Politics and power in territorial planning: insights from two ‘Ecological-Economic Zoning’ multi-stakeholder processes in the Brazilian Amazon

J. GONZALES TOVARa, A.M. LARSONb, J.P. SARMIENTO BARLETTIb and G. BARNESC

aOregon State University, College of Forestry, Corvallis, OR 97333, United States of America
bCenter for International Forestry Research, Av. La Molina 1895, La Molina, Lima 15023, Peru
cUniversity of Florida, School of Forest Resources and Conservation, Gainesville FL 32611, United States of America

Email: gonzajaz@oregonstate.edu, a.larson@cgiar.org, j.sarmiento@cgiar.org, gbarnes@ufl.edu

HIGHLIGHTS

• Both territorial planning and MSFs must be recognized, in theory and in practice, as highly political processes rather than technocratic tools.
• Maps are ontologically powerful instruments that are neither innocent nor objective.
• Both collaboration towards the common good and competition due to trade-offs are inherent to multi-stakeholder territorial planning.
• Although it is important to minimize knowledge gaps among MSF participants, not necessarily everybody has to be an expert.
• Territorial planning MSFs have better chances of promoting equity, collaboration, and environmental benefits when they emerge from (and are nourished by) a context that embraces local socioenvironmental movements.
• Not everything depends on MSFs. Other governance mechanisms shape what happens outside and even within an MSF, or what happens after it has ended, for better or worse.

SUMMARY

The use of multi-stakeholder forums (MSFs) in territorial planning has gained global popularity. These MSFs aim to bring diverse actors together to collaboratively and equitably develop a plan that assigns optimal land uses to a territory. However, as promoting particular land uses and benefits for some actors often comes at a cost to others, territorial planning MSFs may reproduce or even exacerbate, rather than mitigate, conflicts and asymmetries. We comparatively analyze collaboration, power relations and sustainability goals in the Ecological-Economic Zoning commissions of Acre and Mato Grosso, Brazil, which fall under the same federal mandate but operate in contrasting contexts. We show how territorial planning MSFs have better chances of meeting their goals when they are understood as political processes: in this case, when they emerge from and are nourished by powerful local social-environmental movements and alliances, rather than being technocratic initiatives opposed by powerful local production-business alliances.

Keywords: territorial governance, sustainable development, equity, collaboration, forests

Politiques et pouvoir dans la planification territoriale multi-parties prenantes: points de vue de deux processus de Zonage écologique et économique dans l’Amazone brésilienne

J. GONZALES TOVAR, A.M. LARSON, J.P. SARMIENTO BARLETTI et G. BARNES

L’utilisation des forums de multi-parties prenantes (MSFs) dans la planification territoriale a gagné en popularité globale. Ces MSFs essaient de réunir plusieurs acteurs pour développer équitablement et en collaboration un plan qui assigne des utilisations optimales de la terre à un territoire. Néanmoins, comme la promotion d’usages particuliers et de bénéfices pour certains acteurs entraîne souvent un coût pour les autres acteurs, la planification territoriale des MSFs peut reproduire, voire exacerber, les conflits et les asymétries, plutôt que les mitiger. Nous analysons comparativement la collaboration, les relations des pouvoirs et les buts de durabilité dans les commissions de Zonage écologique et économique de l’Acre et du Mato Grosso, au Brésil, qui tombent sous le même mandat fédéral, mais opèrent dans des contextes contrastés. Nous montrons que la planification territoriale des MSFs a plus de chances d’espérer pouvoir parvenir à ces buts, quand elle est comprise comme un processus politique et, dans ce cas, quand elle est nourrie par, et émane de mouvements et d’alliances sociaux-environnementaux locaux, plutôt qu’étant une initiative technocrate à laquelle s’opposent de puissantes alliances de production-marché locales.
INTRODUCTION

Territorial planning often refers to an ideal vision of the future: assigning – and, thus, assuming the existence of – optimal or best land uses, rules and rights, with collective benefit, for different portions or geographies of a certain territory (Da Silva Schröeder and Belisário Finamore 2012, Di Gregorio and Jansen 2005, Rudel and Meyfroidt 2014). Starting with calls in the 1980s for participatory land-use planning and the so-called ‘good’ land governance, the use of multi-stakeholder forums (MSFs), commissions, or committees in territorial planning was advocated by researchers, governments and practitioners (e.g., Kusters et al. 2018, FAO 2014, ILC 2017). The goal of this planning method constitutes a political, technical and institutional ideal: to bring representatives of actors from diverse levels and sectors together, to coordinate and collaborate as equals, to discuss, produce, approve and/or implement a territorial map/plan, in order to solve land conflicts and environmental problems and promote sustainable development (Kohne 2014, Stead 2014, Nolte et al. 2017, Cote et al. 2010, Comerma 2010, Ardiansyah et al. 2015). In the Brazilian Amazon, territorial planning was regulated, starting in the 1970s, to respond to international concerns about increasing deforestation. After Brazil transitioned to a democracy in the late 1980s, regulations on Ecological-Economic Zoning (ZEE, in Portuguese) were established through the 1990s and early 2000s, defining ZEE as a policy tool for sustainable and inclusive land-use planning, which ought to be developed and implemented using participation mechanisms such as multi-stakeholder commissions.

Despite enthusiasm for the potential benefits of participatory territorial planning, evidence demonstrates that it is affected by the same divergent interests, trade-offs and inequalities that it aims to address (Kohne 2014, Kohlepp 2002, Robbins 2003, McClusker and Weiner 2003, Gonzales Tovar et al. 2021). Territorial planning can become a power game when pursuing certain land-use goals and benefiting particular actors comes with costs for other goals and actors. Actors can exert power to influence who is included or excluded from the process (i.e., the overt face of power), how fairly and effectively actors participate in it (i.e., the covert face of power) (Sadan 1997), and who wins the argument (Domhoff 2005). Actors navigate these processes through different means: coercing and competing (power over), using their own agency (power to) and/or joining forces with others (power with) (Chambers 2006, VeneKlasen and Miller 2007). For example, elites – actors recognized as powerful, who hold political authority and valuable assets – can use their own agency (power to) to intimidate others (power over) and, hinder their confidence to speak up (the covert face of power) and influence outcomes (win the argument) (Domhoff 2005, Sadan 1997). Consequently, participation or coordination mechanisms such as MSFs may not be sufficient to address existing power asymmetries, conflicts and environmental problems (Larson et al. 2018, Ravikumar et al. 2018), and may merely reproduce or even exacerbate them (Viana et al. 2016).

Given these different ways of exerting power and inequalities between participants, territorial planning MSFs are spaces where actors try to use and/or shape contradicting regulations, discourses and processes to legitimize the selective implementation of rules in their favour. Scott (1998: 3) argued that states use maps to control those they rule and remake reality by drafting maps that represent only the aspect of reality they are interested in. This dynamic is context-dependent (Kohne 2014). Particularly in contexts with weak authorities, insecure land tenure, and pronounced power asymmetries, rural territorial planning differs substantially from the planned process, resembling an ‘organized anarchy’ (Rudel and Meyfroidt 2014: 240).

Thus, there is a need to approach these MSFs by putting context, power and politics at the centre of the discussion. This paper analyses the capacities and challenges of the ZEE commissions of the Brazilian states of Acre (Figure 2) and Mato Grosso (Figure 3) to promote collaboration, balanced power relations and sustainable land uses. The paper examines the effect of different subnational contexts and power dynamics on multi-stakeholder territorial planning processes and results.

Acre’s ZEE process was completed in two phases (1999–2000 and 2003–2007), each with a ZEE commission. Acre’s ZEE is widely known as advancing collective benefits and sustainability (Schmink et al. 2014). Contrastingly, Mato Grosso’s ZEE was a politicized conflict that failed to produce an approved regional plan (Kohlepp 2002, Gonçalves 2016,
WRI 2012). After a preliminary expert-led phase (1980s–1990s), a ZEE commission was activated in the late 2000s (phase I) and a ZEE map was completed, but not officially approved. In 2016–2018 (phase II), the process re-started with a new commission, but no map had been approved at the time of research.

After presenting the methods, the paper examines how contextual factors and power relations for each state laid the foundation for the emergence, goals and power dynamics of both ZEE processes and commissions. This is followed by an analysis of who participated (and how) in the commissions and its results, revealing the different faces and sources of power as deployed by different actors in the MSFs’ processes. Moreover, the role of and power dynamics associated with, other institutions and governance mechanisms outside the MSFs, but part of the overall process is analyzed to understand both MSFs’ outcomes. Figure 1 shows a diagram of the analytical framework utilized.

The conclusions seek to contribute to a stronger understanding of the politics and power dynamics embedded in territorial planning MSFs and the real and potential roles that these governance mechanisms play in empowering historically marginalized populations, encouraging collaboration and promoting the conservation of forests and the protection of livelihoods. Research findings are relevant to improve territorial governance in Brazil and the wider Amazon.

METHODS

The context, power relations and equity of Acre and Mato Grosso’s ZEE commissions were examined combining qualitative data from 102 interviews carried out in 2016–2018 with secondary information (see Table 2). Following scoping fieldwork, we mapped the organizers and participants for both MSFs, complementing official documents with the snowball technique. Interviewees were selected to reflect diversity in gender, levels (local, sub-national and national) and actor types (government, non-governmental organizations, large-scale and small-scale farmers’ organizations, indigenous/grassroots organizations and academia).

Different semi-structured interviews, with both open and closed questions, were designed for and applied to different types of informants (see Sarmiento Barletti and Larson 2019). We applied a key context questionnaire, a Theory of Change questionnaire, a participants questionnaire and a non-participants questionnaire. Finally, additional non-structured interviews were carried out.

FIGURE 1 Analytical framework

![Analytical framework diagram]

Changes in the broader context and structural power relations

1 A key context questionnaire – with 6 key context informants in Acre and 5 in Mato Grosso – sought to understand the context in which the ZEE processes and commissions emerged. A second questionnaire, the Theory of Change questionnaire, was applied to 5 of Acre’s ZEE commission organizers and to Mato Grosso’s single organizer in order to understand the ideas behind the creation of the ZEE commissions and how organizers considered contextual factors. Furthermore, 23 participants in Acre’s commission and 25 in Mato Grosso’s responded to a questionnaire design to understand their views regarding the emergence, goals, design, processes and outcomes of each MSF, with special emphasis on power relations. Also, 16 stakeholders in Acre and 12 in Mato Grosso who had not participated in the commissions were interviewed with a separate questionnaire to understand how informed they were about the processes and whether they felt represented or benefited.
interviews were conducted with 5 informants in Acre and 4 informants in Mato Grosso.

We now move to the results and discussion section, which is primarily based on the data collected from the questionnaires and was divided in five main subsections. First, we examine how context shaped the emergence, goals and power dynamics of the ZEE processes and commissions. The following two sections examine which actors were included and excluded from the commissions and how actors participated. The fourth and fifth sections examine outcomes in terms of the resulting maps and relationships, respectively.

RESULTS AND DISCUSSION

Combining data from all questionnaires with secondary data, the next section examines how contextual power dynamics laid the foundation for the emergence and goals of the ZEE processes (see Table 2). We analyze effects in the ZEE goals (e.g., who was the ZEE meant to empower and benefit) and ground conditions (e.g., how much support the ZEE organizers had from local elites).

How did national and subnational power dynamics lay the foundation for power relations in the ZEE process?

Territorial planning in Brazil was first promoted in the 1970–1980s, when the military government mapped the Amazon’s natural resources in a process with no civil society participation. Interviews highlighted three factors that led to ZEE being deployed as a multi-stakeholder territorial planning tool: actions by the international community, Brazil’s democratization, and the coming to power of the Workers Party (PT, in Portuguese).

The National Environmental Policy (Federal Law 6.938/1981), established in 1981 to respond to international pressure to reduce deforestation rates, introduced the concept of environmental zoning. With Brazil’s democratic transition in the late 1980s, the national political environment and new federal legislation (exemplified by the Constitution of 1988) favoured social movements, civil society participation, multi-sectoral coordination and social-environmental goals. Regulations established by the Ministry of Environment in the 1990s (SAE and MMA 1996) and officialised in 2002...

---

2 Assertions made in the results section constitute data. They come directly from quotes from the database that were summarized for clarity and brevity. This was done to express complex matters in a clear and concise way.

3 Ecological-Economic Zoning was further regulated in the 90s (e.g., Federal Decree 99.193/1990, Federal Decree n° 99.540/1990).
Politics and power in territorial planning

uses and promote the sustainable organization of the territory. Nevertheless, a state-level ZEE can directly impact land uses on the ground, as Brazil’s new Forest Code (Law 12.651) established that Legal Reserves could be reduced from 80% to 50% in the Amazon biome in states with an approved ZEE.

These national processes were experienced differently in Acre and Mato Grosso, due to divergent local contexts and power dynamics (see Figure 4).

Acre is a relatively small (164,221 Km2) state in an area of the Amazon where the lack of roads made large areas inaccessible and hampered the expansion of agroindustry (i.e., highway BR-364, in the 1960s–1980s). Under the federal regulations mentioned above, a state-level ZEE process should, through a participatory process, produce a map that divides the state’s territory into land-use categories, identifying different types of land tenure and existing and potential protected areas, and developing specific guidelines for land use in different regions. According to interviewees, the overall objective of the ZEE is to guide land uses and promote the sustainable organization of the territory.

(Federal Decree 4.297) required multi-stakeholder commissions in ZEE processes. Also, the PT – created in 1979–1980 “as a manifestation of the social movements” (Albert 2016: 8) – gained popularity across the country through the 1990s. The PT governed Brazil from 2003 to 2016, encouraging participative governance (Albert 2016, Keck 1992). In the 2000s, with the PT in power and international actors pressuring countries to move towards a sustainable development, the Brazilian government undertook several initiatives to reduce deforestation by 80% in the Amazon, leading to the creation of protected areas (i.e. Conservation Units and Indigenous Lands; Schmink & Wood, 2012; May et al. 2011).

FIGURE 3 Map of Mato Grosso

Under the federal regulations mentioned above, a state-level ZEE process should, through a participatory process, produce a map that divides the state’s territory into land-use categories, identifying different types of land tenure and existing and potential protected areas, and developing specific guidelines for land use in different regions. According to interviewees, the overall objective of the ZEE is to guide land uses and promote the sustainable organization of the territory.
TABLE 1  Interviewees by questionnaire, level, type, sector and gender

| Questionnaire       | Acre | Mato Grosso | Total |
|---------------------|------|-------------|-------|
| Context             | 6    | 5           | 11    |
| Organizers          | 5    | 1           | 6     |
| Participants        | 23   | 25          | 48    |
| Non participants    | 16   | 12          | 28    |
| Extra informants    | 5    | 4           | 9     |

| Level               | Acre | Mato Grosso | Total |
|---------------------|------|-------------|-------|
| International       | 1    | 0           | 1     |
| National            | 19   | 6           | 25    |
| Regional            | 27   | 30          | 57    |
| Local               | 8    | 11          | 19    |

| Type                 | Acre | Mato Grosso | Total |
|----------------------|------|-------------|-------|
| Indigenous populations| 5    | 4           | 9     |
| Traditional populations | 6    | 1           | 7     |
| Small-scale farmers  | 2    | 2           | 4     |
| Non-governmental organizations | 8    | 16          | 24    |
| Government           | 30   | 20          | 50    |
| Private sector / large-scale farmers | 4    | 4           | 8     |

| Sector               | Acre | Mato Grosso | Total |
|----------------------|------|-------------|-------|
| Environment          | 14   | 4           | 18    |
| Environment considering production | 0    | 6           | 6     |
| Production considering environment | 37   | 21          | 58    |
| Production           | 4    | 15          | 19    |
| First, environment; Then, production considering environment | 0    | 1           | 1     |

| Gender               | Acre | Mato Grosso | Total |
|----------------------|------|-------------|-------|
| M                    | 38   | 31          | 69    |
| F                    | 17   | 16          | 33    |

forest-dependent populations (e.g., rubber tapers), well-conserved forest areas, and the establishment of various Indigenous Lands and Conservation Units (e.g., Extractive Reserves) (Schmink, in Katila et al. 2014, May et al. 2011). In that context, politicians affiliated with the PT and who supported Acre’s movements and florestania (a neologism meaning forest-citizenship or forest-based sustainable development) won elections in Acre in 1999 (Schmink, in Katila et al. 2014). The election of Jorge Viana as governor (1999–2007) legitimated Acre’s social movements (Fernandes do Rêgo 2017), resulting in a powerful local socio-environmental alliance with political authority, technical expertise, and collective and ideological power (Gonzales Tovar et al. 2021) that agroindustrial interests recognized the need to negotiate with. Interviewees (17/22 MSF participants) identified Viana as the key proponent for a participative, florestania-oriented ZEE, reflecting and supported by the social-environmental oriented national and subnational context at the time. Led by Viana, Acre’s secretariats of Environment and Planning (SEMA and SEPLAN) organized the ZEE process and its commission in both phases.

In contrast, Mato Grosso (903,330 Km²) is a much larger state, with political and land use dynamics framed by powerful economic interests. Policies and projects promoted by both the federal and state government throughout the 19th and 20th centuries – including the Law of Lands (1882), colonization
Politics and power in territorial planning

projects and highways (BR-354 and BR-163) – made Mato Grosso Brazil’s leading State in agribusiness and deforestation (Alves Lamera and Rodrigues Figueiredo 2008, Kohlepp 2002, Gonçalves 2016, WRI 2012). This led to an agribusiness alliance with economic power as well as political power (agribusiness actors had links to – and occupied positions in – the state government) (Gonzales Tovar et al. 2021).

Interviewees described an agribusiness alliance composed of state-level authorities – such as governor Blairo Maggi, an agro-businessman internationally known as “the king of soybean” as well as most deputies from the Legislative Assembly – and the private agribusiness sector, including Mato Grosso’s Agriculture and Livestock Federation (Famato). Interviewees suggested that Mato Grosso’s agribusiness sector has great influence on farmers’ goals and decisions (i.e. collective and ideological power). In such an agribusiness-oriented local setting, interviews (to key informants, MSF organizers and participants) and World Bank documents (1992, 2003, 2004) showed that Mato Grosso’s ZEE emerged as the secretariats of Environment (SEMA) and Planning (SEPLAN) efforts to comply with international demands and federal regulations.

As Acre’s and Mato Grosso’s ZEE commissions emerged in contrasting contexts, they were meant to meet distinct demands and received different levels of support from local elites.

Who was the ZEE meant to empower and benefit in Acre and Mato Grosso?

Acre’s and Mato Grosso’s contrasting contexts led to two ZEE processes with different approaches in terms of goals and beneficiaries. Portraying the context of Brazil and Acre (both oriented to social-environmental matters), the goals of Acre’s ZEE were simultaneously idealistic and realistic. As stated by Viana, Acre’s ZEE map was idealistically meant to be a dream map promoting florestania and sustainable development (SEMA 2010). The organizers of Acre’s ZEE sought to go further than complying with the national legislation and producing a map. A participatory ZEE was thought as part of a social pact to overcome past conflicts, empower and recognize the rights of historically marginalized groups7 and give all land-use actors a voice in jointly building a common future vision (CEPA et al. 2014, Fernandes do Rêgo 2017). The goal was a map that would also reflect and support Acre’s historical land uses, natural resources, and forest vocation, which were compatible with forest conservation (SEMA 2010, Fernandes do Rêgo 2017). Furthermore, organizers in Phase II added a cultural-political axis to the ZEE methodology in order to include Acre’s diverse identities, cultures, discourses, interests, types of knowledge, livelihoods, power relations and forms of occupation (SEMA 2010). According to Acre’s government, this sought to transform “the positivist ZEE into

---

7 E.g., extractive and indigenous populations and small-scale producers.

---

| TABLE 2  | Context, emergence and goals of Acre and Mato Grosso’s ZEE processes |
|----------|---------------------------------------------------------------|
| **Acre’s ZEE process** | **Mato Grosso’s ZEE process** |
| **Phases / years** | Preliminary phase: 1980s-early 2000s (no MSF)  
Phase I: 2007–2011 (ZEE map completed but not approved)  
Phase II: 2017 to date (ongoing process) |
| **Local context** | Agricultural production alliance holding strong economic, political, collective and ideological power. |
| **Land use** | Status-quo: Unsustainable production focused on agriculture and livestock |
| **Creation / emergence** | International stipulations and funding, and national regulations, accepted by Mato Grosso’s government. |
| **Main sources of funding** | Phase I: Inter-American Development Bank  
Phase II: State government |
| **Planned goals of the ZEE process** | • Idealistic and based on local demands: Pacifying relations, building a ‘social pact’ (building a common vision of Acre, based on “florestania”) and the empowerment of ‘the weakest’ |
| **Planned goals of the ZEE products** | • Based on local demands: Recognizing and legitimizing claims made by grassroots movements  
• Idealistic and realistic: Maintaining status-quo (i.e. maintaining a forest-based sustainable development path) |
| **Projects / products** | • Technocratic: Complying with institutions (e.g. legislation) about territorial planning  
• Idealistic and complex: Changing status-quo (i.e. diversifying local economy and making it sustainable) |
a lively living being, consistent with the identity of the populations living in the managed territory” (SEMA 2010: 40).

In Mato Grosso – a centre for agro-industrial activity – the ZEE’s goal was technocratic; it was initiated to comply with international stipulations and national regulations, and conceived as a policy tool to be implemented or law to be complied with. It would entail significantly transforming Mato Grosso’s development model, shifting from agribusiness-based to sustainability and economic diversification. Interviewees held mixed opinions about the objectives, focus, scope and relevance of ZEE as a policy tool. Interviewees from the environmental sector sceptically questioned its legal power, while production sector representatives feared potential land-use restrictions. Several participants did not consider the ZEE to be urgent.

**How much support did local elites give to the ZEE and their organizers in Acre and Mato Grosso?**

Interviews show that Acre’s government considered the ZEE a political priority and supported it as a whole, as did PT-affiliated companheiros in the federal government (SEMA, 2010: 10). SEMA and SEPLAN officials had great power to
because they were part of Acre’s socio-environmental alliance, and respected and trusted by most commission participants who were also part of the alliance and recognized SEMA’s and SEPLAN’s expertise and social-environmental awareness. Conversely, the representative of Acre’s agribusiness federation considered the organizers to be biased.

In contrast, Mato Grosso’s SEMA and SEPLAN (organizers in phase I) were not part of the local agribusiness alliance, which did not give tangible support to the ZEE. The process was named Socio-Economic Ecological Zoning rather than Ecological Economic Zoning – the term used by federal institutions—arguably to minimize confrontation with the agribusiness sector. SEPLAN led phase II of the process, perhaps also to lower distrust from the agribusiness sector. Although some government interviewees argued that ZEE is SEPLAN’s legal responsibility, Acre’s and other ZEE processes show that states have some autonomy to decide which entity should organize their ZEE (MMA 2016). Mato Grosso’s participants had contrasting opinions about the commission’s organizer\(^8\) that reflect the regional divisions: some socio-environmental actors felt that the organizer did not have the strength or will to confront agribusiness, while agribusiness/development actors saw the organizer as an environmentalist. Without the support of the powerful agribusiness sector and not being fully trusted by all the commission participants, organizers’ power to relied on their political authority over the ZEE process and on their technical knowledge.

With different goals, intended beneficiaries and levels of support, Acre’s and Mato Grosso’s ZEE commissions differed greatly. The rest of this paper focuses on understanding this difference by examining Phase II of Acre’s ZEE process, when the ZEE map was produced and approved, and phases I and II of Mato Grosso’s process. We present and discuss our findings, examining the commissions as participation mechanisms aimed at providing meaningful input to both ZEE maps. Our analysis extends to power dynamics, each state’s wider context, and how relationships among the actors may have shaped both MSFs’ potential and outcomes.

The overt face of power: which actors were included/excluded in the commission?

In both states, the ZEE commissions were created through state-level Decrees and shared structural similarities. Neither had minimum participation quotas; their organizers’ sought to ensure the presence of all actor types. In both cases, state-level governmental agencies had more seats than other types of stakeholders – representatives of both states’ agribusiness federations complained about being a minority. Institutional representation in the commissions was decided by each institution and usually their heads were selected, although technical staff were also selected due to their expertise in environmental and land-use matters. Both commissions’ organizers had a stake in the selection of representatives, none considered the representation of women as an official consideration and, in both cases, several organizations changed their representatives between and within phases, partly because people rotate jobs and each Phase lasted for several years. The academic sector was represented in both commissions by public universities and research agencies.

As for differences, a significant proportion of the participants in Mato Grosso, especially those from the agribusiness alliance, did not have close relationships with the organizers. Most participants in Acre, including representatives from the production sector, were part of—or had good relations with—the organizers and the State’s social-environmental network.

Actor categories and the number of representatives by category differed in both commissions. In its first Phase, Acre’s ZEE organizers established eight chambers (i.e. types of actors) for the commission, and maintained that structure for subsequent phases. In Phase II, the official members, by chamber, were: state government (7 organizations); federal government (3); research agencies (3; all governmental); other governmental spheres (6; Acre’s Legislative Assembly and representatives of Acre’s 5 sub-regions); small-scale workers’/farmers’ organizations (3); business (7); indigenous organizations (3); and civil society/NGOs (3) (see Table 2).

Mato Grosso’s commission altered its structure between phases I and II. In Phase I, the state-level Decree\(^8\) that established the commission listed 41 participating agencies/organizations, clustering them in 3 groups: state government (15 organizations), federal government (6) and civil society (20; including 14 NGOs, 5 organizations linked to the private sector, and 1 quilombo\(^9\)). The Decree specified that the state government agencies were members, while the other two groups were ‘guests.’ A fourth group was included with six MSFs\(^11\), who were allowed to participate but had no right to vote. Notably, there was no indigenous peoples’ representation. In Phase II, the diversity of represented actors improved (see Table 2). A new Decree\(^12\) indicated new participation categories, and the number of seats in each: state government agencies\(^13\) (9); federal government agencies\(^14\) (5); municipal governments (2); environmental NGOs (2); social NGOs (2); small-scale farmers (2), traditional populations (2), indigenous peoples (2), agriculture and livestock (2) and industry

---

8 The same person organized the ZEE commission in both phases, working for SEMA during phase I and for SEPLAN during phase II.
9 State-level Decree 1.139, on January 31\(^{\text{st}}\) of 2008.
10 The only quilombo with its territory officially recognized in Mato Grosso’s database.
11 These included Mato Grosso’s official Councils of Environment, of Hydric Resources, and of Engineering, Architecture and Agronomy, as well as the Committee of Fire Management, Inter-Institutional Commission of Environmental Education, and Regional Council of Biology.
12 State-level Decree 889, published on March 21\(^{\text{st}}\) of 2017.
13 Including Mato Grosso’s state-level university (’Universidade do Estado de Mato Grosso’).
14 Including Mato Grosso’s federal-level university (’Universidade Federal de Mato Grosso’).
The organizer called on non-governmental actors to decide which organizations would represent each non-governmental category. Some interviewees did not consider this decision as inclusive or fair as it resulted in NGOs filling the spots for traditional populations and small-scale farmers. Conversely, certain actors in Acre that were not listed as official members\footnote{E.g., Rio Branco’s municipality, the Union of Rural Workers of Brasileia and the Secretariat of Agriculture and Livestock.} participated in some meetings. Finally, in Mato Grosso’s Phase II, 22% of the official commission members were women, while in Acre it ranged between 30–40%. One of Acre’s organizers suggested that women’s empowerment was an unexpected benefit of the process.

The covert face of power: How equitably and effectively did different actors participate in the commissions?

In Acre, all organizers and over 80% of the interviewed participants perceived the commission to be very equitable and power relations to be balanced, arguing that all participants were able to influence its process and results (power to). In Mato Grosso, no interviewed participant perceived Phase I’s process to have been equitable, and 60% perceived phase II as slightly equitable or not equitable at all.

How much decision-making power was devolved to the commissions?

When evaluating how fairly and effectively could actors participate in the ZEE commissions, the decision-making power of the commissions (i.e. how much power was devolved to the commissions) was crucial. A key function of Acre’s and Mato Grosso’s ZEE commissions was to produce ZEE maps, which implied debating, reviewing and contributing to a draft map previously produced by a team of government officials and consultants. Both commissions played such role differently, mainly due to the approaches used by each organizer in response to each subnational context and its power dynamics (see Table 3).

Acre’s ZEE’s organizers sought the process to be as participative as possible, and gave the commission an active role in providing input throughout the production process (e.g., ZEE map). The commission collaborated with other governance platforms, thus enhancing the process’ participation, equity and legitimacy. The commission debated matters and approved decisions concerning the ZEE map that had been discussed by the organizers, by the multi-sectorial expert team that drafted the map, by local actors at local workshops in 22 municipalities, and by indigenous representatives.

In Mato Grosso, interviews revealed that the commission’s role in the production of the ZEE map and the guidelines for its production remained unclear among participants even after several meetings. The ZEE map production process was top-down, with the organizers maintaining control over the process – arguably as a way to minimize conflict. Research notes that in both phases the map was produced mainly by the technical team (SEPLAN and SEMA) and the commission had limited chances for significant contributions – especially in Phase I when only the heads of the state-level Secretariats were consulted. The ZEE map was presented at the commission and public hearings only after it had been finalized. A former SEPLAN official explained that Phase I only involved non-governmental actors towards the end of the map’s production in order to make it more efficient. This decision was highly criticized. A participant stated: “If we had some time to talk it was only 10 minutes, and only to change some terms.”\footnote{The interviewee argued that NGOs asked to replace the terms ‘agro-chemicals’ and ‘agricultural defender’ (in Portuguese, ‘defensivo agrícola’) – which were preferred by the agribusiness sector – for the term ‘agrotoxics’.} The organizer explained that for Phase II she

| Type of actor                        | Acre’s ZEE commission | Mato Grosso’s ZEE commission |
|-------------------------------------|-----------------------|------------------------------|
|                                     | Phase I and II        | Phase I                     | Phase II                     |
| Governmental entities               |                       |                              |
| Federal                             | 6                     | 6                            | 5                            |
| State                               | 8                     | 15\footnote{(i)}            | 11\footnote{(iii)}           |
| Local                               | 5\footnote{(ii)}      | 0                            | 0                            |
| Private sector / large producers    | 7                     | 5                            | 4                            |
| Non governmental organizations      | 3                     | 14                           | 7\footnote{(iv)}             |
| Indigenous peoples                  | 3                     | 0                            | 2                            |
| Traditional populations             | 2                     | 1                            | 0                            |
| Small producers/ family farmers     | 1                     | 0                            | 1                            |
| TOTAL                               | 35                    | 41                           | 30                           |

\footnote{(i)} Represented by ‘regionals’ (Acre’s municipalities were grouped by regions).
\footnote{(ii) and (iii)} These included the state-level association of local governments, which represented municipal governments.
\footnote{(iv)} Two NGOs represented traditional populations and one NGO represented small producers.
TABLE 4 Role of the ZEE commissions in relation other mechanisms in Acre’s and Mato Grosso’s ZEE map production process

| Mechanisms utilized for the ZEE map production process | Acre’s ZEE (phases I and II) | Mato Grosso’s ZEE (phases I and II) |
|-------------------------------------------------------|-----------------------------|----------------------------------|
| Role of the commission                                 | Contribute to build consensus among actors (‘social pact’) and empower historically marginalized groups. Actively contribute to creating the ZEE products (e.g. ZEE map) together with the multi-sectorial expert team and considering matters previously discussed through other participation mechanisms. | Review the ZEE products (e.g. ZEE map) that were previously drafted by SEMA and SEPLAN expert team and make suggestions about the ZEE map guidelines (diretrizes). |
| Frequency of commission meetings                       | Approximately monthly or every 2–3 months, during several years (throughout the ZEE process) | Phase I: One 3-day meeting Phase II (until mid-2018): 5 times |

sought to give the commission a bigger role in organizing meetings to gather more inputs and have SEPLAN’s technical team update the map based on the commission’s suggestions. However, the commission was unable to substantially change the delimitation of the land-use zones in the ZEE map in Phase II, limiting its contributions to suggestions on databases, indicators or guidelines. Some interviewed participants from the social-environmental sector and the production sector described Phase II as a formality, limited to approving the map produced by the government.

After evaluating the covert face of power by looking at the power of the commissions, we now do so by looking at power dynamics in the commissions.

Did all actors attend the meetings?
Interviewees agreed that attending meetings was key for actors to inform processes and results and have a fair process, yet ensuring full attendance was challenging in both commissions. Some actors were frequently unable to attend due to time constraints and busy agendas or due to logistic and economic limitations. In Acre, however, most actors were unconcerned with their absences because they trusted the ZEE’s organizers and technical team, who they considered as allies. Participants’ perceptions suggested that attendance in Acre was high, partly because the commission’s participants placed importance on the ZEE as Acre’s official “guide” for strategic territory planning. In Mato Grosso, several participants (including indigenous representatives) stated that they did not put much effort in attending the meetings because they did not consider it as urgent as the Forest Code and land tenure regularization. “Before there was pressure. Groups were afraid of the ZEE, because they thought that the ZEE was going to be part of the new Forest Code – which had not been approved yet. But nowadays there is no pressure anymore. People think that the ZEE is not important, that it is not legally binding. . .” (Associação Xaraiés representative).

Did all actors (need to) understand the technical topics being discussed?
We assessed whether all participants were able to navigate through the technical aspects of the ZEE. In both states, participants agreed that the governmental agencies leading the ZEE process were the most influential in the commission due to their technical knowledge and political authority. Technical knowledge stood out a key type of power, partly because ZEE involves discussing complex topics such as land cover, topography and demographic indicators. Capacity development among participants was not done through training sessions but through the process itself – via presentations, discussions and information sharing at the meetings.

The fact that governmental experts understood technical discussions better than other actors had different implications in Mato Grosso and Acre. Interviews revealed that, in Acre, homogenizing participants’ technical knowledge was not necessarily a requirement for balanced power relations. Unlike Mato Grosso, most participants in Acre did not feel threatened by the technical knowledge of governmental experts as they considered them collaborators that “brought technical knowledge to the table”. Acre’s participants experienced the process as respecting the common good and different types of knowledge. Contrastingly, knowledge differences in Mato Grosso were more problematic. Several civil society participants showed distrust in governmental experts, thinking they aligned themselves with the agribusiness sector – and seeing them as opponents taking advantage of their power and technical knowledge. One participant called the ZEE “a Machiavellian action of the state government” (Gonzales Tovar et al. 2021).

Interviews suggest that the knowledge gap between organizers and participants was more significant in Mato Grosso than in Acre. In Acre, the commission participants stated that the organizers applied different techniques to minimize knowledge differences and maximize learning. Organizers in Acre noted that they explained technical or complex concepts

---

17 Mainly, NGO and government actors.
18 Mainly, local NGOs, grassroots movements, traditional populations and indigenous organizations.
using simple language to facilitate the participation of the representatives of smallholder farmers and communities. Also, the frequency of meetings was key: in Acre, several participants confirmed that there were monthly plenaries with all commission members to officially communicate and approve issues and decisions. There were also other smaller, more frequent meetings by chambers, which organizers and participants claimed were aimed at: holding more focused discussions and negotiations; empowering actors by incentivizing detailed discussion about the topics they were more knowledgeable about; and having more homogeneous spaces (i.e. with similar actors or themes) to facilitate bridge building. Consequently, most participants in Acre – including smallholder farmer and community representatives – saw the ZEE process and commission as a significant learning experience. Acre’s industry federation’s representative stated: “[The ZEE map] has all the technical information that someone needs. . . When you talk about ZEE, you talk about a very important learning process (aprendizagem)”. In Mato Grosso, most participants, including the agribusiness federation representative, complained that, in both phases, they were unable to fully understand the technical document shown to them as there was such a short time to analyze it. In Phase I Mato Grosso’s commission only met once in a 3-day seminar in Mato Grosso’s capital. As Mato Grosso’s Interinstitutional Commission of Environmental Education representative noted, there was much talk about respecting the environment, but important underlying land-use conflicts remained unaddressed. She also mentioned, as did other participants, that the “seminar was too technical and too fast. . . the person from SEPLAN only talked and talked . . . there was not enough time to process [the information].” Although for Phase II the commission met 5 times between 2017–2018, interviews also revealed that participants were unable to fully understand the ZEE proposal. Several interviewees revealed that some meetings were cancelled due to logistical issues. Even after a 90-day extension, few participants had sent comments to the organizer, who expressed her frustration and decided to circulate the draft proposal among governmental agencies without the commission’s approval. She argued that this would allow governmental entities to begin familiarizing themselves with the document and internalize it.

**Could participants join forces towards common goals, and if so, why?**

Fair participation also entails diverse actors uniting (power with) to collaborate towards common goals (i.e. decisions that benefit diverse actors). This was difficult in Mato Grosso’s commission; participants had diverse values regarding the environment, forests, livelihoods and economies, which hampered reaching an agreement. The agribusiness federation representative noted that “the environment was rough, because people did not want to lose the fight.” Differently, most of Acre’s participants were part of the social-environmental alliance, with similar values based on sustainable development. Organizers reported that they encouraged consensus based on the common good and ‘technical’ criteria. Participants agreed that the commission was favourable towards social and environmental goals and forest-dependent populations. Interviewees argued that all participants who were politically and ideologically aligned with the organizers had greater chances of influencing the process. Acre’s agribusiness federation representative considered that the organizers were “contaminated [by] left-wing ideologies” and gave too much power to local peoples and environmental NGOs, marginalizing the interests of the private sector, which had been a minority in the commission.

**How did participants compete or balance power relations when dealing with trade-offs?**

As trade-offs are inherent to land use matters, fairness in a participation process depends on how power dynamics was among participants with opposing interests. Both Acre’s and Mato Grosso’s ZEE commissions lacked clear conflict resolution mechanisms with explicit procedures on how to act in case of conflict. Organizers argued that by bringing diverse actors in dialogue, the commissions themselves would prevent and manage conflicts; thus, additional conflict resolution mechanisms were unnecessary.

The management of trade-offs and contested topics was different in both commissions. Legal Reserves were contested topics in both states, given the approval of the ZEE would enable the reduction of Legal Reserves in the Amazon biome. Acre’s commission debated this topic and concessions were made, balancing different needs. The commission agreed with reducing the size of Legal Reserves in certain areas, as requested by the agribusiness federation and smallholder farmers. Simultaneously, it was decided that only 10% of Acre’s territory – the deforested areas – would be allowed to agriculture. In contrast, interviewees suggested that the organizers of Mato Grosso’s ZEE tried to avoid this topic in the commission. A SEPLAN participant stated that the ZEE technical team intentionally avoided discussing how the ZEE map would reduce the area required for Legal Reserves. She argued that this decision needed to be based on technical criteria and thus determined by the organizers and technical team rather than the commission. Organizers kept commission discussions mainly technical, avoiding discussing politically and socially sensitive subjects such as the domination of the agribusiness sector and the land invasions and threats suffered by smallholder producers and indigenous peoples. An NGO participant stated: “We are trying to politicize the commission. . . but organizers want it to be only technical.”

The previous sections analyzed power dynamics within the commissions. Now we move to explain power dynamics

---

19 E.g., state-level Secretariat of Agriculture and Livestock.

20 As noted previously, Brazil’s new Forest Code established that, in those states that have a ZEE approved, Legal Reserves in some parts of the Amazon biome could be reduced from 80% to 50% of the total area of properties.
in their outcomes: i) the ZEE map and ii) relationships among actors. The ZEE commissions’ outcomes can only be fully understood by looking at the overall ZEE process.

Who won? Looking beyond the ZEE commissions to understand power dynamics in the overall process and outcomes

The ZEE commissions did not operate in a vacuum; other decision-making and governance systems were part of the ZEE process. Those mechanisms reflected and shaped the resulting ZEE maps (e.g., whose preferred reality they represented), as well as the legitimacy and power of the commissions’ decisions and the legitimacy of the overall ZEE process. Each commission interacted with other mechanisms in different ways with different results. Acre’s commission played a powerful role in a highly participatory ZEE process, while Mato Grosso’s commission played a limited role in a highly contested ZEE process.

The ZEE maps approved by the commissions: who did they empower (whose preferred reality did they represent)?

In Acre, the fairness of the map approved by the commission was enhanced by the role that other governance mechanisms played in the ZEE process. The commission approved a map that was produced through a long interactive process where diverse governance mechanisms (besides the commission) were involved. For years, the ZEE products passed from hand to hand, through the multi-sectorial experts’ team, the commission, local workshops and ethno-zoning process. The representative of Acre’s Secretariat of Agriculture and Livestock described it as “a process of constantly coming and going.” Interviewees considered that the combination of these governance mechanisms granted the ZEE process and results a great deal of legitimacy. Local workshops and the ethno-zoning process were considered crucial to reach local actors. The resulting ZEE map reflected Acre’s florestania; it did not allow further deforestation or agricultural expansion and tried to maintain its forests, land uses, land occupation, economic activities, and populations as they were. Former governor Viana described it as: “a zoning made by history.” About 85% of interviewed participants considered this map as very equitable, arguing that it benefited all; most respondents who considered the ZEE as somewhat equitable argued that it is impossible to have an absolute consensus. Most interviewees considered that the map gave all actors and activities a “space”. A participant from the private sector said it was “a perfect distribution for everyone.” The agribusiness representative, however, argued that the map was “too environmentalist,” that only technical experts should draft the ZEE map and the Legislative Assembly alone should decide on its approval. Acre’s ZEE map was successfully approved by the commission in 2006, in a meeting that also included Acre’s three state-level MSFs (Councils of Environment, Science and Technology; Sustainable Rural and Forestry Development; and Forestry). Interviewees suggested that the voting process was a formality, given that the map was widely considered as legitimate. Yet, the agribusiness federation representative expressed dissatisfaction: “the ideology of the majority tends to prevail in detriment of the minorities.”

In Mato Grosso, the fairness of map approved by the commission mostly reflected the organizers’ views. In Phase I, the map approved by the commission had been entirely drafted by SEPLAN’s and SEMA’s technical team. Participants across sectors were dissatisfied with the map, partly because they considered that it had not been participatorily drafted and because they had insufficient time to fully understand it. Furthermore, NGOs and community organizations felt that local and traditional populations were not adequately represented as the map only showed two quilombos, when the number and diversity of traditional populations in Mato Grosso is much higher (Gonzales Tovar et al. 2021). The map proposed significant reforms to Mato Grosso’s agribusiness model towards land-use diversification and sustainability. The agribusiness federation representative stated that the map, “more environmental than socio-economic,” would “paralyze” the State’s economy, and did not represent the state’s reality nor the concerns farmers raised at public hearings. This map was approved by a majority of votes in the commission. Although not completely satisfied, socio-environmental representatives voted to approve the map as they considered it had addressed ecological-environmental aspects. Like the agribusiness federation representative in Acre, Mato Grosso’s agribusiness federation and other production-oriented actors – who had voted against its approval – were dissatisfied and complained about being outvoted by people with a strong ideological component.

How accepted/respected were the commissions’ decisions?

Interviews revealed that the legitimacy of the commissions’ decision (to give their approval to the ZEE map) was reflected on how seconded they were by other governance spaces. Some of those other governance spaces were governmental authorities given, according to federal regulations, the commissions’ functions were to give the semi-final approval of the ZEE map. After being approved by the commissions, a state-level ZEE map requires further approval by the state-level Legislative Assembly and Governor and federal actors to become a law. However, while in Acre diverse authorities and governance spaces enhanced the legitimacy of the commission’s decision, in Mato Grosso they diminished or overshadowed it.

Acre’s map became a legally binding document following approval by the commission and state-level and federal level

21 As noted previously, it was decided that only 10% of Acre’s territory (the areas already deforested) would be allocated for agriculture in the ZEE map.
22 E.g., NGOs, agroecological farming organizations and traditional populations
23 E.g., the Ministry of Environment and ZEE National Commission.
authorities. Contrastingly, participants across sectors in Mato Grosso perceived that the ZEE commission had given them limited possibilities to influence the process and were unhappy with the map, especially in Phase I. Therefore, they used other governance mechanisms, which they deemed as more powerful than the commission, to include their inputs in the map. Key informants and officials from SEPLAN and SEMA agreed that, after the agribusiness alliance of Mato Grosso lost the voting process in Phase I, they sought to obstruct the maps’ implementation by lobbying Legislative Assembly deputies and former governor Maggi. Interviewees noted that agribusiness actors used public hearings and the Legislative Assembly (where the ruralist coalition was a majority) to delegitimize the map and the commission’s decision. All types of informants from diverse sectors suggested that agribusiness actors lobbied for the Legislative Assembly to be responsible for 15 public hearings held in different municipalities. The agribusiness federation mobilized large and small-scale farmers to protest against the ZEE’s potential land-use restrictions, demand their lands to be classified as agriculture/production lands, and demand Legal Reserve areas to be reduced. The agribusiness sector used these hearings to persuade farmers into opposing the ZEE process; they dominated the discussions and intimidated local social-environmental leaders. Some interviewees reported large-scale farmers purposely showing up with their guns, and that social-environmental activists who participated in the public hearings received death threats. A non-participant indigenous informant noted that the ZEE organizers (SEMA and SEPLAN) made honest but unsuccessful efforts to support NGOs and activists during the public hearings. While this and other social-environmental actors described these as highly confrontational and difficult times, the agribusiness federation representative stated that they remembered the public hearings with joy as they allowed large and small-scale local farmers to express their opinions. These confrontations extended to other spaces, including the Legislative Assembly, which approved a pro-agribusiness map after the public hearings. This led to street protests against that map, which were supported and legitimated by federal institutions.

The Decree that started the ZEE commission’s Phase II established that the commission would be responsible for approving the ZEE map and following up on its implementation. To prevent the agribusiness sector from dominating the process, the organizer of Mato Grosso’s commission decided that the commission would be the only space for face-to-face discussion with non-governmental actors, with no public hearings and only an online consultation process. This decision was questioned by both production/development and civil society actors, who claimed there should be channels to discuss and disseminate the ZEE proposal among different stakeholders. As a result, respondents who did not participate in Phase II revealed that local actors did not know about the ZEE process or commission. As of March 2020, the commission had not yet voted on the proposed ZEE map. However, regardless of the map’s approval, the agribusiness sector can use its economic, political and ideological power to block the approval process again. Mato Grosso’s agribusiness federation representatives expressed that if the ZEE commission approves a map that they consider too restrictive, they will turn to other means to prevent its final approval.

How did relationships in the ZEE processes affect power relations and trust?

Scholarly debates argue whether MSFs, if designed and implemented correctly, can help promote harmonic relations (Sarmiento Barletti et al. 2020), thus facilitating future collaborations (power with). Interviews in Acre and Mato Grosso reveal that MSFs, depending on the case and the context, can promote balanced and collaborative power relations, or intensify asymmetrical and conflicting power relations. Acre’s ZEE process helped solve past-conflicts, increased trust among actors and promoted mutual learning; Mato Grosso’s exacerbated conflicts, polarized relationships, and led to a general feeling of mistrust.

Acre’s government considered that the ZEE process and its commission led to the construction of a shared sustainable development model; practically all respondents confirmed this. Most agreed that since Phase I the ZEE commission had progressively improved relations and built bridges between actors, strengthening a culture of dialogue, democracy and respect, providing a formal space for local peoples to be heard, and sharing information and building knowledge about land use, economic activities, social demographics and land cover in Acre.

Interviewees also agreed that Acre’s ZEE commission was successful in shaping actors’ visions about stakeholders from other sectors and the importance of local peoples, conservation and sustainable development, in general terms. There are, however, mixed perceptions about whether the ZEE changed the opinion of some private sector actors. For example, while the representative from the Brazilian Institute of the Environment and Renewable Natural Resources believed that the agribusiness federation representative had “learned” that it is not necessary to burn forests to raise cattle, a non-participant disagreed that the process could lead the private sector to understand the value of sustainability, forests and local peoples.

In Mato Grosso, the struggles that characterized Phase I deteriorated relationships, exacerbated conflicts and polarized NGOs working with agribusiness actors towards “sustainable” agribusiness and REDD+ and NGOs with positions against agribusiness and/or focus on grassroots movements.

---

24 E.g., Public Ministry and the Ministry of Environment.
25 E.g., SEMA, SEPLAN, National Council of Rubber Tappers and NGOs.
26 As noted previously, indigenous peoples and traditional populations had relied mostly on social movements until then.
The first group\textsuperscript{27} believed that the organizer tried to conduct a fair process but was overpowered by the agribusiness sector. The second group\textsuperscript{28} showed mistrust towards the organizer and government experts, noting that the former may have succumbed to pressure from the agribusiness sector. Overall, most actors considered that the process had been biased against them: agribusiness actors because they were a numerical minority in the commission, and environmental actors because they felt that all spheres were dominated by the agribusiness alliance. Furthermore, exhaustion and pessimism were manifested; interviewees from diverse levels and sectors feared the repetition of past events: that powerful groups (i.e. agribusiness) would obstruct the ZEE process and impede the ZEE’s approval.

CONCLUSION

This paper comparatively analyzed Acre’s and Mato Grosso’s ZEE commissions to contribute to debates about territorial planning MSFs, focusing on how they are affected by historical contexts and power relations. Findings show that territorial planning MSFs are shaped by the historical power asymmetries they seek to address. The historical context, local elites and alliances, trade-offs and subjectivities, and political will and institutions across levels and sectors shape power dynamics, collaboration and sustainability outcomes – both inside and outside the MSF.

Findings revealed the centrality of context and historical power relations. Acre’s experience shows that territorial planning MSFs have better chances of promoting equitable, collaborative and balanced power relations and environmental benefits when they emerge from and are nourished by a context that embraces social-environmental local movements. Their chances were enhanced when participants shared similar sustainable development notions in processes that acknowledged technical criteria and peoples’ subjectivities. Conversely, Mato Grosso’s case indicates that territorial planning MSFs are less likely to produce equitable and effective outputs when they arise from external demands and institutions, are framed as technocratic processes, and operate in jurisdictions where economically powerful elites dominate certain societal spheres.

Furthermore, the consequences of differences among MSF participants in technical knowledge are not straightforward. Although it is important to minimize knowledge gaps among MSF participants, this paper shows that disparities in technical and expert capacities between participants are not always an obstacle for an MSF’s goals. In favourable contexts, where different actors are trusted allies with shared views on conservation and social justice, asymmetries in technical knowledge are not obstacles to equity, but rather are incentives for collaboration and trust. In these settings, the determinants may not be power per se, but how it is wielded. It is not necessary for everybody to be an expert; it may be sufficient to develop actors’ capacities to know what to ask and to voice their opinions, as well as to build trust and improve communication among actors.

This research also shows that collaboration among participants towards the common good and competition due to trade-offs are inherent to territorial planning MSFs. First, trade-offs are part of territorial planning processes, as allocating a piece of land to a certain use entails not promoting a different use. Second, maps must be considered as more than technical instruments that objectively reflect reality or the most appropriate land uses, as they are political instruments that are neither innocent nor objective. Politically powerful actors may push for maps to represent the portion of reality they are interested in; government agencies are not the only ones to attempt this as others seek to do so using different sources and forms of power. This entails questions that shape reality, such as: who decides what land-use categories exist? Who determines how much forest exists? Who decides who exists as a traditional community? Who decides what type(s) of information goes on the map? Information considered as technical could be a way to disregard the priorities of certain groups and different lived realities. Consequently, maps represent the views and interests of their makers and information and criteria considered technical (and thus supposedly unbiased) can be influenced by differences in values, subjectivities and historical power dynamics. Organizers and participants of MSFs that deal with territorial planning need to acknowledge this in order to better manage trade-offs, competing interests and power asymmetries. Peoples’ personal perspectives should be included in the process rather than being seen as detrimental to technical objectivity.

Power relations and dynamics are not straightforward in territorial planning MSFs. First, although economic power is crucial, it is not the only piece in the power game. Political and economic power can be key for elites to exert power over – especially in contexts where politically and/or economically powerful actors dominate – but other sources of power (e.g., types of knowledge or power) can enable diverse actors to influence territorial planning processes. Second, how participants deal with trade-offs, how relationships evolve through the process, and which actors and land uses benefit from the MSF’s decisions, is shaped by how homogenous or diverse the views and values of the forum’s participants are in relation to social-environmental issues and sustainable development. Relatedly, depending on the organizers’ views and values, both top-down and bottom-up processes can lead to different results. When an MSF is commanded and led by environmentally oriented authorities, a top-down territorial planning process may promote environmental sustainability. In fact, in settings where local populations tend to have unsustainable land-use practices, the environmental entities that command the MSF may try to retain control over the process and avoid devolving much decision-making power to the MSF.

\textsuperscript{27} This first group included the Instituto Centro de Vida, Instituto Socioambiental and the Instituto de Pesquisa Ambiental da Amazônia.

\textsuperscript{28} This second group included the Conselho Indigenista Missionário and the Comissão Pastoral da Terra.
Consequently, while MSFs can – depending on their design and historical context – play a role in balancing power relations between stakeholders, promote equity in territorial governance, advance conservation efforts and provide benefits to local populations, not everything can depend on MSFs. Other governance mechanisms shape what happens outside and even within an MSF, or what happens after it has ended. These governance mechanisms can be used by different actors to exert power over a territorial planning process, for better or worse. In favourable contexts, the synergy of MSFs with other types of mechanisms, such as public hearings and governmental decision-making systems, can enhance the overall equity and legitimacy of MSFs. In less favourable contexts, other mechanisms outside MSFs can be captured by elites, who can use them to exert power over and power to. Across contexts, social action and securing tenure rights appear as key for civil society to challenge elites, using their power with. As for outcomes, the lack of equity in processes is reflected in the decisions made as well as in the way relationships between actors evolve over time since the creation of the commission and in interaction with other governance processes and spaces.

Overall, both territorial planning and MSFs must be recognized, in theory and in practice, as political processes rather than technocratic tools. The search for good governance and the common good in multi-stakeholder territorial planning involves explicitly addressing, rather than avoiding, the existence of power asymmetries, injustices and trade-offs.

ACKNOWLEDGEMENTS

The authors would like to thank the anonymous reviewers for their comments. We also thank the different people and organizations that were interviewed during this research initiative. 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.

REFERENCES

ARDIANSYAH, F., AKBAR MARTHEN, A., and AMALIA, N. 2015. Forest and land-use governance in a decentralized Indonesia: A legal and policy review. Center for International Forestry Research, Occasional paper 132.

BROEGAARD, R.B., VONGVISOUK, T., and MERTZ O. 2017. Contradictory land use plans and policies in Laos: tenure security and the threat of exclusion. World Development 89: 170–183.

CHAMBERS, R. 2006. Transforming power: from zero sum to win-win?. IDS Bulletin 37(6).

COMERMA, J. 2010. Land capability, suitability and vocation in Venezuela. Paper presented on 19th World Congress of Soil Science, Soil Solutions for a Changing World August 1–6, 2010. Brisbane, Australia.

COTE, C., TITTILER, R., MESSIER, C., KNEESHAW, D.D., FALL, A., and FORTIN, M.J. 2010. Comparing different forest zoning options for landscape-scale management of the boreal forest: Possible benefits of the TRIAD. Forest Ecology and Management 259: 418–427.

DA SILVA SCHRÖEDER, C., and BELISÁRIO FINAMORE, E. 2012. Planejamento territorial e gestão do conhecimento na governança pública: A experiência do mapa estratégico do Corede Produção. Revista do Desenvolvimento Regional 17(1): 164–181.

DI GREGORIO, A., and JANSEN, L.J.M. 2005. Land cover classification system (LCCS): Classification concepts and user manual. Software version 2. Food and Agriculture Organization of the United Nations, Rome, Italy.

DOMHOFF. (2005). Who rules America. Retrieved from: http://www2.ucsc.edu/whorulesamerica/methods/studying_power.html

FERNANDES DO REGO, J. 2017. Mapa de Gestão Territorial, http://pagina20.net/v2/o-mapa-de-gestao-territorial/

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS (FAO). 2014. Multi-sectoral platforms for planning and implementation: How they might better serve forest and farm producers. Food and Agriculture Organization of the United Nations, Rome, Italy.

GCF TASK FORCE. (2020a). Acre. Retrieved from: http://www.gcftaskforce-database.org/brazil/acre/forests-and-land-use

GCF TASK FORCE. (2020b). Mato Grosso. Retrieved from: http://www.gcftaskforce-database.org/brazil/matogrosso/forests-and-land-use

GONÇALVES, J. 2016. Zoneamento socioeconômico e ecológico de Mato Grosso. Universidade Federal de Mato Grosso (UFMT), Mato Grosso, Brasil.

GONZALES TOVAR, J., SARMIENTO BARLETTI, J.P., LARSON, A.M., BARNES, G., and TUCKER, C.M. 2021. Can multistakeholder forums empower indigenous and local communities and promote forest conservation? A comparative analysis of territorial planning in two Brazilian states with contrasting contexts. Conservation Science and Practice 3: e326.

INTERNATIONAL LAND COALITION (ILC). 2020. Multi-stakeholder platform: Working together for systems change in land governance. Retrieved from: www.landcoalition.org/en/explore/our-work/multi-stakeholder-platforms. Accessed May 26, 2020.

KECK, M.E. 1992. The Workers’ Party and democratization in Brazil. Yale University Press.

KOHLEPP, G. 2002. Conflitos de interesse no ordenamento territorial da Amazônia brasileira. Estudos Avançados 16(45): 37–61.

KOHNE, M. 2014. Multi-stakeholder initiative governance as assemblage: Roundtable on sustainable palm oil as a
political resource in land conflicts related to oil palm plantations. *Agricultural and Human Values* 31: 469–480.

KUSTERS, K., BUCK, L., DE GRAAF, M., MINANG, P., VAN OOSTEN, C., and ZAGT, R. 2018. Participatory planning, monitoring and evaluation of multi-stakeholder platforms in integrated landscape initiatives. *Environmental Management* 62: 170–181.

LARSON, A.M., SARMIENTO BARLETTI, J.P., RAVIKUMAR, A., and KORHONEN-KURKI, K. 2018. Multi-level governance: Some coordination problems cannot be solved through coordination. In: ANGELENSEN, A., MARTIUS, C., DE SY, V., DUCHELLE, A.E., LARSON, A.M., and PHAM, T.T. (ed.) *Transforming REDD+: Lessons and new directions*. Center for International Forestry Research, Bogor, Indonesia. 277 pp.

MAY, P., MILLIKAN, B., and GEBARA, M.F. 2011. The context of REDD+ in Brazil: Drivers, agents and institutions. Center for International Forestry Research. (CIFOR). Report. Bogor, Indonesia: CIFOR.

MCCUSKER, B., and WEINER, D. 2003. GIS representations of nature, political ecology and the study of land use and land cover change in South Africa. In ZIMMERER, K.L. and BASSET, T.J. (ed.) *Political ecology: an integrative approach to geography*. Guilford Press, New York, NY, United States of America. 310 pp.

MINISTERIO DE MEIO AMBIENTE (MMA). 2006. Diretrizes metodológicas para o Zoneamento Ecológico-Econômico do Brasil. Retrieved from: http://www.mma.gov.br/informma/item/7529-diretrizes-metodologicas

MINISTERIO DE MEIO AMBIENTE DO ACRE (SEMA). 2010. Zoneamento Ecológico Econômico do Acre – Fase II, Escala 1:250.000, Documento Síntese 2ª Edição, Rio Branco – Acre 2010.

NOLTE, C., GOBBI, B., LE POLAIN DE WAROUX, Y., PIQUER-RODRIGUEZ, M., BUTSIC, V., and LAMBIN, E.F. 2017. Decentralized land use zoning reduces large-scale deforestation in a major agricultural frontier. *Ecological Economics* 136: 30–40.

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. *Politics and Space* 36(8): 1437–1457

ROBBINS, P. 2003. Fixed categories in a portable landscape: the causes and consequences of land cover categorization.

In: ZIMMERER, K.L., and BASSET, T.J. (ed.) *Political Ecology: An Integrative Approach to Geography*. Guilford Press, New York, NY, United States of America. 310 pp.

RUDEL, T.K., and MEYFROIDT, P. 2014. Organizing anarchy: The food security–biodiversity–climate crisis and the genesis of rural land use planning in the developing world. *Land Use Policy* 36: 239–247.

SADAN, E. 1997. *Empowerment and Community Planning. Empowerment and community planning: Theory and practice of people-focused social solutions*. Hakibbutz Hameuchad, Tel Aviv, Israel.

SARMIENTO BARLETTI, J.P., LARSON, A.M., HEWLETT, C., and DELGADO, D. 2020. Designing for engagement: a realist synthesis review of how context affects the outcomes of multi-stakeholder forums on land use and/or land-use change. *World Development* 127.

SCMINK, M., DUCHELLE, A., HOELLE, J., LEITE, F., D’OLIVEIRA, M.V.N., VADJUNEC, J., VALENTIM, J.F., and WALLACE, R. 2014. Forest Citizenship in Acre, Brazil. In: KATILA, P., GALLOWAY, G., DE JONG, W., PACHECO, P., and MERY, G. (eds.) *Forests under pressure: Local responses to global issues*. IUFRO World Series 32, 563 pp.

SCMINK & WOOD. 2012. Conflitos sociais e a formação da Amazônia.

SCOTT, J.C. 1998. *Seeing like a state: how certain schemes to improve the human condition have failed*. Yale University Press, New Haven, CT, United States of America. 445 pp.

SECRETARIA DE MEIO AMBIENTE DO ACRE (SEMA). 2010. Zoneamento Ecológico Econômico do Acre – Fase II, Escala 1:250,000, Documento Síntese 2ª Edição, Rio Branco – Acre 2010.

STEAD, D. 2014. The rise of territorial governance in European policy. *European Planning Studies* 22(7): 1368–1383.

VENEKLASSEN, L., and MILLER, V. 2007. A new weave of power, people & politics: the action guide for advocacy and citizen participation. World Neighbors, Oklahoma, OKC, United States of America.

VIANA, C., COUDEL, E., BARLOW, J., FERREIRA, J., GARDNER, T., and PARRY, L. 2016. How does hybrid governance emerge? role of the elite in building a green municipality in the Eastern Brazilian Amazon. *Environmental Policy and Governance* 26: 337–350.