conservancy (TNC)
- Federal Public Ministry (MPF)		- Institute of Man and the Environment of the Amazon (Imazon)
- State Public Prosecutor’s Office (MPE)		- Institute of Environmental Research of the Amazon (Ipam)
- Terras do Para Institute (Iterpa)		- International Institute of Education of Brazil (IIEB)
- Company of Technical Assistance and Rural Extension of the State of Para (EMATER)		- Socio-environmental Institute (ISA)
- National Institute for Colonization and Agrarian Reform (INCRA)		- Brazilian Institute of Municipal Administration (IBAM)

³ The Steering Committee was responsible for the program’s strategic decisions and action plan. At the time of research, the Steering Committee was coordinated by the Extraordinary Secretary of State (who made the decisions about its structure and composition), and was directly linked to the government’s civil office.

a 2-day workshop to discuss collective CAR in *quilombola* areas. According to the PMV's activities report uploaded to its website, organizers admitted that the inclusion of this agenda was happening too late and had to be developed further.

Why was PMV widely viewed as a success?

According to interviews and official documents, the participation of Pará's municipalities in the PMV was high – 124 out of the state's 144 municipalities joined the program. These municipalities were attracted by a number of benefits that they would be able to access by voluntarily participating in the PMV. Benefits included legal security – which would protect producers against fines and economic embargoes, increased market value of agricultural products – which would be labelled as not contributing to deforestation and being produced under fair working conditions, and attracting investments due to greater legal security.

According to the PMV's website, at the time of research, 76.9% of Pará's registrable area had been entered into CAR⁴. Four out of the seven representatives of government institutions interviewed for this research saw the evolution of CAR implementation as a success. The Federation of Agriculture of Pará State – a PMV participant composed of powerful landowners – organized medium and large-scale producers to register with CAR. This supported the PMV's goal of increasing the number of registered properties in Pará.

Decentralizing environmental management to municipal bodies has been one of the PMV's central strategies on the ground, as the state-level environmental agency (SEMAS, Secretaria de Estado de Meio Ambiente e Sustentabilidade) did not have the operational capacity to regularize the more than 300,000 rural properties that needed environmental licenses in Pará. According to recent PMV reports, decentralization activities were conducted with the municipalities involved in the program. These activities included: training in rural activities licensing, preparation of rural environmental registration, the customization of the CAR system, and training in field deforestation verification. The decentralization of environmental affairs to municipalities was seen as positive by participants to the PMV, as noted by three interviewees from government institutions and two from NGOs. This positive perception was explained as an appreciation of the coordinated effort to develop the capacities and expand the responsibilities of municipal environmental agencies, especially in regard to rural environmental licensing and deforestation monitoring (see also Costa and Fleury 2015).

By 2018, five of Pará's municipalities had been expunged from the Ministry of Environment's critical deforestation list after reducing their annual deforestation rate to below 40 km². Furthermore, interviewees from the large-scale productive sectors engaged in the PMV – medium and large-sized landowners, soybean and cattle farmers, and slaughtering houses – said increased economic gains and an improved image were great benefits brought about by the program. Finally, the

national and international recognition achieved by the PMV as one of the largest environmental forums in Brazil, with sophisticated and integrated mechanisms to combat deforestation and its enhanced dialogue across sectors, was perceived by two government and two NGO interviewees to add to Pará's prestige.

Deforestation in Pará state decreased until 2012, after which it started to increase again (PRODES, 2019). However, some interviewees noted that as the overall pattern of deforestation rates in Pará were similar to those for the rest of the Brazilian Amazon (Figure 2), it is not known whether the decrease was a result of the PMV's actions, of the combined federal command and control actions that were carried out as part of the PPCDAm, or of other factors, such as international commodity prices. Deforestation in Pará state increased by 28% between 2011 and 2019, with an annual deforestation average of 2,574 (\pm 658) km²/year (PRODES 2018). In that period, the minimum annual deforestation was 1,741 km² in 2012, and the maximum was 3,862 741 km² in 2019, (PRODES 2018). Therefore, the PMV had not accomplished one of its main goals in reducing deforestation by 80% by 2020.

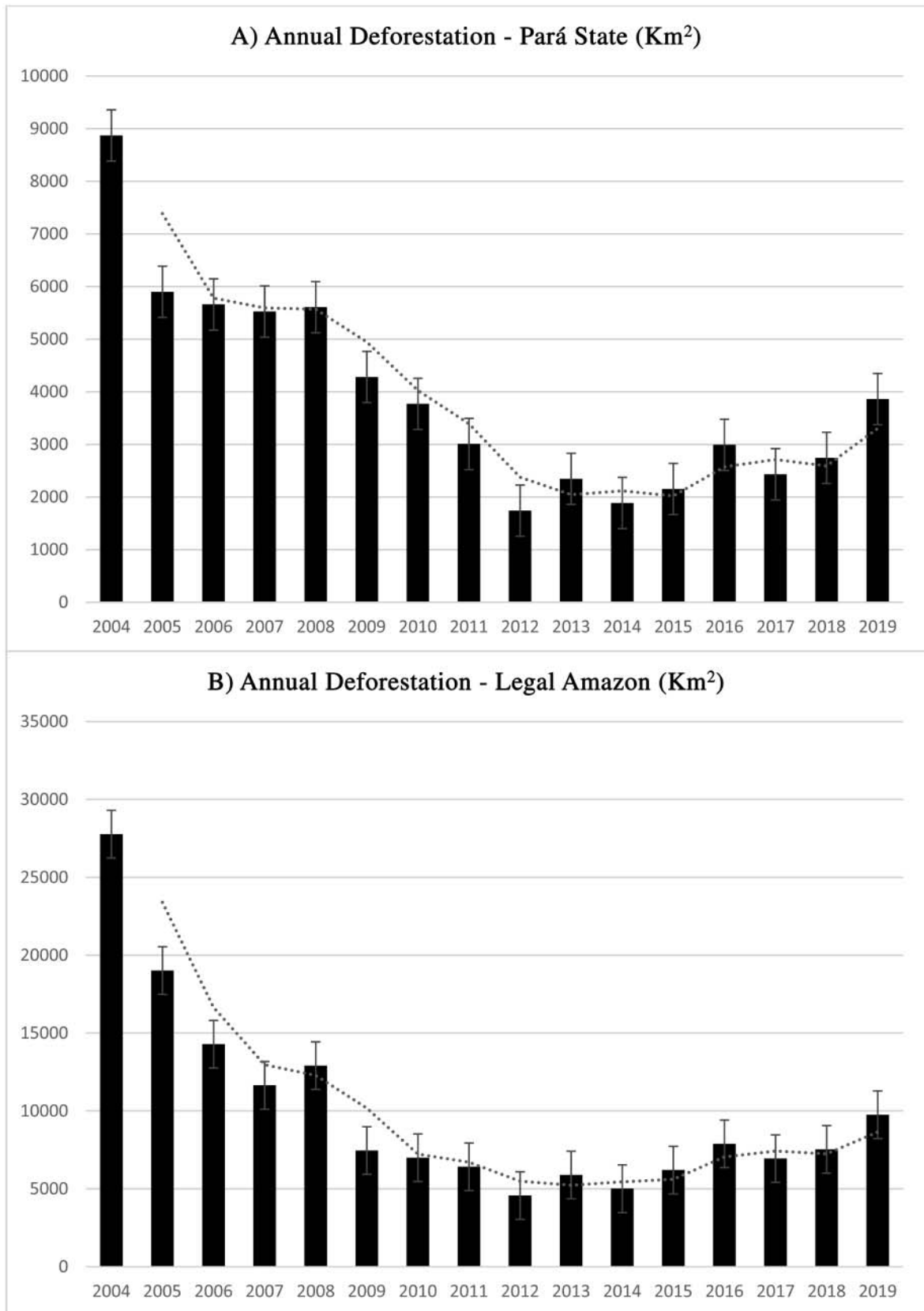
Participants' overall perceptions of the PMV's effectiveness

In terms of the PMV's effectiveness, four out of seven government interviewees agreed that the MSF had been 'somewhat effective', while the remaining three perceived it had been effective to a great extent. Regarding the responses that classified the MSF as 'somewhat effective', interviewees noted that deforestation may have had declined to some extent, but this had not changed the fact that family farmers were still marginalized as they received no assistance from the program and had continued to use the land in the same way. The PMV also led to the organization of the agribusiness sector, which adapted to meet the new environmental requirements and avoid the interruption of their productive processes. Furthermore, the improvement of municipal environmental administrations was also recognized as part of the PMV's effective outcomes by interviewees from government institutions. However, the rotation of staff in the program and the lack of a permanent and consistent conservation policy across Pará compromised its long-term effectiveness. Government actors who classified the program as effective or effective to a 'great extent', explained that they did so due to the high level of adherence to CAR and the redistribution of environmental responsibilities to the municipalities in Pará.

Most NGO interviewees (four out of five) classified the program as 'somewhat effective' and one classified it as 'not effective at all'. They alleged that giving municipal secretariats equipment and capacity development was not a real nor effective decentralization of the state's environmental management. The large turnover in government staff and low level of engagement between local agendas and Pará's macro

⁴ <http://www.municipiosverdes.pa.gov.br>

FIGURE 2 Annual deforestation in Pará State (A) and in the Brazilian Legal Amazon (B). Source: PRODES 2019



agenda prevented a consistent adherence of municipal agendas throughout the PMV's process. Research also revealed that some of the municipalities whose teams had become more efficient were able to benefit from the program and invested in enforcing new regulations, personnel, and capacity development, but the majority lacked the political will to halt deforestation, and their local political powers and structures were the same as those that drove deforestation. One NGO and one government interviewee responded that leaving land regularization issues unaddressed was a major and fundamental flaw of the program. According to those interviewees, in Pará, as in the rest of the Amazon, land issues and the need to conduct a fair and organized agrarian reform is one of the most critical causes of deforestation, if not the main one. A PMV participant from an NGO noted that,

“The central fault of the PMV was not having been able to move forward in solving the land titling issue. And this problem cannot be solved by municipalities on their own. [The land issue] should have been in the government's commitments. In the end, the program tackled the effects rather than the causes of deforestation”.

Dominant productive sector representatives interviewed for this research evaluated the program as either highly effective (three respondents) or somewhat effective (four respondents). Interviewees who classified the PMV as highly effective justified this in terms of how it had allowed middle and large-scale producers to become legal, thus giving their businesses more security. These interviewees also claimed that deforestation had reduced, but they could not say if it was due to the PMV's actions or as a result of other factors. Those who attributed partial effectiveness explained that some municipalities did not have the structure of organized civil society (e.g. unions of large producers) to make the PMV work, that Pará is too heterogenic and unequal, and also that the high turnover of politicians and secretaries hampered the process in the long run.

Participants' overall perceptions of the PMV's equity

Interviewed government officials categorized the PMV as “somewhat equitable” (five respondents), “little” (one) and “not equitable at all” (one). The first five respondents noted that the PMV was biased towards Pará state's dominant economic interests – large-scale productive sectors – while people with other interests were being forced to adapt to these priorities. The other two interviewees asserted that family farmers, and their organizations and cooperatives were not represented in the program, did not have their demands met (e.g. land titling and technical assistance), and that their problems were not even discussed. On the other hand, the commitment to include municipalities in the program, and the inclusion of EMATER (Pará's government extension and rural technical institution) six years into the program, were regarded as equitable.

NGO participants that were interviewed for this research almost unanimously classified the program to have had

between very little and not equity at all. Their explanations were based on the lack of representation by historically excluded stakeholders, such as indigenous and grassroots organizations and local communities. They also noted there had been a dominant representation of the agribusiness sector in the PMV, which was allowed to act in a very coordinated manner. Interviewees recognized that the interest groups driving deforestation were the most powerful groups in Pará: their voice was strengthened, and they had received support by the program to improve their activities. One of the NGO interviewees commented that, in order to combat deforestation, the deforesters should be dealt with first, and two other NGO participants proposed that the legitimization and prioritization of the demands of medium and large-scale farmers and cattle ranchers had been an unfair strategy. According to three NGO interviewees, the PMV only solved the problems of the most powerful actors in Pará by addressing issues of environmental licensing, introducing more flexible licensing for soybean producers and cattle ranchers, and boosting CAR implementation across medium and large-scale producers. One NGO interviewee explained that the CAR should be adapted to different territorial realities and dynamics (i.e., collective land titles), as it did not apply to the realities of small-scale producers and local communities. These interviewees also noted that the strategy to address the consequences rather than the causes of the deforestation was inequitable, since it would not lead to any structural changes.

Interestingly, the dominant sector was the only stakeholder group that stated that the program had been equitable to a “great extent”. The three large-scale landowners interviewed asserted that the PMV resulted in “a very large economic gain for the whole of society”, allowing the region to grow and benefit economically, as well as attracting external investors and increasing the price of land. The other four representatives of the dominant sector classified the program's equity as somewhat (two interviewees) and little (two interviewees). They did so on the grounds of the lacking representation of indigenous, local communities and settlements (two respondents), the lack of gender balance as the Steering Committee was dominated by male representatives (one respondent), and, because inequality is already high in the state and its most developed regions benefited most (one respondent).

Other perceptions: non-participants and key context interviews

While many participants considered some aspects of the program to be effective, innovative or successful, key context and non-participant interviewees' perspectives differed considerably. The latter had serious observations on the program's exclusionist character, which included the centralization of the discussion among bureaucratic government institutions (one government interviewee); the systematic exclusion of social and grassroots movements and organizations that could have provided a critical contribution to the program (three government and one grassroots organization interviewees); worsening the situation of marginalized minorities by weakening their already fragile land security

and other land-use rights (two government and one grassroots organization interviewees). Non-participants who were interviewed for this research almost unanimously disagreed with the PMV's overall strategy and were consistently critical of the lack of legitimacy and fairness displayed by the program. This opinion was held by interviewees across most actor types – grassroots organizations (four interviewees), the government (four interviewees), NGOs (three interviewees), and the private sector (one interviewee).

Respondents also discussed their perceptions over the motivations behind the creation of the program. One key context interviewee from the government and three non-participants (one from the government and two from NGOs) did not see the PMV as following a genuine concern to address deforestation, rural conflicts and social injustices. Instead, they described it as an instrument to benefit the actors that had historically been the drivers of both deforestation and the violent expulsion of traditional peoples from their territories. One key context informant from the government and one non-participant interviewee from a grassroots organization asserted that, although a policy mechanism, the program was designed to respond to groups largely affected by the federal government's deforestation monitoring policies. These interviewees explained that the PMV was created precisely as a sort of "make-up" over a situation where, due to PPCDAm, large-scale producers were going to have to pay fines for their environmental infractions for the first time. Instead, the PMV's focus on CAR would legalize their productive activities, and thus allow them to attract lines of credit and external investments. As such, these interviewees described this as 'green-washing', depicting the program as a 'wolf in a green sheepskin'. According to a non-participant interviewee from a university, the PMV included few spaces where participants could think about the concept of equity as it did not include a number of actors that were important for regional development, such as social movements, regional universities and rural small-holders and communities that continue to suffer due to a lack of state policies to address their challenges and to constant threats of expulsion and murder.

This leads to the question of the program's legitimacy. Non-participant and key context interviewees (seven interviewees representing the government, grassroots organizations and NGOs) highlighted the elitist composition of the PMV, which demonstrated that the state government's multi-stakeholder commitment was flawed as it favored oligarchic sectors linked to rural elites and agribusiness (including large-scale producers of soybean, cattle and other commodities) who were invited to coordinate with important government institutions and decision makers. In such a dialogue platform,

the voices coming from these dominant sectors were empowered and their demands were met. A non-participant interviewee from a university in Pará noted that 'The PMV is restricted to an interest group (large-scale landowners) that already had access to the government. No one sees the PMV as an effort to insert a range of more diverse organizations in addressing the land issue in Pará, or as a platform that favors the principle of public policy equity.' Three grassroots movement representatives (representing indigenous people, *quilombolas* and family farmers), claimed that they had not been invited to participate or that the forum had not, by any means, represented their interests or considered their agendas.

Another important issue mentioned by interviewees – mainly a key context informant from the State Public Prosecutor's Office and non-participants from a university, research institution, and NGO – was the flaws of the Rural Environmental Registry (CAR). Since the CAR system is self-declaratory, those who have access to more information and greater capacity to engage with the process can register first. This means that, in practice, actors were able to claim and register any land they wanted⁵. Information on the CAR registration procedure was not widely disseminated and favored the wealthiest and most powerful rural sectors. The result was that over 120% of Pará's land was registered in the system (according to a key context informant and the Brazilian Forest Service Website⁶, SBF 2018). This was mostly done by rural elites. Conversely, local communities, *quilombolas* and other types of traditional populations remained without defined territories⁷. According to the same key context and non-participant interviewees, this resulted in the aggravation of agrarian conflicts as the CAR was systematically used by agrarian speculators to intimidate and expel local communities and small agro-extractive producers from their territories. Informants claimed that these conflicts worsened the situation of rural violence in the region, as the CAR instrument was being used to displace local communities and smallholders. As a key context informant from the State's Public Prosecutor's Office noted, "The CAR is legitimizing the takeover of land by big producers, and it gives an air of legality to criminal land grabbing. Violence in these rural areas remains at high rates".

DISCUSSION AND CONCLUSION

This paper described and analyzed the work of a major MSF – the Steering Committee of the Green Municipalities Program (PMV) – from the perspectives of experts, participant actors and non-participants who represented groups that

⁵ The decentralization strategy included field verifications of the deforestation detected through satellite monitoring and facilitating registry to the CAR, among other initiatives. It would have been ideal for municipal bodies to serve as conflict mediators for land issues, thus being able to address land overlaps and land improperly registered to the CAR. However, since the program did not recognize the opportunistic registrations to the CAR by some actors as a serious issue, it did not emphasise verifying accuracy in its lines of action.

⁶ <https://www.car.gov.br/publico/imoveis/index>

⁷ The information is based on statements provided by interviewees. The exact number of titled areas for traditional communities versus the number of traditional communities that remain without defined territories is not itself a focus of our analyses. In any way, the PMV did not increase this number (it was not even one of its goals).

had been affected by the program. It focuses on issues concerning the PMV's composition, representation throughout its process, and the equity and legitimacy of its processes and outcomes. The central question goes beyond whether the PMV was an effective strategy to address deforestation – it aims to understand the role of the already economically and politically powerful actors driving deforestation in Pará, and the program's lack of support towards addressing the necessary structural changes to decrease deforestation and improving access to land for indigenous and local communities. In other words, this is an exploration of how an elite-based MSF affected historically underrepresented actors and their experiences of environmental justice, land distribution and land-use rights.

The PMV comprised one of the largest forums for environmental debate that addressed deforestation in Brazil. It was a subnational program of great importance and gained national and international recognition. The PMV focused on the articulation of multiple sectors, the implementation of the CAR (Rural Environmental Registry) and environmental licensing to medium and large-scale landowners. Nevertheless, family farmers, indigenous peoples and local communities who did not receive any type of assistance from the project were further marginalized. The program also served as a platform for the deliberation of public policies, such as softening regulations for the productive sectors.

With regard to equity, the PMV was criticized as being biased towards the interests of Pará's great economic powers, focusing on improving conditions for the large-scale productive sectors in detriment of small-scale producers and local communities. Research revealed that indigenous peoples, local communities, family farmers, their organizations and cooperatives were not represented, did not have their demands met (i.e., land titling, technical assistance) and that their problems were not discussed.

As such, the PMV made great strides in solving problems faced by the most powerful actors by addressing issues of environmental licensing – including more flexible licensing for soybean and beef producers – and boosting CAR implementation across medium and large-scale producers. The evidence in this research suggests that the way in which the CAR has been conducted has further increased land conflicts. This is supported by the specialized literature. Tupiassu *et al.* (2017) found that although the CAR was introduced to support environmental regulation, in practice it was applied with harmful land and environmental effects, as a tool for land dispossession and fiscal injustices that contributed to worsening land chaos in the Amazon region. In similar vein, Terra de Direitos, a human rights organization, through *Publica*, an agency for investigative journalism, reported that out of more than 150,000 CAR registrations analysed in Pará, at least 108,000 overlapped with other rural properties (Barros *et al.* 2016). This led them to denounce the use of the CAR as

part of a criminal scheme, describing it as one of the key components to violence in rural areas.

Evidence also indicates that the PMV was not effective. Deforestation was not reduced in the long term and the decentralization of enforcement mechanisms to the municipal level was considered by non-participant and some participant interviewees as a failed strategy to combat deforestation. Although CAR implementation was in some respects a success, it only benefited the most powerful actors in the state and some interviewees argued that it increased agrarian conflicts and insecurity for less privileged groups. The PMV's lack of attention to land regularization issues was reported by interviewees to be a fundamental flaw in the program, since the land chaos in the region is widely viewed as either the principal or one of the most critical drivers of deforestation. The program was largely seen by key context informants, non-participants and some participant interviewees as addressing the effects of deforestation more than its causes, and thus not allowing for structural changes that would address deforestation reduction and social justice.

Hence, the evidence suggests that the PMV was neither effective nor fair, as experienced by most interviewees⁸. This raises questions about addressing deforestation by focusing on the powerful sectors that drive it, while excluding other relevant and less economically and politically powerful actors from participating in decision-making platforms. As a multi-stakeholder strategy, this case reaffirms the criticism and concerns brought by scholars and practitioners that the dominance of powerful elites may limit the meaningful participation of underrepresented groups, leading to outcomes that reify unequal development models (Williams 2004). Research findings support the notion of the problematic role of elites in development and conservation initiatives as they may capture a disproportionate share of the benefits, which often reinforces their power (Musgrave and Wong 2016, Platteau 2004). This problem, however, becomes even deeper under contexts marked by inequalities and conflicts. While the prevailing development discourse assumes that appropriate dialogue, good governance and participatory democracy can address elite capture, these may prove insufficient to challenge elite coalitions. Although the PMV was not exactly captured by elites, it was constructed and conducted by elites by using technical – and in this context 'anti-political' (Ferguson 1994) – approaches to address deforestation, without challenging the land-use models historically responsible for deforestation and rural violence. The program gave power to the already powerful sectors and left the less powerful groups in a situation of heightened vulnerability. By failing to address land tenure issues through effective regularization and land reforms, and by failing to question the expansion of the commodity-based agribusiness land-use model, the PMV did not challenge the status-quo but rather reinforced it, providing even more power, income and legitimacy to

⁸ This finding differs from an earlier flyer on the PMV published by the same project (CIFOR 2019). The flyer is based on specific quantitative aspects of research while this paper combines quantitative results and in-depth qualitative analysis that included a wider scope of interviewees.

powerful actors. This is a case where an MSF may have led to some partially effective outcomes but at the cost of being unjust.

Studying 35 land-use initiatives in a cross-country survey that included work in Peru, Indonesia and Mexico, Ravikumar *et al.* (2018) found that elite-based political coalitions act in these platforms to impede their opponents from participating in land-use governance, which leads to the production of outcomes that are neither environmentally sustainable nor socially just. In other words, coalitions of sectors that commonly benefit from deforestation exercise political power to exclude coalitions for conservation and community land rights.

How useful are state-of-the-art monitoring systems if programs do not address power structures that are historically responsible for driving the environmental and social issues that underlie deforestation? Pará displays contrasting and competing land-use models. One is based on agroforestry systems, family farming and collective territories occupied by local communities and indigenous peoples with a variety of models of forest-based and small-scale farming livelihoods. These groups often struggle to secure their rights to land and natural resources, in a struggle against the expansion of the agro-industrial, logging and mining frontier that has historically imposed both legal and illegal pressures to displace them. The other land-use model is based on the concentration of large expanses of land in the hands of a few people who use it to produce commodity monocultures such as soybean farming and cattle ranching, as well as by capital that invests in boom-and-bust extractive economies that generate little in terms of development for the region. These actors are disproportionately wealthy and powerful. They hold important political positions and their interests are articulated and defended at different levels, from local municipalities to the national legislature. There are intrinsic and deep historical struggles and interactions among all of these different actors that cannot be reconciled by mere coordination and dialogue. The responses of the powerful landowners that the PMV resulted in “economic gain for the whole of society” suggests the vast difference between worldviews and development priorities.

Pará, with such disparity in access to land and resource rights, implemented the PMV as a multi-stakeholder approach to curb deforestation, without attempting to address these differences. The political dimensions of land use and the ongoing marginalization of local people cannot be resolved in an MSF purported as a ‘technical’ solution to a problem that, as demonstrated, is both political and structural. At the same time, marginalized groups have the potential to contribute, through their diverse knowledge systems, to low environmental impact production models. Collaboration and assistance that consider the specificities of local realities and informal institutions could allow these small-scale and traditional livelihoods to thrive and contribute with fair, equitable and environmentally friendly land-use institutions.

The rights of these already-vulnerable communities should not be up for discussion, hence MSFs may not be the most appropriate ways to address land rights and deforestation

under conditions of high inequality (see also Rodriguez and Sarmiento Barletti 2021). Ravikumar *et al.* (2018) found that contestations by coalitions of NGOs, government environmental offices, and local people have been more effective in empowering local people and reducing deforestation across low-emissions development initiatives, in comparison to MSFs. For Myers *et al.* (2018), to be legitimate, initiatives should pay substantial attention to political aspects of social justice, cultural practices and territorial claims, allowing participation parity, along with the recognition and representation of the less privileged and most vulnerable territorial identities.

Perhaps what is most impressive about the PMV initiative is precisely how it won national and global recognition in spite of these vast differences in perspective with regard to its success – or to what might be considered trade-offs in common global parlance on solutions to the climate crisis. This should serve as a warning. If the idea behind the current effort to address the climate emergency is to work towards creating a “safe and just space for humanity” (Raworth 2017), the inequity of the PMV’s processes and outcomes makes its effectiveness an illegitimate solution to deforestation.

ACKNOWLEDGEMENTS

This work was supported by the Norwegian Agency for Development Cooperation, the European Commission, the International Climate Initiative of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, and the United Kingdom’s Department for International Development. It was undertaken as part of the CGIAR Research Programs on Policies, Institutions and Markets (PIM), led by the International Food Policy Research Institute (IFPRI) and on Forest, Trees and Agroforestry (FTA), led by CIFOR. The opinions expressed here belong to the authors, and do not necessarily reflect those of CIFOR, IFPRI, or CGIAR. A small PIM grant supported the writing. The authors thank Dr. Eliane Moreira and the anonymous reviewers for their thoughtful comments on the manuscript.

REFERENCES

- BARROS, C., BARCELOS, I., and GALLO, J.O. 2016. As falhas e inconsistências do Cadastro Ambiental Rural. <https://apublica.org/2016/08/as-falhas-e-inconsistencias-do-cadastro-ambiental-rural/>. Accessed 20 Jul 2020.
- BEBBINGTON, A. 2005. Donor–NGO relations and representations of livelihood in nongovernmental aid chains. *World Development* **33**: 937–950.
- BEBBINGTON, A., ABRAMOVAY, R., and CHIRIBOGA, M. 2008. Social movements and the dynamics of rural territorial development in Latin America. *World Development* **36**: 2874–2887.
- BECKER, B.K. 2001. Revisão das políticas de ocupação da Amazônia: é possível identificar modelos para projetar cenários? *Parcerias Estratégicas* **12**: 135–159.

- BENNETT, L. 2017. Deforestation and climate change. Washington (DC): The Climate Institute.
- BERKES, F. 2009. Evolution of co-management: role of knowledge generation, bridging organizations and social learning. *Journal of Environmental Management* **90**: 1692–1702.
- BUCHY, M., and HOVERMAN, S. 2000. Understanding public participation in forest planning: a review. *Forest Policy and Economics* **1**: 15–25.
- BÜSCHER, B. 2010. Anti-politics as political strategy: Neoliberalism and transfrontier conservation in southern Africa. *Development and Change* **41**: 29–51.
- COSTA, J.M.D., and FLEURY, M.F. 2015. The “Green Cities” Program: Strategies for enhancing space in the municipalities of Pará. *Ambiente & Sociedade* **18**: 59–74.
- CIFOR. 2019. The Green Municipalities Program: Para, Brazil. https://www.cifor.org/publications/pdf_files/flyer/7458-Flyer.pdf. Accessed 10 Jan 2021.
- DOOLITTLE, A.A. 2010. The politics of indigeneity: Indigenous strategies for inclusion in climate change negotiations. *Conservation and Society* **8**: 286–291.
- ESTRADA-CARMONA, N., Hart, A.K., DeClerck, F.A., Harvey, C.A., and Milder, J.C. 2014. Integrated landscape management for agriculture, rural livelihoods, and ecosystem conservation: An assessment of experience from Latin America and the Caribbean. *Landscape and Urban Planning* **129**: 1–11.
- FEARNSIDE, P.M. 2005. Deforestation in Brazilian Amazonia: history, rates, and consequences. *Conservation Biology* **19**: 680–688.
- FERGUSON, J. 1994. *The anti-politics machine: development, depoliticization, and bureaucratic power in Lesotho*. University of Minnesota Press, Minneapolis. 320 pp.
- HEMMATI, M., DODDS, F., ENAYATI, J., and MCHARRY, J. 2002. *Multi-stakeholder processes for governance and sustainability: beyond deadlock and conflict*. Earthscan, London. 312 pp.
- KOOIMAN, J. 2003. *Governing as governance*. SAGE Publications, India. 249 pp.
- LI, T. 2007. *The will to improve: Governmentality, development, and the practice of politics*. Duke University Press. United States. 392 pp.
- LIMA, M.G.B., VISSEREN-HAMAKERS, I.J., BRAÑA-VARELA, J., and GUPTA, A. 2017. A reality check on the landscape approach to REDD+: Lessons from Latin America. *Forest Policy and Economics* **78**: 10–20.
- LOUREIRO, V.R., and PINTO, J.N.A. 2005. A questão fundiária na Amazônia. *Estudos Avançados* **19**: 77–98.
- MARGARIT, E. 2013. O processo de ocupação do espaço ao longo da BR-163: uma leitura a partir do planejamento regional estratégico da Amazônia durante o governo militar. *Geografia em Questão* **6**: 12–31.
- MARTIN, A., COOLSAET, B., CORBERA, E., DAWSON, N.M., FRASER, J.A., LEHMANN, I., and RODRIGUEZ, I. 2016. Justice and conservation: the need to incorporate recognition. *Biological Conservation* **197**: 254–261.
- MAY, P., GEBARA, M. BARCELLOS, L., RIZEK, M., and MILLIKAN, B. 2016. *The context of REDD+ in Brazil: drivers, agents, and institutions*. Occasional Paper 55. 2nd edition. CIFOR, Bogor, Indonesia. 69 pp.
- MMA. 2018. *Plano de Ação para Prevenção e Controle do Desmatamento na Amazônia Legal (PPCDAm)*. Ministério do Meio Ambiente. Brasília. <http://www.mma.gov.br/informma/item/616-prevenção-e-controle-do-desmatamento-na-amazônia.html>; <http://redd.mma.gov.br/pt/acompanhamento-e-a-analise-de-impacto-das-politicas-publicas/ppcdam>. Accessed 20 Oct 2018.
- MUSGRAVE, M.K., and WONG, S. 2016. Towards a more nuanced theory of elite capture in development projects. The importance of context and theories of power. *Journal of Sustainable Development* **9**: 87–103.
- MYERS, R., LARSON, A.M. RAVIKUMAR, A., KOWLER, L.F., YANG, A., and TRENCH, T. 2018. Messiness of forest governance: How technical approaches suppress politics in REDD+ and conservation projects. *Global Environmental Change* **50**: 314–324.
- UNITED NATIONS. 2011. The UN-REDD Programme Strategy. Technical Report. United Nations Development Programme, UNDP.
- PERSHA, L., and ANDERSSON, K. 2014. Elite capture risk and mitigation in decentralized forest governance regimes. *Global Environmental Change* **24**: 265–276.
- PLATTEAU, J.P. 2004. Monitoring elite capture in community-driven development. *Development and Change* **35**: 223–246.
- PRODES. 2019. Monitoramento do Desmatamento da Floresta Amazônica Brasileira por Satélite. *Coordenação-Geral de Observação da Terra*, Instituto Nacional de Pesquisas Espaciais. <http://www.obt.inpe.br/OBT/assuntos/programas/amazonia/prodes>. Accessed 10 May 2020.
- RAVIKUMAR, A., LARSON, A.M., MYERS, R., and TRENCH, T. 2018. Inter-sectoral and multilevel coordination alone do not reduce deforestation and advance environmental justice: Why bold contestation works when collaboration fails. *Environment and Planning C: Politics and Space* **36**: 1437–1457.
- RAWORTH, K. 2017. A Doughnut for the Anthropocene: humanity’s compass in the 21st century. *The lancet planetary health* **1**: 48–49.
- RODRIGUEZ, D., and SARMIENTO BARLETTI, J.P. 2021. Can multi-stakeholder forums mediate indigenous rights and development priorities? Insights from the Peruvian Amazon. *International Forestry Review* **22**: 1–13.
- RUDEL, T.K. 2007. Changing agents of deforestation: from state-initiated to enterprise driven processes, 1970–2000. *Land Use Policy* **24**: 35–41.
- SARMIENTO BARLETTI, J., and LARSON, A. 2019. *The role of multi-stakeholder forums in subnational jurisdictions: Framing literature review for in-depth field research*. Occasional Paper 194. Bogor, Indonesia: CIFOR. 24 pp.
- SAYER, J., SUNDERLAND, T., GHAZOUL, J., PFUND, J.-L., SHEIL, D., MEIJAARD, E., VENTER, M., BOEDHIHARTONO, A.K., DAY, M., and GARCIA, C. 2013. Ten principles for a landscape approach to reconciling agriculture, conservation, and other competing land

- uses. *Proceedings of the National Academy of Sciences* **110**: 8349–8356.
- SCHMINK, M., and WOOD, C.H. 1992. *Contested frontiers in Amazonia*. New York, Columbia University Press. 387 pp.
- SFB. 2018. *Serviço Florestal Brasileiro*. <http://www.florestal.gov.br/numeros-do-car>. Accessed 20 Oct 2018.
- TUPIASSU, L., GROS-DESORMAUX, J.-R., and DA CRUZ, G.A.C. 2017. Regularização fundiária e política ambiental: incongruências do cadastro ambiental rural no estado do Pará. *Revista Brasileira de Políticas Públicas* **7**: 189–203.
- VINHA, V., and MAY, P.H. 2010. A biodiversidade e a governança verde no Brasil: soluções inovadoras na gestão dos recursos para a conservação e equidade. *Desenvolvimento em Debate* **3**: 89–110.
- WHATELY, M., and CAMPANILI, M. 2013. *Programa Municípios Verdes: lições aprendidas e desafios para 2013/2014*. Programa Municípios Verdes, Governo do Pará.
- WILLIAMS, G. 2004. Evaluating participatory development: tyranny, power and (re) politicisation. *Third World Quarterly* **25**: 557–578.
- GLOBAL WITNESS. 2017. *New data reveals 197 land and environmental defenders murdered in 2017*. <https://www.globalwitness.org/en/blog/new-data-reveals-197-land-and-environmental-defenders-murdered-2017/>. Accessed 5 Dec 2019.