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Article

Community Forest Management: Weak States or Strong Communities?

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Abstract
Community forest management (CFM) has become an influential approach in the sustainable use, management, and conservation of forests worldwide. It ranges from community-based self-governance of local village forests to co-management approaches with state forest agencies in public forests. However, analyses show complex relationships between states and communities in CFM. At least three ideal types can be identified. The first refers to local communities that collectively decide to manage surrounding forests themselves due to a lack of state involvement. As a manager of the public good, such absence of the state may easily lead to deforestation and forest degradation that such communities wish to avoid. A second type refers to the co-management approaches of local communities and state forest agencies. Here, forest officials and community members cooperate in managing local forests. A final type refers to indigenous communities with strong customary forest institutions whose territorial claims are recognized by the state. While communities always need specific institutions, knowledge, and tenure rights in place to make CFM perform, each ideal type presupposes various degrees of state capacity and state autonomy. The article concludes that weak states (to some degree) and strong communities (of a certain kind) may indeed form a "convincing liaison" in CFM, although it is not the only arrangement that may produce (some) positive social and environmental impacts on the ground, as the cases explored illustrate.

Keywords
co-management; community forest management; decentralized state; distant state; facilitating state; indigenous people; local communities; self-governance; territorial recognition

Issue
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1. Introduction

Community forest management (CFM) has become an influential approach in the sustainable use, management, and conservation of forests that combines socio-economic and environmental objectives at the local level (Baynes et al., 2015; FAO, 2016; Hajjar et al., 2021; IFRI, 2015). Globally it covers about 15% of the world's forests, or approximately 600 million hectares (Arts, 2021). CFM ranges from community-based self-governance of local village forests to co-management of public forests by communities together with state forest agencies (and other actors in many cases, such as NGOs, business organizations, and experts in the field). Consequently, CFM may be characterized by quite different relationships between states and communities. In this article, we distinguish three ideal types, based on theoretical literature: (a) self-governance, distant state; (b) co-management, decentralized state; and (c) territorial recognition, facilitating state. Such classification implies that different kinds and degrees of statehood are involved in different CFM arrangements.

To contribute to the question raised by this thematic issue—whether local self-governance and weak statehood may offer a convincing liaison—this article aims to analyze what state–community relationships are materialized in different CFM arrangements and how these might contribute to their performance, be

it weak states and strong communities, the other way around, or any other combination. Strong states are understood as exhibiting high degrees of state capacity and autonomy in their relationships with forest communities, while weak states lack those characteristics. Strong communities are, in turn, understood as possessing some relevant, forest-related institutions, knowledge, and tenure rights, while weak communities lack those characteristics. These various characteristics of both states and communities are to be found in different degrees in the three CFM ideal types of self-governance, co-management, and territorial recognition. To illustrate these, we offer three case studies from Peru, Tanzania, and Ecuador, respectively. Next, based on case-specific indicators (which will be explained in the section dedicated to the methodology), we assess the social and environmental performance of CFM in these cases. Finally, we link the findings of the three case studies to the overall CFM literature to generalize some of the results. The article concludes that weak states (to some degree) and strong communities (of a certain kind) may indeed form a convincing liaison in CFM.

2. The Role of the State in CFM: Three Ideal Types

In their well-cited review paper, Charnley and Poe (2007, p. 301) define CFM as "forest management that has ecological sustainability and local community benefits as central goals, with some degree of responsibility and authority for forest management formally vested in the community.'' Hence, it puts the fulfillment of local livelihoods and forest conservation first (Baynes et al., 2015; Hajjar et al., 2021). CFM has emerged as a response to failing state forestry and local overexploitation of forests while building upon traditions of customary regulation of natural resources (Arts & de Koning, 2017). Such forests may be completely, partially, or not owned by communities, and their management is often practiced in various degrees of collaboration with state forest agencies, donor organizations, knowledge institutions, and companies (FAO, 2016; IFRI, 2015). Already in the early 1970s, the idea of community participation, both for better forest management and for improving people's livelihoods, was practiced in a few countries, advocated by NGOs and scientists, and intensively discussed in the FAO at a global level (Arnold, 2001; FAO, 1978). Later, these ideas "travelled'' to other countries and localities worldwide (Arts & Babili, 2013). India, Bolivia, and Tanzania have pioneered different forms of CFM from the 1980s onwards, and many countries, from Ethiopia to Albania, followed later (Baynes et al., 2015; Charnley & Poe, 2007). CFM has now become a global phenomenon, although it particularly applies to developing countries in the tropics, where state institutions are often weak in forested landscapes or even absent in remote areas. Because it currently covers a forest area of about 600 million hectares, it is considered an important contribution to the UN's global forest goals on sustainable forest management (Arts, 2021).

In many countries, the emergence of CFM is considered to be a direct result of weak statehood (cf. Basnyat et al., 2020). Weak statehood is commonly defined as a state's lack of capacity to deliver security, have functioning political institutions in place, create support for economic systems, and deliver welfare for its citizens (Patrick, 2006). In this article, we are specifically interested in the political institutions of the state, also referred to as state agencies, in the context of forest policy. Whether such state agencies are weak or strong can be defined by two metrics: capacity and autonomy (Bersch et al., 2017). Capacity refers to the ability of state agencies to deliver on goals, e.g., improving forest conditions and local livelihoods for CFM. In contrast, autonomy refers to the ability to defend the public good and maintain political independence and integrity when faced with interest groups, private pressure, and attempts of bribery. When one zooms in on state agencies' capacity and autonomy as metrics for state strength, it becomes clear that states are heterogenous and may be strong in one aspect while weak in another (Gustafsson & Scurrah, 2019). This is also the case for the developing countries in which our CFM case studies are situated (Tikuisis & Carment, 2017). Indeed, the strength of forest state agencies and their capacity and autonomy when implementing or supporting CFM varies broadly. While inspired by the literature, we present three ideal types of CFM (Baynes et al., 2015; Hajjar et al., 2021; IFRI, 2015).

The first one is "self-governance," which emphasizes the ability of communities to manage local forests themselves as a response to a "distant state" that is incapable of managing public forests (Agrawal & Gibson, 1999). Communities are able to do so when specific "internal characteristics" are present, particularly: (a) local institutional arrangements that are (sufficiently) effective and legitimate (e.g., rules on access, use, management, and decision-making); (b) history of and experience in customary forest management; and (c) tenure security, either de jure or de facto (Baynes et al., 2015; FAO, 2016; IFRI, 2015; Ostrom, 1990). Nevertheless, local communities that practice self-governance are never fully independent from the state. Even a weak state can play a positive role in CFM, for example, by formalizing forest management plans. When state agencies lack both the capacity to deliver public goods and autonomy from political elites, they often pay lip service to the concept of CFM but fail to help communities execute it, let alone formally devolve forest rights to them (Hajjar et al., 2021). However, when state autonomy is present and CFM is locally supported, and forest rights are devolved, more positive outcomes for both forests and communities are usually found. In practice, such self-determination of local communities needs to be actively negotiated between state agencies and local communities (Li, 2007). If certain conditions are met, the state may also play a role in settling conflicts between communities, which cannot be resolved via local institutional

mechanisms, and it may provide technical assistance for forest management or local agricultural practices, for example, via agricultural extension programs (Agrawal & Gibson, 1999).

A second type of CFM is "co-management," where state agencies still play an active and usually authoritative role in managing forests but have decentralized (some) responsibilities and authority to local communities. Literature on co-management defines multiple roles for the state, often in terms of criteria for success (de Pourcq et al., 2015; Pagdee et al., 2006). Specific roles for the state are to define property rights, to clearly define territorial boundaries, to provide technical assistance for forest management, and to legally recognize the authority of communities to manage and use forests (Pagdee et al., 2006). De Pourcq et al. (2015) argues for a similar role for the state in co-management, highlighting the importance of trust and effective participation to avoid conflict between the state and communities. This emphasis on the role of social networks is also echoed by Arts and de Koning (2017), who identify a community of practice as an important indicator of successful CFM. It should be noted that most literature discussing it from a co-management perspective places the state in an authoritative or top-down role. Moreover, CFM as co-management is regularly criticized for not realizing sufficient social and economic benefits for local communities (Sheba & Mustalathi, 2015). This type of co-management assumes forest state agencies that are at least moderately capable and autonomous. Conflicts between communities and forest state agencies frequently arise when autonomy is lacking and communities view state agencies as representing the interests of political elites (Baynes et al., 2015; IFRI, 2015).

The third type of CFM is "territorial recognition," in which recognizing and formalizing traditional and/or local tenure rights are considered key to sustainable forest management. Specifically, indigenous peoples and local communities (IPLC) are recognized in the literature for the positive role they often play in managing forests and other territories for forest conservation values (Brondizio & Tourneau, 2016). Often, these territories perform just as well as strictly protected areas when it comes to preventing deforestation and forest degradation. The specific role of the state in this form of CFM is to facilitate legal recognition of the tenure of local communities over specific territories based on historical use and/or indigeneity to safeguard the integrity of territorial borders against invaders. Therefore, this type of CFM does not assume specific state capacities but does require a strong autonomous state to safeguard territories from being captured by the interests of political elites, e.g., agricultural expansion or mineral resource extraction. In addition, states often play a role by offering assistance in land use planning and mapping (cf. Matuk et al., 2020). Tenure reforms do not directly lead to tenure security by themselves. Gebara (2018) finds that additional enforcement and activism by non-state actors are usually needed to fight illegal extractive activities (i.e., logging, mining) when state capacity is insufficient. Regrettably, illegal extractive activities are often tolerated and even supported by political elites, showing a lack of autonomy of state forest agencies that need to enforce the integrity of territorial boundaries (cf. Sant'Anna & Costa, 2021). Another issue in the tenure of IPLC of their forests is that any rights granted remain bound to the state's legal frameworks, and these rights are often limited to use rights. Especially ownership and management of forests often remain firmly in the hands of the state (FAO, 2016; Larson & Dahal, 2012).

The capacity and autonomy of forest agencies concerning local community-based forest management help to distinguish between the three CFM types. Local self-governance generally goes along with political and administrative institutions that lack sufficient capacity to govern forests and people for the public good locally. In contrast, for the two other types, such state capacity must range at least from moderate to strong. Autonomy of state agencies—even of less capable ones—is for each type of importance to enhance successful CFM, although in different ways per arrangement, but is especially crucial for the second and third types. For co-management, state autonomy is crucial, given the reported importance of trust and impartiality between communities and state agencies. For territorial recognition, state autonomy is crucial for protecting indigenous territories against external economic pressures to exploit the area, including environmental crime, such as illegal logging. See Table 1, in which the differences and commonalities among the three ideal types are plotted.

All in all, communities in CFM mitigate the weak(er) capacity and autonomy of state agencies with their own management ability and political independence. But a lack of capacity and autonomy by state forest agencies can also be mitigated by other external players outside the community. Environmental NGOs may, for example, strengthen state capacities to improve forest conditions, and public campaigns—whether national or international—may counter the influence of political elites in state forest agencies (cf. Gustafsson & Scurrah, 2019). Accordingly, the performance of CFM should always be viewed as a result of the interaction between state and community, while taking other societal actors into account.

3. Methodology: Case Selection and Data Analysis

This article aims to analyze what state–community relations offer a convincing liaison for CFM arrangements to perform. To illustrate the three ideal types of state-community relations empirically, we analyze cases in three countries where the authors have worked in the past or are currently working. These were selected as follows: From a list of many CFM cases in eight countries worldwide (see Arts & de Koning, 2017; van der Zon et al., 2023), we identified appropriate ones in three

Table 1. Types of CFM and roles of the state.

	Type of CFM		
Roles for the state	Self-governance	Co-management	Territorial recognition
Position	Distant	Authoritative	Facilitating
The capacity of forest state agencies	Weak: acknowledgment of CFM.	Moderate to strong: formal institutionalization of CFM; active management of forests jointly with communities.	Moderate to strong: safeguarding territorial borders and addressing environmental crime.
When the autonomy of state agencies is *higher*	Formalization of existing forest management practices; maybe some legal and technical assistance.	Decentralization of management authority to local agencies and communities; enhancing participatory processes.	Recognition of territorial rights and land tenure; assistance with land use planning and mapping.
When the autonomy of state agencies is *lower*	Paying lip service to CFM without any support; might undermine the self-determination of communities.	Conflict with communities over forest use; capture of forest resources by state agencies; loss of trust.	Erosion of territorial rights; the intrusion of external actors (e.g., miners, loggers); increase in environmental crime.

relevant countries that fitted the theoretical ideal types best. With that, we applied a *most different* case study approach concerning CFM–state relationships and a *secondary analysis* of data from existing or past research. However, the kind or degree of performance in these cases was not an ex-ante selection criterion. The idea was to analyze the state–CFM relationships in each case study in the first place and, secondly, see how these work in practice while taking performance into account. The latter is operationalized in terms of environmental and/or socioeconomic impacts over time, being the two key objectives of CFM (see the second section).

Since we conduct a secondary analysis, the indicators of these two types of impact differ per case. The Peruvian case study looks at CFM's conservation success through before-after control intervention (BACI; quasi-experimental assessment of deforestation rates within and outside the case areas); the Tanzanian case study uses commonly accepted forest condition and livelihood indicators (such as canopy coverage and income data over time); and the Ecuadorian case study assesses impact through identifying the continuation of sustainable customary forest management practices in indigenous territories and the adoption of modern forest management plans by communities. From a methodological point of view, using such different methods and indicators is problematic, but our objective is not to systematically compare these cases' impacts. As said, these are illustrations of different state–community relationships under CFM, and of more or less convincing liaisons, given case-specific performances.

The analysis of the three case studies follows a similar structure. First, general forest data and information on forest policy in each country or region are introduced. Then, the analysis looks at CFM in greater depth—i.e., its overall features, the state–community relationships involved, and its impact in terms of case-specific indicators. Finally, we will focus on the question of whether a specific CFM type offers a convincing state–community liaison in the specific context.

4. Self-Governance in CFM: A Case From Peru

The Amazonas and San Martin (ASAM) regions, located on the eastern slopes of the Andes in northeastern Peru, are a central part of the Tropical Andes Biodiversity Hotspot. It is one of the most biodiverse areas on Earth and the habitat of many endangered species (Shanee, 2019). The population density in ASAM has risen rapidly since the 1980s. Deforestation is high due to road projects, migrant influx, shifting cultivation agriculture, and an agribusiness land rush. Between 2001 and 2016, 402,635 hectares were deforested in the area, 8% of the 2000 forest cover (Geobosques, 2017). Since 2007, annual deforestation has decreased, partially due to community conservation (Agudo, 2019).

Currently, the landscape in ASAM consists of agriculture-dominated mosaic landscapes with patches of forest. Government-protected areas cover a small portion of the remaining forests in the area (~1.5 million hectares), but these are poorly managed and thus insufficient for species and habitat protection. In addition, many conservation initiatives are initiated and managed by rural *campesino* communities. Some are formally registered as non-government protected areas (private conservation areas or conservation concessions).

Others lack such legal recognition from the government (Monteferri & Coll, 2009; Shanee et al., 2015). In the case of private conservation areas or conservation concessions, the state is not actively involved in management and supervision; it only conducts the paperwork to formalize the areas (for a rather high fee), periodically reviews satellite data, and may conduct supervisory visits. The regional environmental authority can also fine conservation areas and concession holders if they detect deforestation or other harmful activities. Much to the frustration of the *campesinos*, who feel the government should support their efforts to conserve the forest rather than only threaten them with fines if they do not manage areas perfectly. For this reason, some also feel it is easier to protect a forest without legal recognition. The motivation of the *campesinos* to protect the forest is often linked to (the loss of) certain services, such as water supply, timber, non-timber forest products (NTFPs), and climate regulation, but also to the intrinsic value of nature (van der Zon et al., 2023).

In the absence of supportive statehood, *campesinos* tend to rely on locally recognized customary rights and communal institutional arrangements to manage and control forest conservation. The *ronda campesina* is the most common arrangement in northeastern Peru. *Rondas*, which consists of members of all families in a *campesino* community, patrol the communal lands, maintain social order, administer justice, and protect the interests of the community (van der Zon et al., 2023). The first *ronda campesina* was created in 1976 by a group of farmers to patrol the community lands to protect it from criminals and became widespread during the guerilla war in the 1980s and 1990s. *Rondas* of neighboring communities often collaborate. In addition, they are all part of a powerful hierarchical network, including representations at different levels (including nationally). It is estimated that about 5,000 *rondas* bases exist in Peru today (Shanee, 2019). Nowadays, most of them are legally recognized. Yet, the government does not recognize *ronda campesina* conservation areas unless a distinct conservation committee or association manages them. Even so, the enforcement mechanisms that the *rondas* provide are generally quite strong, and their voluntary conservation initiatives tend to be successful (van der Zon et al., 2023).

As part of a larger study on communal conservation initiatives in northeastern Peru, van der Zon et al. (2023) evaluated the conservation success of five initiatives in ASAM in which *rondas* play a major role. They observe that independent of the state's recognition of the conservation initiatives, the *rondas* undertake numerous activities to protect the community conservation areas. Firstly, they create paths and sometimes build guard houses to show their physical occupation of the forest. Secondly, they regularly monitor the forest or at least the main points of entry. In some cases, they can do so close to the village if they have a good overview of the forest area nearby. Other groups of *ronderos* periodically patrol the forest. Thirdly, they sanction rule breakers using traditional measures. For example, in Jardines Ángel del Sol, when a community member breaks a conservation rule, the rule breaker is generally invited to participate in a meeting. As most community members wish to avoid conflict, such sanctioning meetings generally suffice. Rarely, when rule breaking is more serious or continuous, the *ronda* sanctions the rule breaker according to its tradition or requests that the district attorney does so.

The study measured conservation success using BACI deforestation scores for five cases (Bos et al., 2017). BACI scores allow a rather accurate judgment of deforestation rates in conservation areas, as they base performance on cross-scale and multi-year comparisons of deforestation data inside and outside those areas. Three of these five conservation initiatives are formally recognized as conservation concessions or private conservation areas (Jardines Ángel del Sol, Valle del Biavo, Pampa del Burro). Two of these (Jardines Ángel del Sol and Pampa del Burro) show relatively low deforestation rates compared with the larger geographical area, while in Valle del Biavo, it remains high. This might be so because the latter conservation initiative had only existed for two years at the time of assessment. The other two of the five case studies (El Arenal, El Hocicón) have no legal recognition from the state, and the communities have no official property rights over the forest. Yet, the *rondas* manage to keep deforestation low compared to the larger geographical area.

Overall, the above study shows that *rondas* can improve forest management and conservation themselves, particularly due to their strong communal enforcement mechanisms, while the Peruvian state is generally at a distance. This is reflected in low(er) deforestation rates in most of the areas investigated, compared with the larger geographical area. Hence, it seems that this Peruvian state–community relationship of self-governance offers a rather convincing liaison, although the state—for as far as it is present and capable of intervening—mainly plays a sanctioning rather than a supportive role.

5. Co-Management by States and Communities: A Case From Tanzania

The United Republic of Tanzania is one of the poorest countries in the world (United Nations Development Programme, 2020). At the same time, it is a very biodiverse country, possessing rich forests. Currently, about 46 million hectares of forests cover its surface, nearly half of its territory (FAO, 2020). However, deforestation is vast and increasing over time. In the period 2010–2020, Tanzania lost about 0.88% of its forest area every year. This percentage is substantially above the African average. Key drivers are poverty, demography, and agriculture, both swidden and commercial.

Over decades, the country has tried to reverse these trends, amongst others, through forest policy and

law. Under the socialist Ujamaa era of Julius Nyerere (1965–1985), all forests were nationalized to benefit the people, but the effect was the opposite. Since the state was unable to manage all forests effectively, once private and community ownership had been abandoned, forests practically became "open access regimes," reinforcing deforestation and degradation (Kihiyo, 1998). Therefore, after the socialist era, and in line with upcoming international trends, forest management became (partially) decentralized, liberalized, and more participatory. This culminated in a new forest policy in 1998 and a new forest act in 2002, which laid the basis for CFM in Tanzania (Sungusia et al., 2020). Two forms can be distinguished: community-based forest management (CBFM; in community-owned village forests) and joint forest management (JFM; in publicly-owned forest reserves, jointly managed by forest departments and communities). The latest data (from 2012) show that CBFM consists of 2.4 million ha and JFM of 5.4 million ha (together, 7.8 million ha, about 17% of the Tanzanian forest area). Below, we only focus on JFM as a mode of co-management.

Since JFM has been operating in Tanzania for about 20 years, more data are available to assess its performance. Although the evaluation literature on Tanzania's JFM is limited, scattered, diverse, and mainly based on a few cases per study, some general conclusions can still be drawn. Most studies do report (some) benefits from JFM, but particularly so in the ecological domain (improved forest condition) and less so in the social-economic and political ones (livelihoods, cash income, empowerment, governance; see Sheba & Mustalathi, 2015). And for as far as social-economic outcomes are reported, these particularly benefit the wealthier groups in communities and those who govern the forest committees in the villages (Ngaga et al., 2013).

A case from the Babati district is illustrative (Arts & Babili, 2013; Babili et al., 2015). This study assessed the forest area under JFM in two North-Tanzanian villages through satellite images, focus groups, household surveys, and field observations. Results indicated that the forest cover expanded over time after the introduction of JFM: For one village, this meant a transition from forest cover loss in the 1990s to forest cover gain in the 2000s; for the other village, JFM involved a continuation of forest cover expansion. Also, given villagers' perceptions, forest quality, particularly tree density and species diversity, had improved over time. Yet, according to household surveys, income did not increase due to JFM over the years. While, for example, the availability of some NTFPs improved, the limitations on cattle grazing and timber harvesting in the forests reduced particular livelihood options. Besides these ecological and socioeconomic findings, the study also reports some benefits in terms of good governance at the local level (increased trust between officials and villagers and enhanced accountability from forest authorities towards the communities) and some increase in social capital in the communities (empowerment of villagers vis-à-vis authorities).

In understanding these "mixed" outcomes, both from the general JFM literature on Tanzania as well as from the Babati case studies, the double role that the decentralized Tanzanian state plays is crucial. On the one hand, it exhibits the capacity to enhance JFM, through legally and practically recognizing the role and position of communities in local forest management, while also assisting them with technical and management advice in many instances. On the other hand, the decentralized Tanzanian state often lacks autonomy in the eyes of communities in that it still tends to advance the particular interests of the "old" forestry profession, but now under the label of JFM (Sheba & Mustalathi, 2015; Sungusia et al., 2020). Consequently, communities may still feel subjected to a rather authoritative, technocratic, and bureaucratic approach, thus reproducing "old" power relations between foresters and villagers, undermining the legitimacy of and trust in JFM. Although, the Babati case also shows that trust may be restored.

All in all, the Tanzanian co-management liaison does seem to perform to a certain extent. Forests do generally benefit; people less so. State forest agencies are generally capable of institutionalizing and assisting JFM but are often still trapped in a straitjacket of classical forestry interests, thus losing impartiality and trust in their relationship with communities.

6. CFM and Territorial Recognition: A Case From Ecuador

The Ecuadorian agricultural reforms of 1960–1980 probably had the biggest impact on the deforestation of the Ecuadorian Amazon. During these reforms, the government encouraged migrant farmers from the Andes to move to the Amazon to cultivate the land (Blankstein & Zuvekas, 1973). The reasons behind this colonization of the Amazon by Andean farmers were twofold: a land shortage in the Andes and the perception of the Amazon as an uncultivated and uninhabited area (Bromley, 1981; de Koning et al., 2021). By clearing land, Andean farmers occupied large parts of the Amazon, resulting in Ecuador having high deforestation rates in the 1980s (de Koning, 2011; Southgate et al., 1991). Another consequence of the colonization was that indigenous Shuar communities were not able to successfully claim their traditional lands. Due to their extensive land use practices and traditional shifting cultivation, the state did not recognize the land they inhabited as theirs. As a response, the Federacion Interprovincial de Centros Shuar (FICSH) started to fight for its rights and the protection of the remaining Shuar territories. For example, The FICSH was responsible for allocating so-called Shuar *centros*: Shuar villages that were consciously scattered over the indigenous territory to demonstrate the Shuar presence in the Amazon. By the end of the 1980s, at the end of the reform, the Shuar were able to gain back some of the land (de Koning, 2011).

In the late 1990s and onwards, the Ecuadorian government actively implemented reforms to reverse the negative deforestation rates created by colonization. These reforms included, among other things, a decentralization process, a new forest law that promotes CFM, and the acknowledgment of indigenous territories and use rights. Under this law, small farmers—including indigenous subsistence farmers—were able to draw up forest management plans for their forests. These reforms included a first step toward the recognition of land use practices of the Shuar (de Koning, 2011; Ibarra et al., 2008).

The role of the Ecuadorian state in those forest reforms mostly focused on the larger legal and policy frameworks and setting the preconditions for forest management. The practical assistance for designing management plans was outsourced to NGOs. These non-governmental organizations explained the rationale behind the policy instruments to communities and offered assistance in drawing up management plans. The state's role was primarily setting and facilitating the new forest rules and controlling the timber flow (e.g., fining illegal logging) while simultaneously acknowledging and guaranteeing indigenous land rights. By doing so, the state aimed to reverse some of the effects of the colonization process and increase the performance of CFM. While the relationship between Shuar and the state has remained fragile, the underlying principles of CFM seem to complement indigenous beliefs on natural resource management and sustainability.

An example of a Shuar community (to illustrate the above trends in more detail) is located in the Ecuadorian Amazon of Morona Santiago province (studied between 2006–2009; see de Koning, 2011). Morona Santiago was one of the regions that suffered the most from high deforestation rates and still shows relatively higher percentages than other provinces. The Shuar also experienced such detrimental effects of the colonization period, yet they appeared responsive to the idea of CFM. A local NGO worked with them to implement the arrangement. Although the adoption of forest management plans did not work well in this area, a direct effect of CFM implementation was that it enforced pre-existing local traditional beliefs on conservation, collective action, and sustainability. Shuar communities were already used to working collectively in customary practices, including unrolling ideas about sustainability. Moreover, most of the practices in the forest were considered not only as a way of living but also as a way to conserve traditional Shuar identity and to look after the forest. While the area had already been heavily deforested due to the colonization process, the new forest reforms did avoid further deforestation. And the state's recognition of indigenous territories increased the Shuar's awareness of the need to maintain their cultural identity and forest ecology.

However, noticeable shifts to a different and more commoditized livelihood have started to occur recently besides CFM. Due to an increasing need for income, an increasing amount of forest has been logged in the indigenous territories, particularly by the younger generation. While the amount of logging was still limited, forest management practices were performed informally and without official forest management plans (de Koning, 2011, 2014). The facilitating role of the state was obviously not strong enough to avoid these developments. At the same time, one can argue that more interference by the state would have worsened the already fragile relationships between the Shuar and the government.

Nowadays, the new constitution of 2008 includes the protection of indigenous rights, ensures consultation of indigenous communities in case of new development interventions, and guarantees the protection of forests against over-exploitation of natural resources (de Koning, 2011; Etchart, 2022). However, recent large-scale mining projects, oil drilling, and continuous struggles to claim and maintain indigenous territories have contributed to a problematic relationship between the state and indigenous people. This includes Shuar protesting state interference in their lands while they fight for their own independence and survival (Etchart, 2022). This has, on the one hand, the effect that Shuar cultural beliefs and their ideas about sustainable forest management have been further strengthened due to territorial recognition by the Ecuadorian state and remain to have a strong positive influence on forest practices (see, for example, Rudel, 2021; Etchart, 2022). On the other hand, current modernization pressures and the effects these have on state–community relationships and the aspirations of the younger Shuar generations present challenges to forest conservation.

To conclude this case study, the performance of the Ecuadorian CFM liaison shows a mixed picture. Territorial rights for indigenous people are indeed recognized and facilitated by the Ecuadorian state, fostering customary sustainable forest management practices. But relationships with indigenous communities remain fragile, given government-supported colonization processes in the past and modernization processes today.

7. Discussion

The three case studies from Peru, Tanzania, and Ecuador illustrate the three ideal types of CFM–state relationships, as identified in the theoretical part. Although not completely ideal-typical, because practice is often messier than theory assumes, the CFM types nonetheless show that states need communities to be able to sustainably manage (part of) the forests within their national boundaries. In that respect, all three showcase—although to different degrees and in multiple ways—the state's weakness in taking full care of forests in its territory.

Secondly, the cases illustrate that communities are able to enhance CFM through self-governance (Peru), co-management (Tanzania), and territorial recognition (Ecuador), with more or less success. Thus, the examples

indicate that CFM can perform and produce (some) positive social and environmental impacts, although more often for the forest than for the people. Also, contra-developments do take place (ongoing deforestation, bureaucratization of CFM, elite capture, state-community conflicts, and modernization processes).

Thirdly, the state positions itself differently in these CFM arrangements, either deliberately or forced by circumstances: distant (lacking state capacity to intervene), authoritative (exhibiting a certain degree of both state capacity and autonomy), or facilitating (particularly built on state autonomy). But overlap exists as well. In all three cases, some external recognition of CFM of whatever form by the state is crucial for its performance, be it through symbolic or legal means. Moreover, a supportive role of the state is important for CFM-functioning, be it technical, legal, or management assistance, and whether the state is at-a-distance or very involved. Yet, these roles can be easily undermined by those same state agencies as well, for example, through selective recognition, top-down arrogance, aligning with opposing economic interests, and ongoing political domination, as the three cases also illustrate.

Of course, only three cases might provoke several biases if one wishes to arrive at some general conclusions. Therefore, we confronted the findings so far with the general CFM literature. We identified four (more or less systematic) review studies—jointly covering hundreds of CFM cases worldwide—which go more deeply into the role of the state vis-à-vis communities in explaining the success and failure of CFM (Baynes et al., 2015; FAO, 2016; Hajjar et al., 2021; IFRI, 2015). These review studies combined refer to the following two crucial roles of the state, contributing to CFM performance: (a) government recognition and support, direct through local forest departments and officials, or indirect, through NGOs or donors; and (b) the maintenance of political stability and the endorsement of policy continuity. Particularly the first point confirms the findings from the case studies. At the same time, the scholarly literature also recognizes that state bureaucracies can hinder progress in CFM, for example, through patronage, corruption, domination, and window-dressing. The latter point refers to CFM as a "sort of compensation" for the dominance of an extractive political economy outside CFM areas. Some of these hindrances were also addressed.

What the general literature also emphasizes is a number of internal characteristics of communities for CFM to perform (effective local institutions, indigenous/local experience in forest management, and de jure or de facto tenure security). These characteristics are also expressed in (some aspects of) the three case studies from Peru, Tanzania, and Ecuador.

8. Conclusion

While states may be weak in terms of their capacity and autonomy to intervene in local forest management for endorsing the public good of sustainability, communities need to be sufficiently strong (institutionally, cognitively, and tenure-based) to make CFM a success. In that respect, the title of this thematic issue seems to apply to CFM: Weak states (to some degree) and strong self-governing communities (of a certain kind) may indeed form a convincing liaison in CFM. Although, it is not the only state–community arrangement that can perform in terms of social and economic impact, as the cases in this article also illustrate. At the same time, CFM is not the "golden bullet" for sustainable forest management or the empowerment of IPLC. Many constraining factors and adverse processes do also operate (from elite capture to extractive modernization processes). For the sake of the world's forests and these communities' prosperity, all involved should work towards minimizing such negative trends.

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Conflict of Interests

The authors declare no conflict of interests.

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