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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

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A B S T R A C T

This Realist Synthesis Review (RSR) examines the scholarly literature on multi-stakeholder forums (MSFs) set up to support efforts towards more sustainable land use. In this review, we focus on subnational MSFs that include at least one grassroots and one government actor. MSFs have been presented, especially by practitioners, as a panacea to address land-use change and support climate mitigation, such as through "landscape" or jurisdictional approaches. However, it is not clear that these initiatives are learning from past experience, particularly from research analyzing the effect of context on the ability of such approaches to reach their objectives. To address this gap, the academic literature was assessed using the RSR method to elucidate the key contextual variables affecting outcomes. In addition to analyzing context, this review identifies four common lessons learned for MSFs: the importance of commitment (to the people, the process and its goals); engaging the implementers (key middle level brokers and government officials who determine what happens on the ground); openness to learn from and listen to stakeholders; and having a design that is adaptive to this context, with time and resources to do so. Findings suggest that the most successful MSFs are those that are recognized as part of a wider process that seeks to transform practices at multiple levels; entail a period of research and meetings at upper levels to identify potential roadblocks and existing capacities with those who would implement the project locally; build consensus and commitment from higher levels, and thus political will; and are designed as adaptive learning processes. The central lesson, then, is not one of how to design initiatives, given such different and distinct contexts. Rather, it is about how to *design for engagement* to address context, whatever its distinct features, in order to develop and implement initiatives with greater chance of success.

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1. Introduction

This Realist Synthesis Review (RSR) analyzes the literature on multi-stakeholder forums (MSF) that were established to address land use and land-use change (LULUC), such as by fostering sustainability or stopping degradation. The main objective is to understand the key contextual factors that affect the outcomes of the initiatives studied (Nilsson, Baxter, Butler, & McAlpine, 2016; McLain, Lawry, & Ojanen, 2017). The term MSF is used here to refer to what are also known as multi-stakeholder platforms, processes, partnerships and networks. In this review MSFs are defined as purposefully organized interactive processes that bring together stakeholders to participate in dialogue, decision-making and/or implementation regarding actions seeking to address a problem they hold in common or to achieve a goal for their common benefit. Stakeholders refer to actors with 'an interest in a particular decision, either as individuals or representatives of a group. This includes people who make a decision, or can influence it, as well as those affected by it' (Hemmati, 2002: 2).

The review focuses on forums set up at the subnational level and that include at least one governmental and one non-governmental participant. Subnational MSFs were chosen for three reasons. First, there is little, recent analysis on MSFs at this level, as most academic attention has concentrated on international forums (e.g. the Roundtables on Responsible Soy and Sustainable Palm Oil). Second, subnational MSFs are closer to the geographical locations where stakeholders are directly involved in and affected by land-use change, planning and management; thus outcomes might be easier to measure.[1] Third, the analysis contributes to a growing interest in scholarship and practice on jurisdictional approaches to tackle climate change and deforestation (Fishman, Oliveira, & Gamble, 2017; Boyd et al., 2018; Stickler et al., 2018).

This review is motivated by one theoretical and one practical issue. Although these issues are not new, they address the current fascination with MSFs as a 'new' participatory mechanism. The theoretical question is framed by an older discussion of community participation in development and conservation initiatives. Often referred to as 'business as usual' (BAU), mainstream approaches are commonly top-down, unisectoral and/or expert-driven. Analysts on both sides of the discussion agree on the problematic nature of power inequalities in BAU approaches, but they diverge on whether participatory processes, such as MSFs, can transform them (Chambers, 1983; Chambers et al., 1989). Within this debate, one position highlights the potential for more horizontal decision-making to have more equitable and effective outcomes for local populations (see Sayer, Sunderland, & Ghazoul, 2013; Estrada-Carmona et al., 2014; and Bastos-Lima, Visseren-Hamakers, & Brana-Varela, 2017 on landscape approaches). The other argues that mainstream participation only masks existing technologies of governance that do not address, and may reinforce, structures of inequality (Cooke and Kothari, 2001; Warner, 2006; see Larson et al., 2018; Ravikumar, Larson, Myers, & Trench, 2018 on the shortcomings of mainstream collaborative approaches).

Regarding practice, many donors and practitioners emphasize the importance of stakeholder participation in decision-making processes related to LULUC. These positions are sometimes associated with international agreements, e.g. indigenous peoples' right to Free, Prior and Informed Consent, or Reducing Emissions from Deforestation and Degradation (REDD+) initiatives. Local populations, especially indigenous organizations, demand this (Espinoza Llanos and Feather, 2012; Zaremberg & Torres Wong, 2018). The call for stakeholder participation is linked to positive outcomes ranging from the normative, such as upholding rights and participatory democracy, to the pragmatic, such as the proposition that stakeholder participation leads to more sustainable outcomes (Buchy & Hoverman, 2000; Hemmati, 2002; Reed, 2008; see Sarmiento Barletti and Larson, 2019a for a review).

Though a transition towards a substantive multi-stakeholder paradigm would be laudable, many past participatory initiatives have at least partly been 'box-ticking exercises' to satisfy legal or donor demands or were lost in the contexts in which they were introduced (see the contributions by Cooke, Cleaver and Mosse in Cooke & Kothari, 2001). Hence, it is important to consider the extent to which those promoting MSFs today are reflecting on and learning from the analysis of several decades of participatory conservation and development experience.

This review examines how MSFs were designed, how they functioned and with what goals; their program theory (the strategy through which the organizers expected their intervention to create change, see Nilsson et al., 2016); and the different and often cross-cutting contextual factors that affected their outcomes. It is based on the understanding that participatory mechanisms cannot be understood in a vacuum but rather require an in-depth awareness of the contexts they emerge from and operate in; as other scholars have found, participation has been constrained or enabled by a series of cross-cutting factors such as gender, geographies, class and/or caste and knowledge, among others (see Cornwall 2001, 2003; Escobar, 2006; Gupte, 2004; Mosse 2001, 2014). This article will contribute not only to scholarship but also to practice, as it provides insights into how MSFs can be designed to engage with the contexts in which they are implemented.

The next section outlines the method and inclusion criteria for the review. The third section presents the 19 case studies selected, grouped under the four program theories that emerged. Each program theory includes a short description of the theory and of each relevant

[1] This subnational approach also establishes a basis for empirical work the authors are currently carrying out in 13 subnational jurisdictions in 4 countries.

case, and a synthesis and analysis of the contextual factors that shaped how the initiatives worked in practice. The discussion section outlines the key lessons learned. This is followed by a short conclusion.

2. Approach and method

The initial literature review revealed a predominance of studies that: concentrate on global MSFs and whether they can make and enforce decisions; propose MSFs as the way forward with little consideration of alternative avenues to empower subaltern stakeholders; and pay little attention to the contextual factors that affect the participants, decisions and outcomes of MSFs. As the review proceeded, the RSR method was selected because, in comparison to the more common systematic review, it allows for the analysis of 'what works, for whom, in what circumstances, and why' (Pawson, 2013; see Pawson & Tilley, 1997) in MSFs.

The RSR still draws on the strict inclusion criteria of the systematic review, and thus has the evidence-based authority of such reviews while permitting greater analytical depth. RSRs bring together theory and empirical research to explain how interventions do not produce outcomes independently, as they are positioned within specific contexts. Outcomes are recognized as the product of the mechanisms that underlie interventions, and the mechanisms themselves are functions of the interactions between participants and their contexts. Designed to analyze goals, the mechanisms for reaching those goals and the role of context, the RSR does more than present quantitative evidence on whether an initiative is successful or not, as traditional systematic reviews often do (see Boaz, Ashby, & Young, 2002; Hagen-Zanker et al., 2012 for critiques). RSRs thus present an explanatory model that is more accountable to the complexity of the social sciences in general and of MSFs in particular.

The review aims to understand how context affects the way in which the mechanisms proposed in an initiative's program theory will work (Pawson, Greenhalgh, Harvey, & Walshe, 2004). Pawson and Tilley (1997) define mechanisms as 'a combination of resources offered by the social programme under study and stakeholders' reasoning in response' (see Dalkin et al., 2015; Durham & Bains, 2015 on the relation between mechanisms and outcomes). This definition points to the intent of the program, emphasizing the mechanisms put into place as a result of how organizers think people will respond to the initiative, as well as people's actual response to it. In short, the review aims to understand why initiatives following the same mechanisms may lead to different outcomes in different communities and under different conditions.

Two decisions were made to address the complexity of the topic. First, rather than using a pre-existing list of contextual factors, these were extracted from the evidence available for each case study. This helped build a stronger and more adaptable analytical method. Cases that had contextual data were prioritized in selection; the contextual factors derived from the analysis were synthesized into a final set, then integrated into mechanism-context-outcome combinations. Hence, the contextual factors included draw on the evidence most commonly provided, and some obvious ones, like biophysical factors, are missing.[2]

Second, to avoid over-simplification, we chose not to reduce each case study to only one program theory but rather used the two most relevant. It is worth noting, in any case, that what follows are synthesized 'ideal types' (Weber, 1952). The goals, mechanisms and outcomes are derived primarily from the perspective presented in the academic literature cited and do not necessarily represent how others involved may have interpreted the initiative (additional research is being conducted on this topic).[3] Further validation was done by contacting authors and reviewing additional literature, but the analysis concentrates on the journal article contributions. Inevitably, inherently messy and complex interactions have been simplified for analytical purposes.

Finally, as participation is a central theme of this review, it is important to note that 'participation' has many meanings and layers. Arnstein (1969) refers to a ladder of participation ranging from manipulation at the bottom to citizen control at the top; Agarwal (2001) refers to a progression from nominal participation (such as membership in a group) to interaction and empowering participation. In analysing each case study, emphasis is placed on the description used, but it is not always possible to clarify exactly what the authors mean by participation in every case.

2.1. Literature selection

In order to determine cases for analysis, a multi-step selection process was undertaken. This process required refining the review's definition of MSFs, as although all MSFs have participatory components by design, not all participatory processes are multi-stakeholder and fewer include the combination of stakeholders that meet the study criteria. A test systematic search on the universe of articles in EBSCO[4] of combinations of 'multi-stakeholder' terms (e.g. multi-stakeholder forum, multi-stakeholder initiative, multi-stakeholder platform) with LULUC-related terms (e.g. reforestation, forest management, community forestry) was limited, particularly in the search for subnational MSFs. Furthermore, many articles on participatory processes fit the review's definition of MSFs but do not define them as such or include the terms 'multi-stakeholder' or 'stakeholder' in their title, abstract or keywords. To address this challenge, the scope of the search was expanded, as explained below.

The review was carried out in five phases (see Sarmiento Barletti, Hewlett, & Larson, 2019 for more detail in the full protocol).

Phase 1: A systematic search combining 18 terms describing LULUC interventions and 33 terms describing this review's definition of MSFs was carried out on EBSCO. The terms were applied on the title and keywords of all results. Each abstract was filtered for the review's population (MSFs with at least one government and one non-governmental subnational stakeholder), intervention (LULUC efforts towards sustainability and/or stopping detrimental change) and scale (subnational level). Phase 1 concluded with 984 articles.

Phase 2: The reviewers read the full text of the studies selected in Phase 1, selecting those that included: evidence of the impact on local communities brought about by the MSF; a qualitative assessment of the context addressed by the MSF; description of contextual data for the case study; and specification of how the MSF was convened, what stakeholders took part in it, how decisions were made and the MSF's outcome and its implementation. Phase 2 concluded with 124 articles.

Phase 3: Articles that did not include the following characteristics for their case studies were excluded: details on the intervention proposed by the MSF; its program theory/theories; the context, mechanisms and outcome relationship at play in the case study; comments on the rigor of the study; other rele-

[2] This is both a strength and limitation of the analysis. On the one hand, had the review been restricted to cases that included all potential contextual factors, even fewer cases would have remained. On the other, it is possible that some influential factors were not taken into account by the authors of the cases studied. For a more complete look at causal and contextual variables, see Agrawal & Chhatre, 2006 and the IAD framework by Ostrom (2005), and IAD as further elaborated by others (e.g. Clement, 2010). See also the Population, Intervention, Comparator, Outcome, and Context (PICOC) framework (Newton et al., 2015).

[3] See https://www.cifor.org/gcs/modules/multilevel-governance/methods

[4] Accessed through the Catholic University of Peru, http://biblioteca.pucp.edu.pe/recurso-electronico/ebsco-research-database/

vant notes to understand the MSF, its outcome and its context. Case studies were then grouped by their program theories. Phase 3 concluded with 42 articles.

Phase 4: The data extracted in Phase 3 was supplemented with research in both scholarly articles and grey literature related to the MSF and its context, including contacting the authors of articles for further evidence on the MSF and how it was affected by its context. Although the initial search was for articles in English, the research team included members fluent in Spanish, Indonesian, French and Portuguese, which permitted context research in these languages. Those case studies for which there was not enough evidence to understand how context may have influenced the MSF were excluded. Phase 4 concluded with 16 articles and 19 cases (see Table 1).

Phase 5: Contextual factors were synthesized into the 18 most commonly identified by the research team, based on the articles and supplemental material, as relevant to the outcomes (see Table 2). Case studies were organized by program theory, and for each case the mechanisms by which this theory was thought to operate and the contextual factors affecting outcomes were detailed (see Table 3).

3. Case studies by program theory

Four program theories were synthesized by assessing how each of the case studies 'should have' worked based on phases 3–5 of the review. As these are ideal types and LULUC practices and MSF initiatives are complex, the cases do not perfectly correlate to a single program theory but have aspects that fall within multiple theories. This is unsurprising. However, due to space considerations, this review only focuses on the two most relevant program theories and the four most relevant context variables for each case study. This section is organized in four parts by program theory. Each part first explains the program theory together with its mechanism and proposed outcome. This is followed by an introduction to each of the case studies under that theory. The cases include the MSF's background, purpose and participants, as well as a qualitative assessment of its success or failure. Next, the top four contextual factors that shaped MSF outcomes are discussed in relation to the relevant cases. Detail has been sacrificed in the presentation of each case study in order to include a larger number of cases for comparability within the permitted word count. All cases are presented in past tense, even those that may still be ongoing, as they

Table 1
Case studies.

Case studies	Short title	Program Theories	Initiator	Participating Stakeholders	**LULUC Goal**
1 Joint Forest Management in Gadabanikilo, India	1/Gadabanikilo JFM	1/Sustainability-social inclusion & 2/Development-sustainability	Government	Community, government	Sustainable forest management
2 Joint Forest Management in Uttaranchal, India	2/Uttaranchal JFM	1/Sustainability-social inclusion & 2/Development-sustainability	Government	Community, government	Sustainable forest management
3 Joint Forest Planning Management in Karnataka, India	3/Karnataka JFPM	1/Sustainability-social inclusion & 2/Development-sustainability	Government & donor	Community, government, NGO	Sustainable forest management
4 Joint Forest Management in Karnataka, India	4/Karnataka JFM	1/Sustainability-social inclusion & 2/Development-sustainability	Government	Community, government, NGO	Sustainable forest management
5 Community Forest Program, Nepal	5/Nepal CFP	1/Sustainability-social inclusion & 3/ Enhanced participatory decision-making	Government	Community, government, NGO	Sustainable forest management
6 Bangkok Urban Green Space, Thailand	6/Bangkok Green	1/Sustainability-social inclusion & 3/ Enhanced participatory decision-making	NGO	Community, government, NGO	Urban re-greening
7 Campo-Ma'an Model Forest, Cameroon	7/Campo-Ma'an MF	1/Sustainability-social inclusion & 3/ Enhanced participatory decision-making	NGO	Community, government, NGO	Sustainable forest management
8 Dja et Mpomo Model Forest, Cameroon	8/Dja et Mpomo MF	1/Sustainability-social inclusion & 3/ Enhanced participatory decision-making	NGO	Community, government, NGO	Sustainable forest management
9 Juma Sustainable Development Reserve Project, Brazil	9/Juma REDD+	2/Development-sustainability & 4/Multilevel governance	NGO & private	Community, government, NGO, private	Sustainable forest management
10 Oddar Meanchey REDD + Project, Cambodia	10/Oddar Meanchey REDD+	2/Development-sustainability & 4/Multilevel governance	NGO & donor	Community, government, NGO, private	Sustainable forest management
11 Finger Lakes National Forest, United States	11/Finger Lakes	3/Enhanced participatory decision-making	Government	Community, government	Sustainable forest management
12 District Forest Coordination Committees, Nepal	12/Nepal DFCC	3/Enhanced participatory decision-making	Government	Community, government	Sustainable forest management
13 Hin Nam No Protected Area, Lao PDR	13/Hin Nam No	3/Enhanced participatory decision-making & 4/Multilevel governance	Government & donor	Community, government	Sustainable forest management
14 Vilhelmina Model Forest, Sweden	14/Vilhelmina MF	3/Enhanced participatory decision-making & 4/Multilevel governance	NGO	Community, government, NGO, private	Sustainable forest management
15 Nusa Tenggara Barat, Indonesia	15/Nusa Tenggara Barat	3/Enhanced participatory decision-making & 4/Multilevel governance	NGO	Community, government, NGO	Sustainable forest management
16 Cardoso Island State Park, Brazil	16/Cardoso Island	2/Development-sustainability & 3/Enhanced participatory decision-making	Government	Community, government	Sustainable forest management
17 Prince Albert Model Forest, Canada	17/Prince Albert MF	3/Enhanced participatory decision-making & 4/Multilevel governance	NGO	Community, government, NGO, private	Sustainable forest management
18 Monarch Butterfly Regional Forum, Mexico	18/Monarch Butterfly	2/Development-sustainability & 4/Multilevel governance	Government	Community, government, NGO, private	Sustainable forest management
19 Manitoba Model Forest, Canada	19/Manitoba MF	3/Enhanced participatory decision-making & 4/Multilevel governance	NGO	Community, government, NGO	Sustainable forest management

Note: See Table 3 for full Program Theory descriptions

Table 2
Synthesized contextual factors (in alphabetical order)[5].

Economic poverty
Enforcement of LULUC-related laws and regulations
Existence of informal and/or traditional institutions related to resource management/use
Forest dependence
Gender inequalities in access to participation and/or resources
Government commitment for multi-sector collaboration
Government commitment to decentralization and devolution of decision making to subnational governments
Government control of decision making
Government development agenda emphasizes extraction of natural resources
Government recognition of right to and/or interest in the participation of local people
History and experiences of development projects/initiatives
Indigenous/local peoples distrust of other groups and organizations
Local/regional/national interest in conservation and preservation
Political and social sensitivities surrounding the issue of conservation
Power inequalities between LULUC actors
Powerful groups clearly influenced the MSF's process and/or outcome
Tenure insecurity and weak recognition of rights to land and resources for Indigenous Peoples/Local Communities
Time, capacities and funding available for program

Note: Factors in italics were not among the top four for any of the program theories in this article and are thus not mentioned in the text. This does not mean, however, that they are not also very important.

[5] As noted below, the review prioritizes the four most relevant contextual factors per program theory, based on how often these factors appeared in the case studies under each program theory.

Table 3
Program theories, mechanisms and intended outcomes.

Program theory	Mechanism	Intended outcome	Key contextual factors
1. **Sustainability-social inclusion initiatives** seek change by integrating sustainable land-use change, livelihood, and social inclusion goals.	Include local people in initiatives toward sustainability, as this will motivate them to adopt the proposed initiative.	Improves sustainable land-use, reducing the vulnerability of local peoples, and enhances their participation in decision making	● Gender inequalities in access to participation and/or resources ● Existence of informal and/ or traditional institutions ● Government control of decision making ● Government recognition of right to and/or interest in the participation of local people
2. **Development-sustainability initiatives** seek change by integrating sustainable land-use and development goals.	Create economic output through protecting and/or regenerating forests, which are then distributed among local stakeholders to provide development benefits.	The income or benefits of the new land use outweighs the losses in income from prior practices incurred by local stakeholders, and thus motivates them to implement the initiative.	● Tenure insecurity and weak recognition of rights to land and resources for Indigenous Peoples/Local Communities ● Powerful groups clearly influenced the MSF's process and/or outcome ● Forest dependence ● Government recognition of right to and/or interest in the participation of local people
3. **Enhanced participatory decision-making initiatives** seek change by providing communities with greater control over natural resources through local institutions, which are integrated with government and formalized.	Grant local communities more control over their resources through co-management and co-learning and/or capacity-building effort.	Leads to more sustainable land-use that is economically beneficial to local populations, and will reduce vulnerabilities.	● Indigenous/local peoples distrust other groups and organizations ● Time, capacities and funding available for program ● Power inequalities between LULUC actors ● Government recognition of right to and/or interest in the participation of local people
4. **Multilevel governance initiatives** seek change through cross-scale initiatives that involve different stakeholders and government agencies, from different sectors and levels.	Enhance social capital through collaborative decision making and multilevel coordination.	Leads to a more transparent and legitimate participatory process with increased local ownership of initiative.	● Government control of decision making ● Power inequalities between LULUC actors ● Government commitment for multi-sector collaboration ● Local/regional/national interest in conservation and preservation

capture past analyses of each program. Finally, each subsection closes with a short summary discussion. For more information, readers are invited to read all the case-studies and supporting literature and to contact the authors for access to the database.

3.1. Program theory 1: Sustainability-social inclusion initiatives (Sustainability Paradigm)

Some initiatives view sustainability as a good in and of itself and assume that by including people in decision-making or management bodies, they will see the benefits of sustainable alternatives and thus choose to support or adopt them. The initiatives under this program theory, the Sustainability Paradigm, viewed the mechanism as follows: including people in decision-making processes aimed at more sustainable land use – an opportunity otherwise limited for indigenous and local communities – would create an experience of social inclusion, leading them to adopt the proposed initiative and thus transition to more sustainable land-use practices. Of the cases reviewed, eight demonstrated the most interest in this approach, as set out in the summaries below. Two of the contextual factors with most influence in this program theory were attributes of the actors involved (who normally participated in decision-making and why); and the other two were attributes of governance (how strongly government controlled participation and whether it was actually committed to participation).

3.1.1. Case studies

Case 1: *Joint Forest Management in Gadabanikilo*, *India* (Nayak & Berkes, 2008)

This MSF formalized a local Community Forestry Management initiative that was established in Gadabanikilo during the 1940s due to deteriorating forests and a lack of wood-fuel for funeral pyres (Vasundhara, 1997). The original initiative included villagers and government stakeholders and was overseen by a committee comprised of representatives from all community households. It did not directly involve Forest Department officials. The new Joint Forest Management (JFM) model introduced in Gabadanikilo in 1998 was part of a national commitment to decentralize and devolve decision-making to subnational governments. Among its goals, it intended to increase the participation of marginal groups through a Forest Department-mandated participation quota for women and lower caste community members. Nevertheless, rather than nurturing existing local initiatives, state-imposed JFM reduced community decision-making and control over forest planning and management. The formalization process resulted in the Department's increased involvement in decision-making, including control over forest planning, and decreased access to forests and forest products for marginal groups (Sarin, Singh, Sundar, & Boghal, 2003). In Gadabanikilo, rather than the intended outcome, these groups were rendered more vulnerable due to the higher potential for sanctions created by stricter regulations and enforcement of access to forests and forest products.

Case 2: *Joint Forest Management in Uttaranchal*, *India* (Mohanty, 2004)

This MSF also stemmed from national policies designed to increase the participation of under-represented groups and devolve decision-making to subnational governments. However, this site had no historical context of Community Forest Management. During the colonial period the Forest Department and Revenue Service in Uttaranchal were relatively equal entities, coordinating to acquire revenues for the colonial government. After independence, the two became competitors for control over local political processes such as the van panchayat (village council). Joint Forest Management, introduced in Uttaranchal in the late 1990s, exacerbated this struggle because the Department transitioned from being a supporter of decisions made by the van panchayat to managing the decisions and projects carried out by Village Forest Committees, which were partly based on pre-colonial practices, and displacing the lowest level representatives of the Revenue Service. This competition, and the extension of control over forests by the Department under JFM, disempowered Village Committees in a competition for control and influence. It also placed more pressure on the leaders of these Committees because they were meant to raise funds from their villages, but the funds themselves were managed by the Revenue Service and the Forest Department. This included the Service's continued management of Village Committee elections in Uttaranchal, and requirements that the Service approved programs to be carried out by the Committees and Forest Department and that a Department official had direct access to the Committees' bank accounts.

Although JFM intended to support the participation of local people in forest management and build upon decentralization mechanisms, the authors suggest that this has failed. Department officials controlled specific projects, funding and decision-making, thus maintaining historical relations of dominance and dependence in Uttaranchal. This included community members participating as laborers rather than decision-makers, leading many to believe the government would retake control over forests. These problems were compounded by gender inequalities, and there is evidence of fear among some women to speak during meetings because they believed their ability to attend would be restricted or banned. Despite limited participation among women, lower castes and the poor, the MSF did allow them to increase their understandings of the 'language' of the state, its rules and regulations.

Cases 3 and 4: *Joint Forest Planning and Management and Joint Forest Management in Karnataka*, *India* (Martin & Lemon, 2001)

These two MSFs were organized in Karnataka in the early 1990s through collaboration between NGOs, communities and government institutions. Like 1/Gadabanikilo JFM[5] and 2/Uttaranchal JFM, the projects built upon national legal and policy frameworks and emphasized creating Village Forest Committees to co-manage forests with the Forest Department. Inequalities were addressed through a quota system for the inclusion of women and lower castes in the Committees. This did not have the anticipated outcome as new restrictions that ignored informal institutions and relationships, which had often allowed marginalized groups access to certain forest resources, undermined their ability to maintain their livelihoods. The two MSFs differ in that 3/Karnataka JFPM was funded by the United Kingdom and 4/Karnataka JFM only had government funding. 3/Karnataka JFPM often failed to meet its goals due to a disconnect between donor priorities of supporting the most vulnerable groups and the Forest Department's emphasis on measurable forest growth and economic outputs through the expansion of plantations. As with 1/Gadabanikilo JFM and 2/Uttaranchal JFM, this led to the Department reinforcing or exacerbating inequalities. Under the new system, Village Committees and the Forest Department decided what areas were demarcated for specific activities.

In 3/Karnataka JFPM, the zoning process was mandated by the funder and this process most often took place prior to engaging with newly formed Committees. Before the program's establishment there were no official zones, and the allocation of specific areas for certain activities was controlled by village councils and traditional institutions. 4/Karnataka JFM focused on protecting standing forests rather than planting more. The authors note that this approach led to mixed results. There was success in the

[5] See Table 1 for case abbreviations.

participation of local people in forest management, improving communication and trust between Village Committees and Department officials and increasing economic opportunities for some local people. Yet, the MSF failed to address inequalities among local people and to change the opinion of some Forest Department officials that local people lack capacity to manage their own forests.

Case 5: *Community Forest Program*, *Nepal* (McDougall et al., 2013)

This MSF was part of a project focusing upon existing or potential multi-stakeholder 'platforms' in community forests in Nepal, with a diverse group of stakeholders at different scales (Forest Department, researchers, User Groups, NGOs, and national and local government). By the completion of this project in 2008, Nepal had established a program with over 15,000 Community Forest User Groups. Two of the project's phases correspond to the Sustainability Paradigm; one centered on national level research and building the knowledge of the project leaders and government officials about the specific issues to be addressed, and the other included carrying out village visits, interviews and building a network of *meso*-level actors. There is evidence that through the project, participating User Groups became more effective at creating and implementing plans and showed potential for generating income. Yet, several challenges remained at the project's end. These included the persisting domination of more powerful actors, based on broader inequalities connected to social status, which greatly affected people's access to information, control over decision-making, capacity to influence outcomes and their access to resources. However, the MSF unexpectedly addressed some of these differences by serving as a forum for stakeholders to discuss and debate pre-existing conflicts (McDougall et al., 2008).

Case 6: *Bangkok Urban Green Space*, *Thailand* (Stringer et al., 2006)

This MSF was part of a project initiated in 1999 by a Thai and a Canadian NGO to address the lack of green spaces in Bangkok. Green spaces were understood to offer the potential for social, economic and environmental benefits to local inhabitants. The project was supported by different levels of government and built on Bangkok Metropolitan Administration's priority to increase green spaces. The primary objectives were to facilitate co-learning among stakeholders of each other's priorities and needs, develop community capacities concerning environmental issues, reduce poverty, create connections with government, empower women, and build a model for replication in other areas of the city. The project employed an adaptive management method initiated through multi-stakeholder processes at different scales. The process began as top-down but had an explicit strategy to phase out most top-down components after the initial planning stages and transition to a community-driven process. The initial steps of engaging with communities entailed holding learning days organized by the NGOs and attended by members of target communities. Working groups comprised of community members were established, which held their own planning days. These groups were supported by NGO staff and landscape architects as they mapped out their neighborhoods and decided which areas were most suitable for greening. A key aspect of this project's success was that the coordinators addressed challenges with flexibility and adaptability. For example, the objective of empowering women was not successful until a process of trial, error and adaptation was initiated. It resulted in the creation of a women's forum that was successful in reducing women's marginalization.

Cases 7 and 8: *Campo-Ma'an and Dja et Mpomo Model Forests*, *Cameroon* (Jum, Nguiebouri, Zoa, & Diaw, 2007)

Model Forests follow a multi-stakeholder approach to sustainable forest management. Introduced by the Canadian government, the initiative has expanded to 30 countries under the International Model Forest Network.[6] Forested areas are approached simultaneously as a place (a forested landscape or ecosystem), partnership (stakeholders ranging from local communities to government actors), and process (dialogue, experimentation, and innovation).[7] In Cameroon, Campo-Ma'an and Dja et Mpomo Model Forests were established in 2005 through MSFs with the participation of local communities, NGOs and government actors. Both aimed to develop local capacities for transparent, robust and inclusive governance (with a gender component) and reduce poverty by optimizing the value of a wide range of forest products and environmental services. As part of these two MSFs, 75 community forests were established or supported in their process of official recognition. This process involved the active participation of traditional chiefs. An effort was made to mobilize women to participate in MSF meetings. There is evidence that women's proposals were considered by the MSFs and resulted in the amendment of certain practices related to management and rules of both the Model Forests (Tiani, Akwah, & Nguiebouri, 2005). Nevertheless, the restrictions on hunting and fishing had a pronounced impact on women as they were less able to adapt in times of change due to their heavy daily workload.

3.1.2. Contextual factors

3.1.2.1. Gender inequalities in access to participation and/or resources. 1/Gadabanikilo JFM, 2/Uttaranchal JFM and 3/Karnataka JFPM were affected by gender-based inequalities. In 2/Uttaranchal JFM, gender inequalities (e.g. authority of males in home and public spaces) are noted to have prevented women from effectively participating in the MSF. There is evidence that women feared that if they tried to participate more actively and meaningfully, the opportunity to attend meetings might be revoked. 3/Karnataka JFPM identifies a disconnect between the funding agency's prioritizing of social inclusion and challenging gender inequalities, and how this was understood and implemented by the Forest Department. When women in 7/Campo-Ma'an MF and 8/Dja et Mpomo MF mobilized to claim access rights to forests during MSF meetings, this led to changes in some governance practices in both Model Forests that had reduced local people's access to cultural sites in the forests and to fishing and selling wild game. There is evidence across the cases that projects framed as addressing gender inequalities but that do not have a strong commitment of time, resources and sound methods may not reach their intended outcome. Furthermore, using women's attendance to meetings as evidence of MSF participation may exacerbate problems by lending legitimacy to unequal decision-making systems (Mohanty, 2003).

5/Nepal CFP shows a transition from centralized to multi-level, de-centered and gender-inclusive decision-making. Although there is not enough evidence to verify shifts in power, there was an increased awareness of inequity connected to the growing capacity and confidence of marginalized actors. Some evidence of the project's success includes the identification of the needs of marginalized groups, the willingness and capacity to bring this into planning processes, a shift from protection to sustainable and equitable resource management, and the establishment of more forest-related livelihood opportunities. Finally, 6/Bangkok Green was designed to include equal gender representation but the objective of reducing women's marginalization was not achieved until project coordinators followed a trial and error process that resulted in the creation of a women's forum.

[6] See http://www.imfn.net/

[7] See http://www.nrcan.gc.ca/forests/canada/sustainable-forest-management/13181

3.1.2.2. Existence of informal and/or traditional institutions. Seemingly recognizing inequalities, 1/Gadabanikilo JFM mandated a quota for women and lower caste community members to build social inclusion and participation. Yet, it did not acknowledge existing forest management practices and imposed and enforced regulations limiting access to forests and forest products. In some cases, marginal groups were rendered more vulnerable because of higher potential for sanction. There is evidence (e.g. 2/Uttaranchal JFM and 3/Karnataka JFPM) that MSFs increased the vulnerability of women and underrepresented groups due to the creation of 'new institutions' (Martin & Lemon, 2001) that failed to acknowledge existing ones. By ignoring such systems and relationships, MSFs may undermine the vulnerable groups they are meant to support.

3.1.2.3. Government control of decision-making. Most cases under the Sustainability Paradigm were in contexts where governments held centralized control of decision-making. Following government or donor initiatives, MSFs were introduced to increase the participation of local people and subnational governments in forest governance. In 2/Uttaranchal JFM there is evidence that government control impacted outcomes. The Forest Department had significant say over the Committee's finances and shared control of its bank account. Part of people's earnings from their participation in projects designed and managed by the Department were deducted and passed on to village development funds. This positioned locals as employees rather than partners and increased mistrust when money was mismanaged. Furthermore, as with the previous contextual factor, it is important to understand the interconnection of the institutions targeted by projects, as well as the historical context from which they emerged in order to account for power differences across time and space. In 3/Karnataka JFPM, Committees were supposed to participate in the planning, creation and management of new plantations, but the process and decision-making were controlled by the Forest Department, including setting resource access and use rules. The project also included a requirement for demarcation of areas -ranging from newly created plantations to forest areas- that became restricted for local people. As this was built into the project by the donor, neither the Department nor local people were consulted on how to define these areas. As a result, the Forest Department zoned these areas and some locals were unaware the zones existed or of their location. Similarly, in 1/Gadabanikilo JFM the Department dictated what tree species to prioritize.

3.1.2.4. Government recognition of right to and/or interest in the participation of local people. Linked to the previous factor, 1/Gadabanikilo JFM, 2/Uttaranchal JFM, 3/Karnataka JFPM and 4/Karnataka JFM built upon national policies to increase the participation of under-represented groups and decentralize and devolve decision-making to subnational governments. Nevertheless, outcomes were limited by a lack of political will and investment in time and resources for subnational implementation. Examples of Forest Department officials controlling decision-making processes are discussed above, as are issues of gender and caste within communities. However, 5/Nepal CFP and 6/Bangkok Green demonstrated a shift by the government towards involving local groups in decision-making. An important outcome of 5/Nepal CFP was local peoples' use of the MSF to raise concerns about pre-existing conflicts, leading to debate and discussion with more powerful actors. 6/Bangkok Green shows that acknowledging power differentials in social processes and governance allows for more effective approaches to address power. Had NGO workers not actively engaged with local government urban planners, the latter might otherwise have refused to participate in the project. This was central to the sustainability of the project as it built trust between communities and government. 7/Campo-Ma'an MF illustrated the capacity of the MSF to adapt after taking into account the interests of women, following the government's interest in their participation. However, even projects that acknowledged inequalities among local participants may still have adversely affected women due to the failure to consider the gendered impact of limiting resource access (6/Bangkok Green and 7/Campo-Ma'an MF).

3.1.3. Discussion – Program theory 1 (Sustainability Paradigm)

Perhaps because of the emphasis on sustainability rather than participation, the contextual factors affecting this program theory, the Sustainability Paradigm, are associated with challenges to inclusion or with the terms of inclusion. Women were invited to participate, but if the commitment in time and resources was insufficient or methods were inappropriate the outcomes were not achieved. Adaptive methods and a strong commitment to addressing gender inequity were key. Similarly, if existing traditional institutions and relationships (e.g. for forest use and management) were ignored or simply replaced by new ones, vulnerability increased for marginal groups in some cases. Existing informal and traditional institutions are complex systems that often have both beneficial and constraining attributes towards an MSF's goals, and these must first be understood before such institutions are transformed or replaced – or reinforced. In the cases under the Sustainability Paradigm, the terms of inclusion were set by the government. Joint Forest Management and Village Forest Committee cases demonstrate government control of decision-making in different parts of India; they highlight the problem of the Forest Department as the implementing body that maintained control over decisions, regardless of inclusion goals. This factor is related to the fourth contextual factor, government recognition of right to or interest in local participation. While these same cases demonstrate failures in implementation at the subnational level, other case studies show what can happen when government commitment is stronger. In one case local people used the multi-stakeholder process to challenge more powerful actors; another openly acknowledged power differentials and used strategic engagement to build trust between government and communities. Commitment to process (dialogue, innovation) and women's participation in the Model Forests in Cameroon led to greater mobilization and voice for women.

3.2. Program theory 2: Development-sustainability initiatives (Livelihoods Paradigm)

These initiatives shift the emphasis to the economics of sustainability by focusing on the importance of generating economic alternatives to win the support of local people. The assumption is that conservation or more sustainable practices will incur livelihoods losses that need to be compensated by new economic opportunities brought about by the initiative. The mechanism under this program theory, the Livelihoods Paradigm, uses a development approach to provide livelihoods for local peoples through the protection or regeneration of forests or related economic activities. In eight of the cases reviewed under this Livelihoods Paradigm, the mechanism aimed to create new income or benefits from more sustainable land use to outweigh the losses incurred by local stakeholders changing their previous practices. Furthermore, participating in relevant decision-making would motivate them to change their practices. As in the previous program theory, two of the most fitting contextual factors are attributes of the actors involved, while the other two are attributes of governance. These factors are related to how dependent on forests local communities were, who controlled land and resources, who decided

on restrictions over them and the power inequalities between the stakeholders.

3.2.1. Case studies

1/**Gadabanikilo JFM**[8] (Nayak & Berkes, 2008)

The MSF aimed to increase economic output but the benefits from timber harvests were not evenly distributed. This was, partly, because the Forest Department emphasized new plantations over improving the economic potential of existing production processes such as farming, raising livestock and collecting forest products. Overall, the initiative resulted in the Forest Department's co-optation of control over forest planning and management, reduced local control over decision-making, endangered the livelihoods of the poor and, in some cases, hastened forest degradation.

2/**Uttaranchal JFM** (Mohanty, 2004)

The Forest Department prioritized a technical approach while subordinating local practices. This resulted in the exclusion of those who may not have understood the program's technical aspects but had knowledge of the forest, were committed to conservation and willing to participate. The MSF's goals were not achieved due to poor relations between Department officials and locals due to ongoing top-down forest management practices.

3/Karnataka JFPM and 4/Karnataka JFM (Martin & Lemon, 2001)

Both MSFs sought to facilitate partnerships to simultaneously mitigate local people's alienation from forests and end a culture of dependency. The initiatives mandated that only forests with less than 25% forest cover could be included in the program, resulting in both a focus on the creation of new plantations and the exclusion of groups living in and relying upon healthy forests. Also, the Forest Department tended to make decisions without consulting Village Forest Committees. This was detrimental to local economic practices as the creation of plantations by the Department often reduced the amount of land available to local people for their livelihoods.

Case 9: *Juma Sustainable Development Reserve Project*, *Brazil* (Gebara, 2013)

This REDD + project in the Brazilian State of Amazonas was promoted in 2008 by international private funders and the Sustainable Amazonas Foundation, a private non-profit. It aimed at achieving 0% deforestation by generating income through the promotion of sustainable businesses and direct cash transfers. Although part of this project was conceived and set up as an MSF, the initiative was fully designed before participatory meetings were conducted. Consequently, meetings tended to be informative rather than interactive. Community members interviewed felt disempowered after the process, arguing that the project's potential benefits were insufficient and threatened their food security and wellbeing (Schapiro, 2010).

Case 10: *Oddar Meanchey REDD + Project*, *Cambodia* (Pasgaard, 2015)

The project aimed to protect the forests in Oddar Meanchey Province by setting up 13 Community Forests through a REDD + project in 2008 (Pact, , 2012). It included an MSF supported by international donors for coordination among local villagers, government and NGOs; forest management committees; and an international conservation agency. Although it sought to derive 50% of its net income for local communities from the sale of carbon credits, the project had not yet sold any credits (McDermott, Mahanty, & Schreckenberg, 2013). The MSF was well-supported and financed and led to improved coordination between conservation practitioners and local forest management committees. However, it did not put into practice its rhetoric of including forest users in decision-making despite limiting their resource use, as it understood inclusion purely in economic terms.

Case 16: *Cardoso Island State Park*, *Brazil* (Sessin-Dilascio, Prager, Irvine, & de Almeida Sinisgalli, 2015)

This Park, in the state of Sao Paulo, is inhabited by six traditional communities. It is governed by guidelines that ensure the participation of civil society in the creation, implementation and management of conservation units. A Participatory Advisory Council composed of the Park's administration, communities living in the area and NGOs, was set up in 1998 as an MSF to encourage participation. According to its statute, which was defined at the MSF, any decision linked with community livelihoods must be approved by its six community council members (Nogueira dos Santos, 2014). The authors note that this inclusiveness created an atmosphere of trust and was largely due to the leadership of the park's director and the funding available during 1998–2004. Later, a combination of diminished funding and inconsistent leadership decreased the MSF's effectiveness (de Lima Silva, 2014).

Case 18: *Monarch Butterfly Regional Forum, Mexico* (Brenner and Job, 2012)

This MSF, promoted by the Federal Government since 2004, included the participation of governmental, non-governmental, private sector and local community stakeholders in managing the Monarch Butterfly Biosphere Reserve. The MSF aimed to integrate conservation and development by building the capacities of communities and providing them with opportunities for wage labor as eco-tour guides and in reforestation activities. In return, community members were expected to cease certain forms of resource use, including logging. The initiative had three main challenges. First, there were uneven power relationships among actors who did not agree on the nature, causes and severity of the environmental problems affecting the Reserve. Second, only members of *ejidos* participated in the MSF, excluding many of the reserve's inhabitants. This exclusion created legitimacy challenges from excluded community members. Third, there was deforestation by non-local actors who did not live in the area and thus were less affected by threats to local ecosystems. The article notes that those willing to support the changes towards more sustainable land use and expanding eco-tourism could not effectively influence other actors that continued to use land unsustainably.

3.2.2. Contextual factors

3.2.2.1. Tenure insecurity and weak recognition of rights to land and resources for Indigenous Peoples/Local Communities. In 1/Gadabanikilo JFM, 2/Uttaranchal JFM and 3/Karnataka JFPM the demarcation of some areas made them inaccessible to local people. In other areas, local people gained certain rights to manage resources, but these were limited by the involvement of different levels and sectors of government which kept control of decision-making. In 1/Gadabanikilo JFM the formalization process resulted in the Forest Department's greater involvement and control over decision-making in regard to forest management and access, resulting in decreased access to forests, forest products and decision-making for marginal groups. In 2/Uttaranchal JFM, the competition between the Forest Department and Revenue Service for control over local political processes was exacerbated by Joint Forest Management because the Department transitioned from supporting

[8] Case information is abbreviated for the ones that have been presented previously.

decisions made locally to managing decisions and projects carried out by Village Forest Committees. The Department's control over forests under JFM weakened Committees in a competition for control and influence (Mohanty, 2003). This contextual factor blends with the following one (powerful groups), particularly in regard to the structures of institutions and governance over land, resources and revenues. In 10/Oddar Meanchey REDD+, only a few households had land titles recognized by the authorities and the risk of land grabbing by commercial companies or influential elites was high. In 18/Monarch Butterfly, membership rights to *ejidos* affected the participation of local peoples in the MSF, including some but excluding others.

3.2.2.2. Powerful groups clearly influenced the MSF's process and/or outcome. 9/Juma REDD+ demonstrates how unequal power relations often lead to 'participatory' initiatives being set up before conferring with local communities. 10/Oddar Meanchey REDD + exemplifies elite capture, as although the project involved conservation practitioners and local forest management committees in daily management, it failed to involve forest users more broadly. Some of the main beneficiaries were those who patrolled the forests, benefited from access to forest products and already belonged to wealthier groups. Furthermore, in 1/Gadabanikilo JFM, the transition from an unofficial structure to an officially-recognized program increased the Forest Department's control over decision-making. The Department's influence resulted in the MSF relying on the government, which eroded lateral connections that communities had created through their previous work together. Finally, when demarcation processes were carried out in 3/Karnataka JFPM, these were largely controlled by the Department and often excluded locals. Generally, powerful actors (e.g. donors, government officials) controlled the process and locals were unable to affect outcomes. Although the project sought to increase participation, there is no evidence of tools within the process to ensure that locals took part in decisions regarding the project's framework and objective or to prevent the more powerful from controlling the MSF.

3.2.2.3. Forest dependence. 9/Juma REDD+ and 10/Oddar Meanchey REDD+ reduced local people's access to the forest and threatened their food security. They had insufficient benefits to offset this. For 1/Gadabanikilo JFM, 2/Uttaranchal JFM, 3/Karnataka JFPM and 4/Karnataka JFM, there were varying degrees of forest reliance. Some members, often marginalized groups, met much of their livelihood needs from forest resources. More affluent and powerful groups relied on forest resources for their overall economic needs, but sometimes in less direct ways. In all cases, forests played an important role in the overall community's socioeconomic life, including ritual practices (1/Gadabanikilo JFM).

3.2.2.4. Government recognition of right to and/or interest in the participation of under-represented groups. 1/Gadabanikilo JFM, 2/Uttaranchal JFM and 3/Karnataka JFPM were part of India's central government agenda to increase local participation in the governance and management of forests through the recognition of formal rights and responsibilities. All three cases incorporated some system to increase the participation of marginalized groups, including women and lower castes. However, although local people may have gained more access to participatory spaces relevant to forest and forest resource management, the government still owned forest resources. The three cases also reveal that although women and other marginalized people participated in MSFs, their overall socio-economic positions within communities, as well as their power over decision-making, did not improve. Overall, those cases demonstrate that the recognition of rights and promotion of participation at the national policy level require commitment at other levels for success. For example, in 3/Karnataka JFPM there was a disconnect between the donor's objectives, the Forest Department's priorities and how the project was implemented on the ground. The Department focused on conservation and controlling resources rather than emphasizing social inclusion, empowerment and livelihoods, which were a central objective of the overall program. In 1/Gadabanikilo JFM, the village fund was technically controlled by the Revenue Service but, in reality, a Forest Department official co-managed the fund with the leader of the Village Committee. Moreover, the Committee was expected to raise a community development fund by withdrawing a percentage of the wages of those who work in joint projects or exchange their unpaid labor in contribution. Department officials maintained some control over the projects funded by the community development fund. In 10/Oddar Meanchey REDD+, the absence of recognition of under-represented groups, such as women and low-income rural workers, played a negative role and allowed elites to control the initiative.

3.2.3. Discussion – Program theory 2 (Livelihoods Paradigm)

The initiatives under this program theory, the Livelihoods Paradigm, were affected by tenure insecurity or weak land and resource rights, which limited the ability of local people to benefit from new economic alternatives. In the same Joint Forest Management and Village Forest Committee cases mentioned above, the rights to use areas were taken away easily and although some people were able to use new areas, these were controlled by the government. Only certain people participated in new initiatives, at least partly based on land tenure rights, as in Mexican *ejidos*. Elite capture is a risk where tenure rights are not secure. This ties to the second factor: powerful groups influenced the process or outcome. These powerful groups sometimes included the government, such as powerful forest departments, or local elites; projects that were designed and implemented in an entirely top-down manner also established strongly unequal power relations. Forest dependencem the third factor, was important across a number of cases. Under this program theory and others, forests are often designated for protection or conservation. If alternative economic activities did not compensate for losses in income, the livelihoods and food security of those who most depend directly on forests for income or resources were threatened. Finally, the Livelihoods Paradigm also demonstrated the importance of commitments from higher levels of government to ensure that rights for participation granted at these levels are implemented at lower levels.

3.3. Program theory 3: Enhanced participatory decision-making initiatives (Participation Paradigm)

Enhanced participatory decision-making initiatives assume that more sustainable land use is possible by providing communities with greater control over natural resources through specific institutional arrangements that are formalized and coordinated with government. If the first program theory emphasizes sustainability and the second emphasizes economics, this one priorities participation explicitly as the central 'good'. The 11 cases reviewed under this program theory, the Participation Paradigm, applieda mechanism that involved granting local communities more control over their resources through co-management and co-learning and/or capacity-building efforts. The idea was that this would lead to more sustainable land use that was economically beneficial to local populations and would reduce vulnerabilities. As opposed to previous program theories, three of the contextual factors that most influence outcomes under this program theory were attributes of the actors involved, while one was an attribute of governance. These factors were related to the power inequalities between stakeholders and whether the least powerful ones trusted the more powerful ones; whether the MSF had enough time and funds to

address this context; and whether the government had an interest in the participation of marginalized populations to begin with.

3.3.1. Case studies

5/Nepal CFP (McDougall et al., 2013)

The MSFs in Nepal led to improvements in forest cover and in the participation of local people in decision-making. The program's third phase is most relevant for the Participation Paradigm as it focused on positioning User Group members as the facilitators of the process, with the researchers as supporters. Thus, the project intentionally shifted from applying a top-down approach towards one in which the program coordinators supported local leaders to take on facilitation roles. There is evidence that participating User Groups became more inclusive and effective at creating and implementing plans. The program resulted in decisions that better addressed the needs of marginalized User Group members, including a shift from forest protection to a mixed orientation that included income generation, more forest-related livelihood opportunities and small loans.

6/Bangkok Green (Stringer et al., 2006)

The project followed policy guidance from Bangkok's Metropolitan Administration. It successfully fostered participation and positioned community members as owners of the process, forging links between communities and government, and supported them through the participation of urban greening experts. However, the model was not as successful when it was replicated elsewhere due to a lack of commitment among participants. This may be due to the failure to incorporate support mechanisms into follow-up projects such as the resources provided by the government to communities, including 60-person days of paid labor.

7/Campo-Ma'an MF and 8/Dja et Mpomo MF (Jum et al., 2007)

These Cameroonian Model Forests were set up for reflection, innovation and collective learning, and participatory decision-making. This included capacity building to enhance respect among local stakeholders and avoid biases in participation in meetings and workshops. Their management structure is based on MSFs that include local peoples, logging companies, conservation groups, Members of Parliament and municipalities.

Case 11: *Finger Lakes National Forest*, *United States* (Twarkins, Fisher, & Robertson, 2001)

The United States Forest Service implemented a participatory process to engage with citizens as local stakeholders in the management of the Finger Lakes National Forest. The MSF aimed to include input from 'communities of interest' into a revision of Land and Resource Management Plans. As local people participated more, they gained forest management capacity, leading to their greater involvement in planning. For example, community members coordinated with the Forest Service to help plan trails and wildlife areas and develop management options for potential old-growth forests and best uses for recently acquired lands. The MSF was limited by its single-issue orientation, with little exchange in regard to other issues. This resulted in frustration for those who wanted to raise other concerns as they felt they were drowned out. Moreover, for local people to participate in discussions required extensive time commitments so not all participants took part in all sessions.

Case 12: *District Forest Coordination Committees*, *Nepal* (Rana, Khanal, Kotru, & Jamarkattel, 2009)

Terai forests have been recognized as strategically important by Nepal's government, grassroots organizations and international institutions, due to their potential to increase both rural people's income and the resources available for urban areas. There were attempts to increase the productivity of Terai forests through Community Forestry, Collaborative Forest Management and Government Management programs, but these failed both at increasing the production of forest products and improving local peoples' livelihoods. This failure resulted in greater emphasis on district level governance. In 2005 the government passed Establishment and Operational Guidelines for District Forest Coordination Committees (MFSC, 2005). These were multi-stakeholder coordination and decision-making platforms envisioned by the Ministry of Forest and Soil Conservation to strengthen the collaboration of diverse forestry stakeholders at the district level and foster deliberative and consultative processes in decision-making. Districts were authorized to each form a Committee with up to twenty-seven representatives from different stakeholder groups to achieve the twin objectives of improving forest sector governance and establishing a culture of collaboration that would be conducive to implementing sustainable livelihoods programs for local communities. These MSFs offered spaces for diverse stakeholders (political parties, local groups, NGOs and the private sector) to engage and identify grounds for cooperation.

This strategy also aimed to improve gender and social inclusion within the forestry sector by building more inclusive participatory decision-making processes in the formulation of district plans and using assessment tools to improve programs and reduce poverty and gender inequalities. While the process required extensive time commitments from participants, it had positive results in terms of increasing the legitimacy of decisions and participation of stakeholders in implementation. As evidence for success, the authors point out that some districts implemented up to 80 percent of their Committee's decisions. Moreover, members of the Committee were committed to continue participating in the MSF and to seek further funding to make it sustainable. This is used as evidence by the authors of a growing sense of ownership of the process among participants; however, they also remained uncertain of who held the responsibility to maintain the institution. The authors argue that for these MSFs to be sustainable there was a need for better institutional positioning in regard to the government as well as clearer and more concrete mechanisms for Committees to access funding.

Case 13: *Hin Nam No Protected Area*, *Lao PDR* (de Koning et al., 2017)

In the 1990s Lao PDR implemented laws and policies to establish and manage Protected Areas. These efforts faced implementation problems, including corruption at different levels, limited information sharing, lack of trust between villages and government officials and government reluctance to decentralize decision-making. To address this, Germany and Lao PDR's Department of Forest Resource Management and its provincial and district level counterparts, implemented a project that included incentives for local people's participation and mechanisms to share resources and build more inclusive decision-making processes. The project set up the District Co-Management Committee, an MSF organized to meet twice annually to work with local villages and relevant stakeholders to protect, manage and enhance the area's natural resources, as well as improve food security and create alternative sources of income. The Committee included government and village representatives and was charged with consensus-based decision-making, oversight and strategic direction for Hin Nam No's pilot collaborative governance system.

The government's interest in protecting the area, designated as Lao PDR's first natural World Heritage Site, led to important political support towards the MSF's objective. This included inviting village co-management committees to participate in formulating a management plan for Hin Nam No and granting them an officially recognized mandate to protect and manage resources within and surrounding it. Moreover, Hin Nam No's monitoring and manage-

ment was carried out with recognition of local people's customary rights, including clear access and use rights as well as established mechanisms for addressing rights infringements. Additionally, over one hundred officially recognized village rangers were trained and participated in regular monitoring and evaluation processes. Nevertheless, a ticketing system established for entrance to Hin Nam No provided insufficient income for the Protected Area, villagers, tour operators and government authorities. Without external funding the program would likely face serious problems as the government is unlikely to provide any additional funding to support the project's continuation.

Case 14: *Vilhelmina Model Forest*, *Sweden* (Klenk, Reed, Lidestav, & Carlsson, 2013)

The land demarcated for this Model Forest is a common pool resource over which indigenous Sami people have herding rights. The MSF, the Vilhelmina Model Forest's steering committee, was established in 2004 and included Sami, government and private sector representatives. As it lacked funds, the MSF mainly deliberated about the role and objectives of the Model Forest and how to obtain funding to support it. The MSF was also involved in a research project aiming at the categorization, identification and delineation of grazing lands. The project relied in part on the knowledge and practices of Sami reindeer herders and included participatory GIS (Sandström et al., 2012). The research project succeeded in integrating traditional ecological knowledge targeted to different forest users and provided an arena for conflicting parties to better understand each other's land-use needs.

Case 15: *Nusa Tenggara Barat*, *Indonesia* (Butler et al., 2016)

Building on government initiatives to decentralize decision-making, including an interest in integrating top-down and bottom-up planning workshops, the project (2010–2014) sought to apply an adaptive co-management approach to transform participatory development planning in one of Indonesia's poorest provinces. Coordinated by Tim Kolaboratif (Collaborative Team), an organization that built formal partnerships, the project established a subnational steering committee and organized a series of planning workshops that brought together international, national and local stakeholders. The experiment in adaptive co-management included four activities: (1) establishment of adaptive co-management tools by the Tim Kolaboratif; (2) workshops at provincial and sub-district levels to formulate Climate Compatible Development plans; (3) pilot projects to test development strategies; and 4) coordination with government-driven processes so that Climate Compatible Development plans would be incorporated into official long-term planning. The program built some momentum with local stakeholders, who underwent capacity development and were interested in being involved. However, it was unable to reach its long-term aims due to time constraints and a lack of government support following its re-organization and unpredictable changes in its priorities. These led to less political support and more interest by the government in taking over decision-making processes.

16/Cardoso Island (Sessin-Dilascio et al., 2015)

Since 1998, the Participatory Advisory Council actively linked the Park's administration with community organizations. The Council held its meetings in different locations to encourage the participation of different communities in decision-making and management activities. This co-management process required a sustained investment of time and effort by Park authorities, which allowed them to gain the trust of local communities (Nogueira dos Santos, 2014). The MSF also led to information sharing by the Park administration with local communities, as well as other awareness raising activities. This initiative achieved its desired outcomes while it had a Park Director committed to the process, as well as funds to include sufficient staff. The MSF's success declined under a new Director and when funding stopped.

Case 17: *Prince Albert Model Forest*, *Canada* (Klenk et al., 2013)

The Model Forests program seeks to increase multi-stakeholder participation in forest governance through a 'technical' and explicitly non-political stance. As a result, this MSF did not differentiate between the 12 First Nations with reserve lands in the Prince Albert Model Forest and other stakeholders. This stance may have reproduced historical patterns of power inequalities that undermined the distinct position of indigenous peoples as right-holders and their rights to access natural resources. These inequalities, and a legacy of broken engagements, led to mistrust between indigenous peoples and government actors.

Case 19: *Manitoba Model Forest*, *Canada* (Parkins, Dunn, Reed, & Sinclair, 2016)

Like 17/Prince Albert MF, this Model Forest is situated in an area in Manitoba which has experienced over a century of unsustainable logging. This partly explains the indigenous population's mistrust in government and the private sector. Recognizing this climate of mistrust, the Government of Manitoba required the formation of Stakeholder Advisory Committees to provide Forest Management Licenses to Forest Product Companies. These MSFs aimed to expand stakeholder participation in the environmental and natural resource decision-making process and keep government and companies accountable, thereby addressing this mistrust. Their objective was to influence site-specific decisions that companies make about their harvest and management plans. However, companies were not responsive to the concerns of their committees, and the MSF failed to forge more effective and equitable governance arrangements. The Manitoba Model Forest MSF only achieved superficial collaboration, with limited and unevenly sustained collaborative management.

3.3.2. Contextual factors

3.3.2.1. Indigenous/local peoples distrust of other groups and organizations[9]. 14/Vilhelmina MF succeeded in integrating traditional ecological knowledge and allowed conflicting parties to better understand each other's land-use needs. Yet, the sharing of Sámi people's land management knowledge proved problematic because: (1) it had not always been respected by the private sector's past activities and (2) Sámi people were wary of how others might use it. Furthermore, because the MSF followed the Model Forest model, its deliberate process sidesteped the political aspirations and ignored the rights of indigenous participants. In 17/Prince Albert MF and 19/Manitoba MF, indigenous peoples distrusted government and private sector actors due to a history of broken agreements and not being consulted regarding governmental decisions to authorize logging. Indigenous peoples in both cases faced the dilemma of either participating as any other partner in decision-making or advancing their interests separately as a self-governing body with guaranteed rights over consultation in natural resource planning and policy development that might affect their rights. 5/Nepal CFP built trust among stakeholders after

[9] Although the reviewed evidence does not include this, field research by the authors revealed cases where the government or private sector distrusted indigenous and local peoples as participants in MSFs. Thus, the lack of trust undermining participatory efforts may be mutual, as actors fear that representatives of indigenous and local communities may bring in demands that MSFs cannot address or may disrupt processes by protesting (see also Sarmiento Barletti & Seedhouse, 2019 for cases surrounding Peru's implementation of Prior Consultation).

it was unexpectedly used by locals to raise issues surrounding pre-existing conflicts, which were then discussed and debated. This illustrates the value of open and inclusive spaces for increased participation, enhancing inclusion and allowing for the development of conflict resolution mechanisms.

3.3.2.2. Time, capacities and funding available for program. In 14/Vilhelmina MF, financial constraints limited representatives' deliberation over the MSF's role and objectives. In 16/Cardoso Island, the MSF failed once funds ended and the Park Director left. 6/Bangkok Green demonstrates the difficulties of replicating projects as attempts to repeat the program elsewhere met with mixed results, at least partly due to limited time and resource commitments. In 5/Nepal CFP, the project entailed research to develop a methodology to implement an adaptive collaborative approach to governance and management. This process was funded and logistically supported by international donors. Its successes demonstrate the value of using a specific methodology, combined with funding for developing, designing and carrying out a project with sufficient time built in to develop an effective approach to address inequalities. Similarly, for 15/Nusa Tenggara Barat the first recommendation offered by the authors was the need for more long-term commitment (and thus funding) for the project. This was important as the MSF's first goal of building the capacities of participants was successful, but the opportunity for following through did not materialize. For 13/Hin Nam No, there were some mechanisms for raising revenues, such as eco-tourism and ticketing to sustain the project, but without external funding and more political support from the government the program was not financially sustainable.

3.3.2.3. Power inequalities between LULUC actors. The cases illustrate that the more successful MSFs recognize the power differences among participants. 11/Finger Lakes recognized differences between stakeholders and used a neutral facilitator to address them. Conversely, in 18/Monarch Butterfly, community members were divided as only those with agrarian rights (*ejido* membership) were granted attendance and voting rights. In 17/Prince Albert MF and 19/Manitoba MF, non-local actors were able to pursue an 'unbiased' and apolitical MSF, but in doing so reproduced a historical pattern of power distribution that undermined indigenous peoples. In 15/Nusa Tenggara Barat, adaptive co-management intended to address inequalities among stakeholders, but the project's short time-frame limited the possibility of more equitable decision-making processes. The program was only active during one Musrembang cycle, which is the annual meeting of communities to plan and organize. Therefore, despite gaining some momentum, it was unable to follow through to engage in multiple planning periods. Moreover, the government process of integrating top-down and bottom-up planning workshops, which the project aimed to integrate into, made it difficult for locals to participate. This was due to a lack of information available to participants, elite and government capture of decision-making processes, and a complex socio-political landscape that shifted due to government reorganization (Butler et al., 2016). These issues are also related to the next contextual factor.

3.3.2.4. Government recognition of right to and/or interest in the participation of local groups. 5/Nepal CFP and 12/Nepal DFCC reflected Nepal's commitment to protect forests and establish governance policies to recognize local people's rights to participate in forest resource management. Participating in 12/Nepal DFCC required time commitments from stakeholders, but the high rate at which collective decisions were both reached and implemented with committee members demonstrates increased trust between participants and the transition to a sense of ownership over the process and its outcomes. That their inputs were taken into account is important, as decisions were previously made unilaterally by government actors. In 6/Bangkok Green the government demonstrated commitment to its goal of increasing green spaces in Bangkok by providing resources to communities. 11/Finger Lakes illustrated the US Forestry Service's interest in local participation. A lesson of the process was that having neutral facilitators encouraged participants to view the meetings as balanced and open, without pre-determined results, and permitted local government and Forest Service workers to interact with participants informally because they were part of the process rather than leading it. This allowed local stakeholders to relate to Forestry Service officials as people rather than bureaucrats. In 13/Hin Nam No, following Lao PDR's government interest in the area, a collaborative governance model was piloted to recognize local people's customary rights by including them in formulating a management plan, with a mandate to protect and manage protected area resources. In 16/Cardoso Island the Park administration involved residents in its Participatory Advisory Council, which worked as an MSF linking the administration with community-based organizations. The administration won trust through negotiation and frequent communication, which was possible due to strong interest and investment by the state authority.

3.3.3. Discussion – Program theory 3 (Participation Paradigm)

In the cases reviewed here, co-management was affected by the distrust indigenous and local peoples held toward outside organizations and actors, which built on their past experiences of working with outsiders, including government and the private sector (especially extractive industries), and of broken agreements. They distrusted how outsiders may use the knowledge they choose to share. Participating thus carries risks as well as potential benefits. Successful forums allowed locals to voice concerns in a way that supported discussion and built trust such as assuring a neutral facilitator, sharing information and actively including local people in decision-making. When time, capacities and funding –the second contextual factor– were short, processes moved too quickly or ended too soon. Cases demonstrate the importance of long-term commitments, sufficient funds and appropriate methods that permitted collaborative design, testing and learning. The third factor, power inequalities among actors, was a common stumbling block. Explicit efforts to address inequalities included open discussion and neutral facilitation but also addressing time constraints and who was at the table. The attempt to keep discussions "apolitical" and "technical" may have also kept them superficial. Finally, once again, as in each of the program theories so far, government recognition of the right to participate was key to facilitating participation. This commitment was demonstrated through investments in resources, neutral and balanced facilitation, creating a negotiating arena that built trust through frequent negotiation, and fostering informal interactions.

3.4. Program theory 4: Multilevel governance initiatives (Multilevel Paradigm)

These initiatives prioritized multilevel and multisectoral coordination and negotiation following the assumption that collaborative decision-making would lead to more transparent and participatory processes which, in turn, are more legitimate and should increase local "ownership" of initiatives. The 7 cases reviewed followed a program theory that posited that more sustainable land use would result from cross-scale initiatives that brought together different stakeholders, including government agencies, from different levels. Again, two of the contextual factors most influencing outcomes under this program theory were attributes of the actors involved, while the other two were attributes

of governance. These factors were related to power inequalities of stakeholders, their interest in conservation, and government interest in controlling decision-making and in multisector collaboration.

3.4.1. Case studies

10/Oddar Meanchey REDD+ (Pasgaard, 2015**)**

The MSF was set up as a multi-level and multi-stakeholder governance effort to enhance community forest systems in Oddar Meanchey. It was supported by international NGOs and Cambodian legal frameworks. The initiative involved six types of actors: local villagers, forest management committees, a local NGO, an international conservation agency, a carbon company and donor institutions. The project succeeded in achieving coordination between levels of governance, creating spaces for meetings, negotiations and agreements on benefit sharing. However, when assessing both progress and outcomes, implementers tended to emphasize positive project assessments, downplayed potential project complications, and engaged with pro-REDD+ local community members. As in other REDD+ sites, the project's finances and incentives affected the interactions between stakeholders: there were high expectations in Oddar Meanchey regarding emissions reductions and subsequent compensation (Ty, Sasaki, Ahmad, & Ahmad, 2011), but villagers involved received little or no money for their work patrolling and protecting forests. The project was designed to engage with the international voluntary market but despite multi-level coordination, failed to sell any carbon credits because carbon prices did not offset deforestation incentives (Terra Global Capital, 2014). As a result, several actors withdrew from the effort.

13/Hin Nam No (de Koning et al., 2017)

The program was successful in establishing official institutions at three levels: Village Co-Management Committees, Village Cluster Co-management Committees and the Hin Nam No Protected Area District Co-Management Committee. These institutions were supported by national policies, the district governor's office and the provincial offices of Natural Resources and Environment. At the village level, 19 Village Co-Management Committees were established. Unlike some of the other cases, there were no relevant existing local institutions to build upon, so these institutions were established for the project. Elected members from the five village clusters in the project were part of Hin Nam No's district co-management committee, which was its main governing body. While consensus was not always achieved due to differing positions on specific issues, such as the ratio of tourism volume vs. tourism income, the inclusion of local people and implementation of a collaborative model of decision-making and management allowed for both more inclusion of local positions and greater discussion about management strategies. This kind of participation of local people in decision-making would not occur without the project and support by government officials at different levels.

The MSF's process included evaluations to identify what was working and what needed improvement. Major obstacles included financial and political sustainability, as coordinating between government levels required substantial political will and resources. Another major issue was equal representation. For example, of the eighty-seven elected co-management members at the time of the research, only five were women. Corruption in the local government and illegal resource extraction from the Protected Area also continued despite some improvements. To address such issues, the MSF's five-year plan included capacity building for government and community members, an affirmative action policy was adopted, and new mechanisms were established for formal agreements regarding the mandate of co-management structures. Despite such plans, funding was a major barrier. Mechanisms for raising revenues, such as ticketing for tourists, were insufficient without external funding because the government would probably not provide funding to continue the pilot project (de Koning et. al. 2017).

14/Vilhelmina MF (Klenk et al., 2013**)**

Over the past three decades, Sweden's forest governance has transitioned from top-down arrangements to networking efforts that bring together local communities and NGOs, government and private sector stakeholders from different levels. Vilhelmina MSF developed within this national and international trend as part of the Model Forest network. With no budget allocated to policy work, this Model Forest had no dedicated staff. Its activities were mainly focused on research, education and demonstration. Multi-stakeholder meetings aimed to influence landscape management by articulating the visions of different forest users. However, conflicting interests among stakeholders led to frustration regarding the participation and deliberation rules designed by the International Model Forests Network. The multi-level dimension of this MSF did not help to solve these frustrations and tensions.

15/Nusa Tenggara Barat (Butler et al., 2016**)**

The program built upon national decentralization policies set out in 2004 which aimed to combine bottom-up and top-down planning for development, and the provincial government's establishment of a Climate Change Task Force in 2010. The Task Force focused on integrating adaptation with development. The Australian government provided funding for Tim Kolaboratif to run pilot projects in the province. The policies and funding demonstrated commitment from the national and provincial governments and the donor, which was crucial to the project's potential for success.

17/Prince Albert MF (Klenk et al., 2013**) and 19/Manitoba MF (**Parkins et al., 2016**)**

Model Forests are a model of multilevel networking that seeks to include community and government and NGO actors from different levels in the management of a forested area. Both Prince Albert and Manitoba Model Forests sought to demonstrate how research and coordination could be useful for engaging various actors in conservation and production forestry. Yet, the participation of indigenous stakeholders was limited and the process did not take into account the rights of indigenous peoples to forest resources. Furthermore, the rules structuring participation and deliberation, designed to be implemented worldwide by the International Model Forests Network, did not adapt to the competing political interests of stakeholders in Canada. This meant that indigenous participants had to decide whether to take part in the MSF as equal stakeholders or separately pursue their distinct agenda. In general, the MSFs only achieved limited and somewhat superficial collaborative management at the subnational level.

18/Monarch Butterfly (Brenner and Job, 2012)

This MSF included governmental and supranational institutions; national and international NGOs; businesses (private sector, community and state-owned); and local population/resource users. The most influential actors within this multi-level setup included non-place-based conservation-centered governmental and non-governmental institutions. These actors shared a general interest in implementing conservation strategies and creating alliances with place-based actors through the MSF. Despite this interest, the MSF had limited success. This was largely due to conflicts of interest regarding resource use between different stakeholders and the distrust of government authorities by large segments of the local population and non-local resource users (Bojórquez-Tapia et al., 2003). Furthermore, the authors noted that the MSF's success was also constrained by cases in which NGOs refused to intervene in conflicts arising between local and government stakeholders, considering these as their 'internal affairs'.

3.4.2. Contextual factors

3.4.2.1. Government control over decision-making. 15/Nusa Tenggara Barat demonstrates the potential advantages of partially decentralizing decision-making, coordinating processes across levels, and the role that MSFs and coordination bodies set up around them can play. The case also shows that these processes not only require time and money but also have to be well timed. The MSF succeeded in developing the capacities and interest of local actors to engage in higher level policy debates, but engagement did not materialize due to changing government priorities and decision-making cycles. The case reveals that decentralizing processes for adaptive governance, and thus shifting power away from centers of power, might provide space for the increased participation of local people. However, it also shows that this may lead to the emergence of spaces for action that are easily captured by actors with strong political and social connections and the capacity to adapt quickly.

3.4.2.2. Power inequalities between LULUC actors. 18/Monarch Butterfly reveals the existence of uneven power relationships and different land-use priorities among stakeholders. In depoliticizing its land-use context, 17/Prince Albert MF and 19/Manitoba MF did not recognize historical power inequalities between actors. This led to decreased coordination because indigenous stakeholders saw their participation in the platform as counterproductive since it would imply waiving their position as rights-holders.

3.4.2.3. Government commitment for multi-sector collaboration. 12/Nepal DFCC reflects an emphasis on decentralization and promoting middle and local level involvement in forest governance. Generally, members at the middle level, such as political party representatives and people with connections to the forest sector, were becoming better positioned to take ownership of processes. This seemed to improve local people's ability to insert grassroots issues into wider debates and discussions. 13/Hin Nam No included representatives from local villages and different levels of government and sought to provide consensus-based oversight for the Protected Area. Finally, 15/Nusa Tenggara Barat demonstrates that commitment to multi-sector collaboration can be important when engaging with stakeholders across scales. Project coordinators specifically targeted government officials to gain their support for the project and leveraged external funding and expertise to build bridges between local stakeholders from different sectors and create more inclusive collaborative spaces.

3.4.2.4. Local/regional/national interest in conservation and preservation. This factor is multifaceted and is presented here to note the different ways in which conservation and related projects are understood at different levels, from donors to national and regional governments to local stakeholders. 12/Nepal DFCC illustrates the ambiguous nature of decentralization processes, including persisting doubts regarding who or what institution 'owns' the MSFs. This suggests uncertainty in how different stakeholders experienced their participation in processes that remained beyond their control. 15/Nusa Tenggara Barat shows a disconnect between stakeholders' conceptions of 'climate change'. Research suggests that people from different classes, levels of government and genders experience climate change differently, leading to different interests in conservation (Bohensky et al., 2016). The project in 13/Hin Nam No increased interest in conservation, partly due to villagers' direct engagement in conservation and monitoring work for which they earned income. Over one hundred trained village rangers participated in biodiversity monitoring and 35 village tourism service providers were established (MNRE, 2016). However, while there was government interest in conservation, the government was unlikely to provide funding to support the development of the pilot project (de Koning et al., 2017).

3.4.3. Discussion – Program theory 4 (Multilevel Paradigm)

To be effective, multilevel initiatives required government to give up at least some control over decision-making, the first contextual factor. Decentralization can open new spaces for local people but also for elite capture. Commitment to a combination of top-down and bottom-up planning, with funding, led to positive outcomes. However, the failure to address power inequalities, the second factor, led to superficial outcomes. The third factor, government commitment to multisectoral collaboration, required funding, capacity and targeted lobbying to build bridges across stakeholders and sectors. Finally, local/regional and national interest in conservation and preservation affected the outcome of multilevel governance initiatives, because different actors may have had very different perceptions of the problem. This includes perspectives not only on land use but also on inequality and on related priorities and trade-offs.

4. Discussion: Designing for engagement

Many of the cases included in the review are not new, but they still provide important lessons in the context of a growing emphasis among practitioners on multi-stakeholder initiatives, or landscape or jurisdictional approaches, with similar goals. Four different program theories were identified, each with its own priorities, mechanisms and intended outcomes; these were associated with the four contextual factors most commonly found to influence those outcomes in the cases studied (see Table 3). The program theories represent different ways, based on different central priorities and assumptions, to foster sustainable land-use solutions through participatory approaches. In each formulation the intended role of the MSF varies, but all forums were aimed at obtaining local "buy-in" using different primary levers: sustainability, livelihoods, participation and multilevel coordination.

Although the program theories overlap and many case studies have elements that fall under more than one, the four categorizations help identify priorities and assumptions behind objectives and understand the specific challenges faced. Together, they bring out some distinctive – and some common – characteristics of context. The Sustainability paradigm highlights the problems with prioritizing conservation (and top-down decisions) over inclusion, with contextual variables defining the terms of inclusion. The Livelihoods paradigm is most influenced by the rights and ability of local peoples to access livelihood resources. The Participation paradigm highlights conditions affecting the quality of participation: trust, power relations and the time needed to address these. Finally, the Multilevel paradigm evokes different perspectives, priorities and power relations among actors at different levels. In all four cases, the government plays a central role, in establishing or undermining the enabling conditions for local participation, rights and decision-making.

The rest of this discussion summarizes common lessons learned and, based on the evidence, proposes a paradigm shift on the approach to projects, from one that focuses on *project design* followed by *project engagement* to one focused on *designing for engagement*. That is, the emphasis should be shifted from how to design initiatives to how to design for engagement in a way that addresses context, whatever its distinct features, in order to develop and implement initiatives with greater chance of success. Four key lessons emerge from the analysis. These lessons are primarily directed to those designing and implementing MSFs but should also benefit organizations funding or requiring that MSFs are implemented as a part of development and conservation initiatives. Finally, these lessons also seek to inform applied research on the topic.

The first lesson, for both MSFs and the wider participatory approach, is about the importance of commitment – to the people, the process and the goals. Commitment is demonstrated by time, resources and follow-through that ensures policy and law is practiced and that participation goals are met. Only with a substantive commitment will actors perceive both the process and its outcomes as legitimate, and thus choose to engage (see Paavola & Adger, 2006; Corbera, Brown, & Adger, 2007). 13/Hin Nam No shows political will by the government to put collaborative management of an important Protected Area into practice, a change that was brought about by the government's interest in bringing tourism into the area. Clearly, there has to be openness and commitment by government to support policies for decentralization and for the inclusion of local people in decision-making processes.[10] The same case shows, however, that a lack of financial commitment by the government after donors fund the initial project can impact the sustainability and replicability of what may otherwise be a successful MSF. In several cases (e.g. 1/Gadabanikilo JFM, 2/Uttaranchal JFM, 3/Karnataka JFPM, 4/Karnataka JFM), there is evidence of a disconnect between law and practice, when local people technically had the right to participate but government officials and/or elites prevented this from occurring effectively, or when there was insufficient investment in time and resources to allow for the implementation of the MSFs at regional and local levels. The cases also reveal the importance of the link between the MSF's durability and changes in commitment (at times unpredictably so), as the development and conservation priorities of different stakeholders transformed over time.

As a second lesson, building commitment means engaging the implementers – key middle-level brokers and implementers, mid-level government officials – who determine what actually happens on the ground, such as in project implementation. In some cases (e.g. 2/Uttaranchal JFM, 3/Karnataka JFPM), initiatives were unsuccessful because there was a disconnect between the project's apparent goals and the way these were implemented by facilitators who were not as committed or had a different understanding of the project goals than those who developed them. Conversely, 6/Bangkok Green shows the benefit of actively engaging local government planners who might otherwise have been reticent to participate in the project. This was central to its sustainability as it built trust between communities and government, which resulted in a plan for maintaining the project into the future. This highlights the importance of doing the work to align commitments and agendas and ensuring that those who can affect change are truly participating (or are effectively represented) in the MSF. Over time, such an approach may be more enduring across political regime changes.

The third lesson is about projects and implementers being open to learn from and listen to stakeholders, especially those traditionally in weaker positions of power (e.g. women, indigenous peoples, peasant farmers). There is evidence across the cases that framing projects to address gender inequalities without strong commitment of time, resources and sound methods may not lead to the intended outcome. Using women's attendance at meetings as evidence of participation in the MSF may exacerbate problems as it may legitimize a deeply unequal decision-making system (1/Gadabanikilo JFM, 2/Uttaranchal JFM, 3/Karnataka JFPM). In comparison, 7/Campo-Ma'an MF and 8/Dja et Mpomo MF demonstrate the productive results of a willingness to listen, where the mobilization of women claiming access rights to forests led to changes in some governance practices in both Model Forests.

As a fourth key lesson, listening and learning has to be combined with the willingness of project organizers and implementers to change. The learning process has to be designed to be adaptable to the needs and priorities of stakeholders who generally have weaker positions in decision-making but who have different knowledge and potentially better information. This may also mean engaging with the institutions that render them less powerful, and even to change the project's direction. For example, there is evidence that adaptive methods and a strong commitment to addressing issues of gender inequality can lead to better outcomes (e.g. 5/Nepal CFP, 6/Bangkok Green, 7/Campo-Ma'an MF, 8/Dja et Mpomo MF). 5/Nepal CFP demonstrated a transition from centralized to multi-level, de-centered, gender-inclusive decision-making processes. 6/Bangkok Green had equal gender representation by design, but the central objective of empowering women was not successful until project coordinators followed an adaptive process that resulted in the creation of a special women's forum that was more successful in reducing women's marginalization.

The openness to learn and adapt is especially important when considering how MSFs may impact (positively and not) existing local institutions. In some cases (e.g. 3/Karnataka JFPM, 17/Prince Albert MF, 19/Manitoba MF) ignoring unofficial/informal systems of forest and resource management, and the historical/transformational nature of relationships (including their gendered aspects and power imbalances), undermined some of the vulnerable groups the MSFs sought to support. Exchanging these informal mechanisms with formal regulations and stricter enforcement, or even formalized participatory spaces, can lead to greater vulnerability even when 'participation' is mandated in the new institutions. As Mohanty (2003) points out, 'The coexistence of a variety of institutions operating in a crisscross fashion makes the situation infinitely complex and has important implications for participation'. Thus, designing new institutions without accounting for existing ones, formal or not, may build contradictions and conflicts into initiatives. However, this attention to institutions requires an understanding that may only be available to MSF organizers and/or proponents after a period of research, reflection and co-learning.

Overall, the cases that applied this kind of attention to learning (e.g. 5/Nepal CFP, 6/Bangkok Green, 15/Nusa Tenggara Barat) were able to do so because they had funding and time. This allowed MSFs to have an intentionally adaptive design, with a focus on learning (including research), recognition of power differentials between stakeholders (including knowledge disparities), and to prepare local peoples for participation. It allowed forum organizers and participants to build trust about, and political will for, the initiative, and in doing so allowed stakeholders to understand the consequences and opportunities of change. However, trust-building was challenged in some donor-funded cases led by local government offices which prioritized the easier to reach outcomes desired by funders (e.g. planting trees over achieving equity). Furthermore, well-funded cases may reach their short-term goals, including the priming of local peoples to take part in MSFs, but fail to progress due to differences with government priorities (15/Nusa Tenggara Barat) or a hastened attempt to replicate them under different conditions (6/Bangkok Green).

What do these lessons mean in practice? There are two important caveats to these findings. First, the lessons described above refer to commitment, engagement, listening and the will to change – characteristics of the MSF *process*. It is important to recognize that these resources for change, even when held by the individual actors involved, may be insufficient to address the structural inequalities or socio-cultural norms that uphold institutions of discrimination.[11] Nevertheless, they represent important, practical

[10] Of course, inclusion or representation in an MSF does not necessarily guarantee effective participation. In addition, representation and participation are two different processes – a topic that should be examined in more detail in future analyses.

[11] For example, indigenous peoples' rights to territory, resources and participation may be supported by the political will of specific government actors and even by specific laws but changing the underlying structures of discrimination is challenging (Sarmiento Barletti & Larson, 2019b).

steps that might help undermine such institutions. Second, and related to the first, it is important to note that measuring the outcomes, or the 'success', of MSFs is a difficult task. This review is based on the literature available and most of the literature refers to the achievement of specific goals and objectives as established by the MSF. In fact, measuring land-use change goals is difficult: the ability to attribute change to the MSF, while also accounting for problems such as leakage, would require rigorous monitoring and evaluation methods that are rarely used (e.g. BACI design, see Conner, Saunders, Bouwes, & Jordan, 2016). At the same time, ongoing research by the authors suggests that success may be perceived very differently by different participants, such as those who find value in the learning or networking that the MSF made possible. Journal articles rarely capture the breadth of perceptions.

The findings of the MSFs reviewed here (subnational MSFs with at least one government and one non-government actor) suggest that those most likely to achieve their outcomes are those that are purposefully recognized as part of a wider process seeking to transform practices at multiple levels; entail a period of research and meetings at upper levels to identify potential roadblocks and existing capacities with those who would implement the project locally; build consensus and commitment from higher levels, and thus political will; and are designed as adaptive learning processes.

Designing for engagement is set out as an adaptive process with a feedback loops from top to bottom to top, starting with a period of research and meetings at the upper levels to understand the potential challenges presented to local implementers by the wider context they seek to act upon. This design, although time-consuming, allows for the building of consensus and commitment at different levels, resulting in greater political will, as well as building capacity and empowering local people to be more effectively involved in decision-making processes. It is based on an approach that demands humility on the part of organizers and implementers and sees local people as partners in finding solutions rather than project beneficiaries.

Context matters because MSFs are not implemented in a vacuum, but rather are superimposed upon existing patterns of relationships, institutions and power. Hence taking the time to research and map local stakeholders and institutions, power relationships between stakeholders and ways of knowing is critical. In doing so, this top-led design recognizes that power inequalities between stakeholders are embedded in wider social, political and economic relations that extend beyond the 'local' and the present. A consideration of relevant contextual factors can draw on Table 2 or work from other relevant literature (e.g. Ostrom, 2005).

Positioning inequalities as obstacles that can be overcome solely by empowering otherwise disempowered local people is insufficient. Taking time to recognize the interconnections between individuals, groups and institutions is important for designing projects that actually address underlying inequities and the obstacles that emerge as initiatives progress. This is why successful cases tend to utilize adaptive and learning approaches, allowing for time to negotiate roadblocks as they arise and build processes of intra-project devolution of responsibilities and decision-making. Importantly, fostering trust between stakeholders (and potentially improving their relations outside the MSF) and creating a sense of local ownership over a project requires time and the consideration of local perspectives that is central to adaptive learning. Current findings suggest that MSFs that put into practice this capacity to foster adaptive learning may be more resilient in times of crises such as funding cuts, policy reorientations and changes in leadership (see McDougall et al., 2013; McDougall et al., 2008).

5. Conclusion

This review makes a methodological contribution to the social sciences by expanding the application of the RSR to the analysis of participatory processes seeking more sustainable land use. In contrast with systematic reviews, which follow a strict protocol to answer a straightforward question, RSRs pay attention to the specifics of how an initiative should work both in theory (as assessed from its program theory) and in practice (how contexts affect outcomes). This makes the RSR method sensitive to diversity and change within projects such as those reviewed here (see Pawson et al., 2004). The method was used in this review to compare systematically the contexts of each of the MSF case studies that were selected on the basis of the protocol (Sarmiento Barletti et al., 2019). The article has aimed to show that the depth of the analysis, in comparison to systematic reviews, makes them more compatible and accountable to the complexity of social science inquiry.

Although the emphasis of the review was to study the effects of context on the outcomes of MSFs, the central lessons that emerged from the analysis are about the *approach* to context. Context has a central role in the failure or success of initiatives on the ground. This might point to the importance of understanding context better in order to design better initiatives. Nevertheless, the cases point to a different solution: *designing for engagement*, in a way that addresses context, whatever its distinct features.

The review identified four common lessons learned from different program theories and their contexts: the importance of commitment (to the people, the process and its goals); engaging the implementers (key middle level, brokers and government officials who determine what happens on the ground); openness to learn from and listen to underrepresented stakeholders; and adapting based on this learning to context and to change, with the time and resources to do so. This approach points to several practical propositions. For example, pressure needs to be put on donors to support longer-term investments and flexible funding that can adapt to negotiated, emerging priorities and to support the possibility of widespread adoption of such engagement approaches. Practitioners should note the importance of mapping local institutions, power relationships and ways of knowing and analyzing these and other key contextual factors that might affect engagement strategies (e.g. gender, history, government, resources). Through such engaged analysis, the groundwork is laid to challenge the power relations that often hamper MSFs. Project design becomes part of the engagement process, and the engagement process becomes part of the design.

Most importantly perhaps, this approach is characterized by humility, an openness to learning and a willingness to be adaptive to context. It also takes into consideration the needs of the people it seeks to engage. The approach would also seek to ensure the political will of relevant stakeholders at different levels for the participation of local people in decision-making. This approach is akin to the concept of 'triple-loop' (Romm & Flood, 1996) or transformational learning. MSF participants following this approach would 'learn about learning', reflecting on how they think about the issues discussed by the MSF, and on not only their own positions and perceptions but also those of other stakeholders, establishing the basis for co-learning, mutual respect and trust-building over time.

Further research is needed to verify these findings and whether designing for engagement would work in multiple contexts. This review has examined subnational MSFs and a limited number of cases that fit the search criteria for inclusion. Specifically these required the presence of at least one government actor, meaning that grassroots or fully bottom-up processes were unlikely to be included. Future avenues for research include exploring whether

similar lessons emerge from similar analyses of national-level MSFs and grassroots MSFs that seek to scale into broader processes. Finally, as mentioned previously, MSFs are highly complex social processes that are unlikely to be fully understood from the perspective of a limited set of literature. Comparative field research is needed to explore multiple perspectives of the same MSF, unintended outcomes and emergent properties, and changes over time.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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