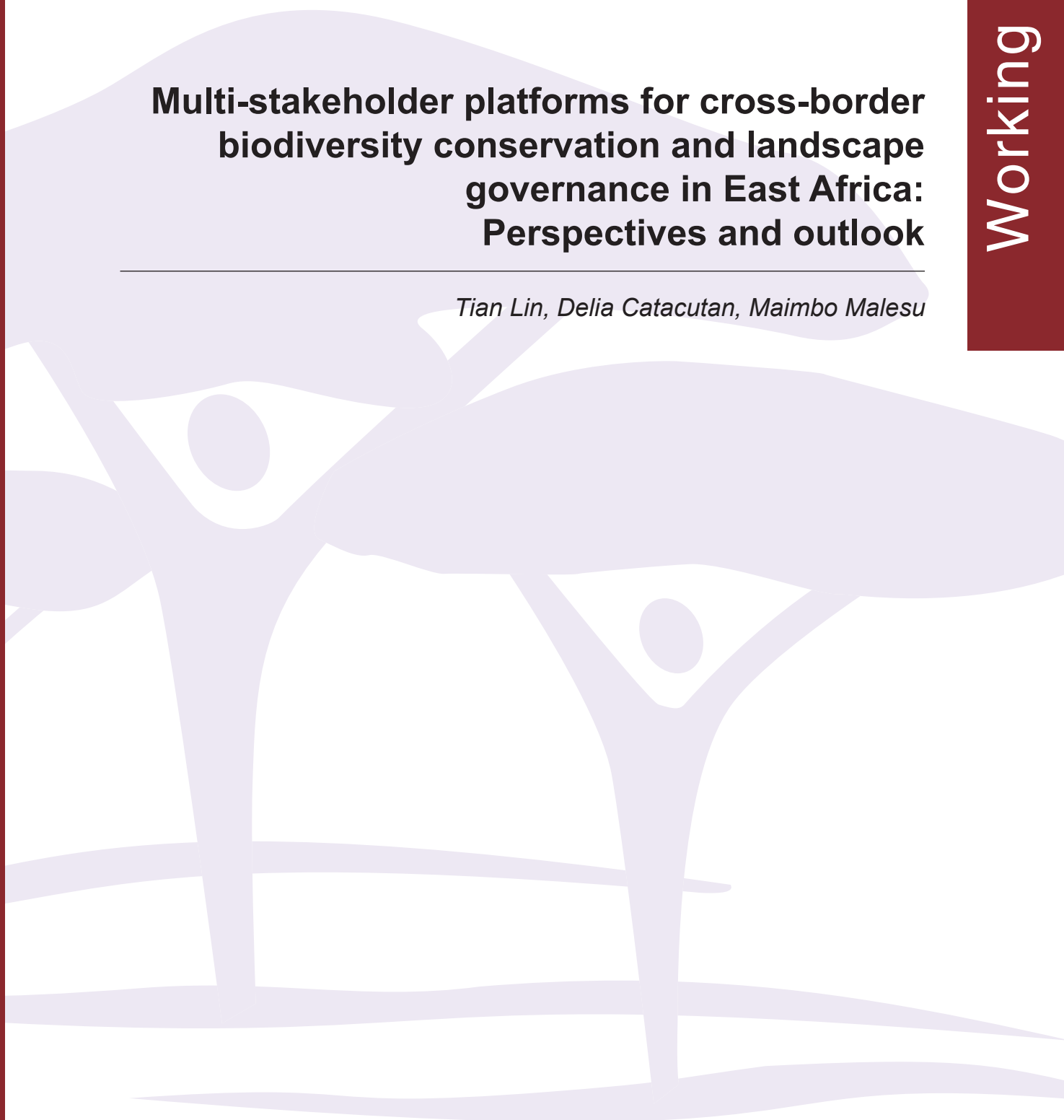


**Multi-stakeholder platforms for cross-border  
biodiversity conservation and landscape  
governance in East Africa:  
Perspectives and outlook**

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*Tian Lin, Delia Catacutan, Maimbo Malesu*



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## **Abstract**

This working paper considers the role of multi-stakeholder platforms (MSP) for cross-border biodiversity conservation and landscape governance in East Africa. This paper draws on the MSP literature to assess the challenges and opportunities of using MSPs for managing terrestrial biodiversity resources in transboundary landscapes. Specifically, institutional linkages are investigated alongside success factors for MSP implementation and outcomes through five case examples. We find MSPs to be critical engagement tools in enhancing the fit between institutions and ecosystems that span multiple jurisdictions and sectors. However, we also note several challenges that limit their performance. The analysis suggests the following conditions to support the effectiveness of MSPs: 1) institutional linkages at all levels; 2) skilled facilitation and willingness of stakeholders to share power; 3) strong science-policy linkages; and 4) equitable and sustainable financing mechanisms. While MSPs may help promote species protection in areas devoid of collaborative decision-making processes, there remain research gaps related to the optimal governance structures for, and monitoring and evaluation of MSPs. Addressing these gaps will be fruitful to curb the extinction crisis in the sub-region and beyond.

## **Keywords**

Multi-stakeholder platforms, transboundary conservation, biodiversity conservation, landscape governance, integrated landscape approach, stakeholder participation, East Africa

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## 1. Introduction

Increasingly, territorially based actors are confronted with the task of engaging in transboundary governance arrangements at various levels and across sectors to influence policies. Among stakeholder engagement processes, multi-stakeholder platforms (MSPs) have increased in popularity to address a range of transboundary issues. Steins and Edwards (1999) define an MSP as a “decision-making body (voluntary or statutory), comprising different stakeholders who perceive the same resource management problem, realize their interdependence in solving it, and come together to agree on action strategies for solving the problem.” MSPs can take various forms, including social networks, focus groups, service or mediation organizations, crisis management platforms, social movements, and co-management organizations (Warner 2006).

In Africa, MSPs have emerged to encourage decentralized decision-making and collaboration among representatives from civil society, government, and the private sector. Specifically, these platforms are seen as viable forums for debate and dialogue in natural resource management, as more evidence supports multi-stakeholder initiatives than stand-alone efforts (Søreide and Truex 2013; Kusters et al. 2018; Reed et al. 2019). For biodiversity conservation, key stakeholders are promoting MSPs to enhance the institutional fit and sustainability of socio-ecological systems. This is in part due to the limited effectiveness of protected areas and the contribution of institutions to conservation outcomes (Oldekop et al. 2010; Schoon 2013).

Institutions constitute a set of agreed formal or informal rules and regulations that support resource management (Ostrom 1990). Since rules and regulations are operationalized within a defined administrative jurisdiction, a mismatch between management units and scales often exists in transboundary landscapes (Bodin 2017). As popularized by Ostrom (1990; 2010) in the conservation field, polycentric governance, which acknowledges multiple centres of decision-making, is a necessary consideration in the provision of a good institutional fit for biodiversity management. In areas with overlapping decision-making bodies, such as transboundary landscapes, MSPs may enable polycentric governance by reconciling the vested interests of different stakeholder groups towards common conservation and environmental goals.

Compared to other regions, Africa faces greater implementation challenges to transboundary conservation due to low institutional capacities and poor governance (Mason et al. 2020). These are complicated by civil conflicts and cross-border disputes, which have resulted in population declines for several species (Beyers et al. 2011; Braga-Pereira et al. 2020). Nonetheless, nature-based tourism, which relies almost entirely on wildlife and protected areas, contributes up to 10% of the regional gross domestic product in East Africa (USAID 2021). Through shared visions among disparate stakeholders, a number of MSPs have been established across this subregion to support transboundary conservation and landscape governance, with varying success.



In this paper, we draw from the MSP literature to assess the role of MSPs in improving transboundary biodiversity conservation and landscape governance in East Africa. We ask:

1. What are the vertical and horizontal institutional interactions within MSPs?
2. How do stakeholder participation, power dynamics, and competing interests affect decision-making and collective action?
3. What are the factors driving successful MSP implementation and outcomes?

## **2. Methods and structure of the paper**

This working paper examines the challenges and opportunities of MSPs for biodiversity conservation, focusing on terrestrial transboundary landscapes in East Africa. Literature searches of peer-reviewed articles, technical papers and briefs from governmental and non-governmental organizations, and credible news media reports were conducted to triangulate data on selected cases. We selected five different cases across East Africa that met the broad definition of MSPs and pertained to transboundary biodiversity conservation and governance in terrestrial ecosystems. From this, we gathered insights on vertical and horizontal institutional linkages affecting the performance and quality of MSPs. Success factors and related monitoring and evaluation dimensions were also identified through this review.

This paper is structured as follows. Section 3 presents an overview of the selected cases, with descriptions of their stakeholder composition, potential contributions and challenges. Using these cases as the backdrop, Section 4 discusses the governance interactions, stakeholder engagement process and success factors of MSPs. It is noteworthy to mention that a single landscape may have multiple MSPs, and as such, the success or failure of one does not necessarily reflect another. Throughout Section 4, we identify lessons learned and the limitations of MSPs. In Section 5, we provide an outlook for MSPs for cross-border biodiversity management and landscape governance in East Africa and beyond.

## **3. Multi-stakeholder platforms for transboundary conservation across East Africa**

About one-third of terrestrial biodiversity hotspots straddle international borders (Vasilijevic et al. 2015). Further, over half of all terrestrial birds, mammals, and amphibians span between national borders and are threatened due to border barriers and uncoordinated management (Mason et al. 2020). Numerous conservation studies suggest that collaborative approaches to managing transboundary landscapes can alleviate the extinction risk of endangered species and help secure local socio-cultural traditions and livelihoods (Kark et al. 2015; Mason et al. 2020). However, much of the analysis on terrestrial biodiversity conservation has focused on the spatial dynamics between wildlife and their environment rather than on the subtle and relational aspects of governance structures and institutions on the ground (Geldmann et al. 2013).

Despite the growth in the number and range of conservation models, such as protected areas and peace parks, data remains mixed on their effectiveness in curbing species

decline (Oldekop et al. 2010; Le Saout et al. 2013). Evaluations of conservation models highlight the importance of institutions in balancing development and conservation goals and mitigating social conflicts for better management outcomes (Oldekop et al. 2010; Schultz et al. 2011). As a means to improve biodiversity management while cutting across traditional boundaries, MSPs and related engagement approaches have been established to provide more appropriate institutional arrangements (World Bank Group 2021). Through these arrangements, several opportunities exist to advance transboundary conservation within and across governance levels and sectors.

Interventions to halt biodiversity loss and foster long-term stakeholder engagement are critical in East Africa, which has one of the world’s highest concentrations of biodiversity (Wei et al. 2018). In their global analysis, Shackelford et al. (2015) found East Africa to be among the top-ranked hotspots for future conservation conflicts, underscoring the urgency of resolving competing interests over biodiversity resources across the subregion. To examine the role of MSPs in transboundary biodiversity conservation, we selected five case examples in East Africa that captured the varying characteristics of multi-stakeholder approaches (Table 1). The locations of these examples include the Serengeti-Mara Ecosystem, Mt. Elgon, the Boma-Gambella Landscape, the Greater Virunga Landscape, and the Eastern Afromontane Biodiversity Hotspot.

**Table 1. Case examples of MSPs in transboundary landscapes of East Africa**

| Location of MSP                               | Type of actors  | Contributions  | Challenges  | Sources                                    |
|---|---|--|---|--|
| Serengeti-Mara Ecosystem (Tanzania and Kenya) | Park authorities (Kenya Wildlife Service, Tanzania National Park Authority), non-governmental organisations (NGOs) (Vi Agroforestry, Bunda Farmers Development Support Organization, Fintea Growers Co-operative Union Ltd), local communities, donors (European Union [EU], <i>Deutsche Gesellschaft für Internationale Zusammenarbeit</i> ) | Inhabitants of the Maasai Mara National Reserve (Kenya) are forming a transboundary protected area (TBPA) with the Serengeti National Park (Tanzania). The Dialogue on the Serengeti - Maasai Mara Ecosystem and Serengeti-Mara Ecosystem Project sought to improve transboundary conservation through | - Weak law enforcement and border control and security issues<br><br>- High poverty levels, human-wildlife conflicts, human population growth and cross-boundary migration toward protected areas<br><br>- Resource pressures, resulting in declining water tables, uncontrolled expansion of | Baldus 2005; EU 2019; Veldhuis et al. 2019 |

|  |  |  |   |  |
|--|--|--|---|--|
|  | [GIZ]), research and training (College of African Wildlife Management)   | empowering local communities   | unsustainable tourism development, and illegal poaching and trade   |  |
| Mt Elgon (Uganda and Kenya)                        | Park authorities (PAs) (Kenya Wildlife Service, Kenya Forestry Department, Uganda Wildlife Authority), Mt Elgon County Council, NGOs (International Union for Conservation of Nature [IUCN]), donors (the Norwegian Agency for Development Cooperation [Norad]), intergovernmental organization (East African Community) | Through the Mt. Elgon Regional Ecosystem Conservation Program (MERECP), a TBPA was initiated in 2004 to bring multiple PAs under joint management, with the explicit ambition of being a role model for other transboundary PA networks in East Africa | <ul style="list-style-type: none"> <li>- Local communities have limited influence on the PA governance and TBPA regime and may have less power from implementation</li> <li>- Rights and economic returns of local communities along both sides of the border vary greatly</li> <li>- Personnel of Forest Reserves and National Parks differ in training and resource capacity</li> </ul> | Larsen et al. 2008; Petursson et al. 2011; Petursson et al. 2013 |
| Boma-Gambella Landscape (Ethiopia and South Sudan) | Park authorities (Ethiopian Wildlife Conservation Authority [EWCA]), NGOs (African Parks Network, Horn of Africa Regional Environment Centre and Network [HoA-REC&N], World Conservation Society [WCS],  | TFCA initiative, comprised of EWCA and HoA-REC&N, was established to manage, protect, and utilize the Gambella Region. In 2021, IGAD and the EU agreed to support transboundary  | <ul style="list-style-type: none"> <li>- Promotion of large-scale agricultural investments in Ethiopia and South Sudan hampers biodiversity protection</li> <li>- Few NGOs aiding conservation in South Sudan,</li> </ul>   | Benjamin et al. 2013; Johnson and Vaz 2015; IGAD 2021            |

|   |  |   |  |   |
|---|--|---|--|---|
|   | IUCN), research and training (Addis Ababa University), ethnic groups, donor (EU), intergovernmental organization (Intergovernmental Authority on Development [IGAD])   | conservation of the Boma-Gambella Landscape, with WCS as the implementing partner   | area affected by the refugee crisis and human migration<br><br>- Political volatility, regional conflicts and periods of insecurity at borders<br><br>- Human-wildlife conflict, desertification and water insecurity  |   |
| Greater Virunga Landscape (Democratic Republic of Congo [DRC], Uganda and Rwanda) | Park authorities (International Gorilla Conservation Programme Institut Congolais pour la Conservation de la Nature, Office Rwandais pour Tourisme et Parcs Nationaux and Uganda Wildlife Authority), NGOs (World Food Programme, WCS), donor (Dutch Directorate-General of International Cooperation) | International Gorilla Conservation Programme (IGCP) – a consortium of conservation NGOs and park authorities – was established in 1991 to foster regional collaboration for the conservation of mountain gorillas. Building on this success, WCS aims to support species tracking through coordinating management within and across institutions of the three countries | - Few incentives to improve species management, mountain gorillas are the only species managed in a regional manner<br><br>- Region under threat of illegal resources exploitation<br><br>- Regional conflicts and periods of insecurity obstructs communication<br><br>- Difficult for local conservation groups to gain political support without external influence | Plumptre et al. 2007; Refisch and Jenson 2016 |

|   |   |   |  |                      |
|---|---|---|--|----------------------|
| Eastern Afromontane Biodiversity Hotspot (15 countries) | NGO (Birdlife International, Fauna & Flora International, Rainforest Alliance), donor (l'Agence Française de Développement, Conservation International, EU, the Global Environment Facility, the Government of Japan and the World Bank), research and training (Addis Ababa University), local communities, private sector | Through the Critical Ecosystem Partnership Fund (CEPF), civil societies within countries of the Eastern Afromontane Biodiversity Hotspot were eligible to apply for funding to mainstream biodiversity conservation into government plans and policies as well as private sector initiatives. Many of the grants went toward fostering multi-stakeholder partnerships to enhance biodiversity | <ul style="list-style-type: none"> <li>- Environmental management and conservation not prioritized by local, subnational and national governments, lack of coordination within ministerial departments</li> <li>- Government policies and incentives incompatible with sustainable resource use</li> <li>- Unclear land tenure systems and resource access rights</li> <li>- Civil unrests and political conflicts afflict many parts of the hotspots</li> </ul> | CEPF 2012; CEPF 2015 |
|---|---|---|--|----------------------|

The formation of MSPs may be top-down, originating from the initiative of states, bottom-up as a result of grassroots mobilization, or a mix of the two approaches depending on the conservation issue. For example, the Mt. Elgon Regional Ecosystem Conservation Program (MERECP) leans toward a more top-down approach compared to the International Gorilla Conservation Programme (IGCP). While MERECP has political legitimacy through its formal ownership by the East African Community, it often excludes the participation of local Ugandan and Kenyan communities in the conservation of Mt. Elgon (Larsen et al. 2008). Also, although joint management agreements, such as Transboundary Protected Areas (TBPA) or Transfrontier Conservation Areas (TFCA), can provide the foundation for multi-stakeholder engagement, Petursson et al. (2011) found that local communities on both sides of Mt. Elgon had no information about the TBPA initiative.

In the Greater Virunga Landscape, the IGCP was formed as a technical body to protect the habitats of mountain gorillas across the Democratic Republic of Congo (DRC), Rwanda, and Uganda (Refisch and Jenson 2016). Regular meetings were held between

the park wardens and members of the three protected area authorities and only later were high-level government representatives and policymakers involved (Plumptre et al. 2007; Refisch and Jenson 2016). Through a bottom-up approach, cooperation between park wardens was still possible even during political instability (Refisch and Jenson 2016). However, harmonizing laws and policies between the three countries is needed to improve law enforcement (Plumptre et al. 2007).

All MSPs in Table 1 were financially supported by donors and most were initiated by NGOs. Through the Critical Ecosystem Partnership Fund, civil societies were targeted for grants aiming to strengthen their participation in conservation and management of the Eastern Afromontane Biodiversity Hotspot. Various MSPs were created through these grants, often in collaboration with large NGOs (CEPF 2015), which offered potential lobbying influence as seen in the Greater Virunga Landscape. Embedding MSPs within the local institutional contexts and obtaining the buy-in of multiple actors may help prevent donor dependence and contribute to local capacity building (Lim 2016; Ros-Tonen et al. 2018). However, this process faces major challenges due to the prevalence of short-term conservation projects (Ros-Tonen et al. 2018; Reed et al. 2019).

#### **4. Governance interactions, stakeholder participation and success factors**

Building on Steins and Edwards' definition (1999), we consider MSP as an umbrella term to describe an institutionalized bargaining space that brings together different stakeholders to improve landscape governance. The rationales for implementing MSPs include alternative dispute resolution, adaptive management, and democratization and empowerment (Warner 2006). Participatory and multi-stakeholder approaches through MSPs have been shown to encourage information access and collaboration for species protection (Lees et al. 2021). However, ensuring inclusive participation and balanced representation becomes more difficult with the involvement of stakeholders across multiple jurisdictions and management units.

##### *The interplay between horizontal and vertical institutional arrangements*

Unlike traditional conservation, transboundary conservation requires more commitment among resource users and decision-makers to ensure a functional fit between institutions and an ecosystem. The horizontal interplay, or interactions of institutions at the same level within a system, and vertical interplay, or interactions of institutions across different levels of social and political organizations, take a new and complex dimension as the principle of sovereignty is recognized (Petursson et al. 2013). While not necessary, the involvement of actors at every level of governance is desirable in transboundary multi-stakeholder initiatives to foster ownership and commitment over the long term (Lim 2016). Legal instruments, such as national laws and policies, can articulate the rules within which stakeholders interact and mandate collaboration.

If political commitment and financial support are secured, new institutions may be created to coordinate interventions – yet they are not key determinants to conservation success. Rather, ensuring existing or new institutions are linked horizontally and vertically within and across states is pivotal to enduring success, as argued by Lim (2016). The capacities

of states involved can also shape horizontal and vertical interactions, and thus conservation outcomes. For example, despite similar environmental motives between Ethiopian and South Sudanese stakeholders to conserve the Boma-Gambella Landscape, both countries suffer from weak environmental enforcement (Johnson and Vaz 2015). Unclear and weakly enforced boundaries, armed conflict, and South Sudan's status as the world's youngest nation add to the array of challenges to forging synergies among different levels of institutions, which takes time (Johnson and Vaz 2015).

Moreover, despite their central role in conservation, informal institutions, such as local communities with unwritten but agreed-upon rules, are frequently marginalized in governance processes (Petursson et al. 2011; Ros-Tonen et al. 2013; Sayer et al. 2017). The bias towards formal institutions, such as recognized bodies with codified rules, can widen the gap between realities and expectations. In the Boma-Gambella Landscape, various ethnic groups, as well as many Sudanese refugees, inhabit the transboundary areas, each possessing their own traditional knowledge systems (Johnson and Vaz 2015). More often than not, socio-cultural differences between groups create land and resource disputes, requiring conflict resolution mechanisms. The recent attempt by the Horn of Africa Regional Environment Centre and Network (HoA-REC&N) and the Intergovernmental Authority on Development (IGAD) to develop an MSP in the Boma-Gambella Landscape is promising to promote cross-border biodiversity governance.

#### *Stakeholder participation, power dynamics and conflict resolution*

Multi-stakeholder governance arrangements provide flexible decision-making processes for adaptive co-management, which has garnered support from governments, donors, NGOs and other resource users (Schultz et al. 2011; World Bank Group 2021). These processes enable innovation and collaboration among different stakeholder groups to resolve multi-scale resource management dilemmas while countering centralized bureaucracies (Armitage et al. 2009; Sartas et al. 2018). However, power centralization still occurs through MSPs, which may not necessarily inhibit innovation and scaling but can exacerbate power imbalances (Sartas et al. 2018). The dominance of a narrow set of perspectives can create situations where stakeholders begin to outcompete each other for resources, risking the integrity of the platform.

The misuse of power remains rampant in the natural resource sector across Africa, with MSPs having limited anti-corruption effects (Søreide and Truex 2013). Nonetheless, by institutionalizing participation, MSPs may help empower local people to express their concerns and negotiate with others in environmental decision-making (Warner et al. 2006; Reed 2008). This does not mean that power will be equally distributed within the MSP, but rather that the institutional structures of MSPs can foster long-term multi-stakeholder engagement processes if appropriately designed and implemented (Reed 2008). For example, by deploying a boundary-spanning model across pastoral ecosystems of East Africa, including the Serengeti-Mara, Reid et al. (2016) found that awareness of power asymmetries and trust helped sustain relationships to support livelihoods and wildlife conservation, even when funding was exhausted.

Since MSPs do not exist in power vacuums, many practitioners reject consensus-building as it disadvantages minorities by allowing more powerful stakeholders to obtain consensus (Edmunds and Wollenburg 2001; Tengö et al. 2014). Some opt for the shared adversity principle, which recognizes inherent trade-offs in decision-making (Reed 2008), while others argue for strategic representation, focusing on stakeholder identity rather than consensus (Manzungu 2002). Amid the debate on encouraging collective action through stakeholder participation, a widely held sentiment is that MSPs and actors that constitute them are not neutral and should not be treated as such (Edmunds and Wollenburg 2001; Faysse 2006). The romanticization of multi-sectoral processes can lead to the homogenization of stakeholder groups and further marginalize minorities, hindering the ability of MSPs to level the playing field.

In contrast, the acknowledgement of stakeholder power imbalances can help align multi-stakeholder dialogues with local realities and improve management outcomes through a commitment to collective goals (Gavin et al. 2015; Reed et al. 2019). Scientists working in pastoral lands were able to reduce power asymmetries at the local scale by sharing the power of information with communities in joint processes where they also viewed community members as experts (Reid et al. 2016). In this case, decentralized information exchanges led to greater inclusion of the Maasai community in government policy discussions, highlighting avenues to enhance vertical institutional linkages. Furthermore, power-sharing helps engender trust within MSPs, as stakeholders with less perceived negotiating leverage have more confidence that they can influence decision-making. Through increased trust, conflict resolutions related to conservation issues also become more likely (Redpath et al. 2013; Young et al. 2016).

#### *Success factors of multi-stakeholder platforms in multi-level environmental governance*

Owing to the unique characteristics of each conservation problem, the performance and success of MSPs will invariably change across space and time. Success may hinge on the sustainability of the platform but more often than not reflects the results produced by the MSP than its maintenance over the long term (Reid et al. 2016; van Ewijk and Ros-Tonen 2012). Common elements that lead to the success of MSPs for multi-level governance are well noted in the conservation literature (Markopoulos 2012; Garard et al. 2018; Kuster et al. 2018). Although not an exhaustive list, these factors include favourable socioeconomic and political conditions and commitment of individual members; the selection of participants who are conducive to discussions; the effectiveness of facilitators in creating trust; the establishment of vertical and horizontal linkages across all levels; strong leadership; and the existence of a dispute resolution mechanism.

Many of these factors fall within the principles of good governance, which articulates the importance of representation, participation and equity, and accountability and transparency (Kuster et al. 2018; Sartas 2018). Through first clarifying priorities for multi-stakeholder collaboration, stakeholders of an MSP can jointly establish conditions for effective operation (Reed 2008; Kuster et al. 2018). This does not mean that an MSP will be defined by a few singular issues, but rather by collaborating on strategic issues, or



finding common ground, as expressed by Lecuyer et al. (2018), stakeholders can use initial achievements to argue for further collaboration. The IGCP initiative in the Greater Virunga Landscape highlights this process, with participants of the different countries coming together to protect mountain gorillas and now using the platform to support peacebuilding (Refisch and Jenson 2016). These and related successes of MSPs showcase key opportunities for diplomacy and social learning.

Along with the social- and process-dependent success factors, the impact and effectiveness of MSPs may also be measured by their influence on policy changes (Faysse 2006). While science-policy linkages can be critical to the deployment and sustainability of management strategies, attempts to create these linkages have only been partially successful due to the strong ideological and philosophical differences between scientific disciplines (Lim 2016; Reed et al. 2019). The rise in interdisciplinary science and citizen science provides avenues for translating science into action (Pocock et al. 2019). This development includes integrating appropriate conservation measures based on scientific and local traditional knowledge into management strategies to deliver long-term impact (Pocock et al. 2019; Tengö et al. 2021).

With the high transaction costs of multi-stakeholder processes (Kuster et al. 2018), the funding of MSPs is notably linked to their performance. In an analysis of MSPs in Burundi, the DRC, and Rwanda, Sartas et al. (2018) found that organizations that received direct funding were more likely to stay within the network – and the reverse was true for financially strapped agencies. While donor funding can kickstart collaboration, it can also negatively affect participation when the benefits and costs of engagement are not equitably distributed. The increasing role of the private sector in landscape governance may help offset these funding challenges, although other risks related to conflicts of interest and power imbalances are created (Ros-Tonen et al. 2018). Complementing MSPs with other stakeholder engagement processes may be needed to reduce tradeoffs and increase synergies in conservation interventions (Warner 2006; Sartas 2018).

## **5. Outlook of multi-stakeholder platforms**

As more of the world's biodiversity resources are under threat, it is increasingly clear that multi-stakeholder coordination and integrated landscape approaches are critical to resolving the extinction crisis. In light of this, this literature review discussed the role of MSPs in fostering multi-stakeholder and multi-level action for biodiversity management. Focusing on East Africa, this review highlighted the effects of institutional interplay and stakeholder engagement on transboundary conservation while identifying ways to leverage inclusive participation. Literature on this topic has rapidly expanded as more practitioners have published lessons learned. This trend signals the importance of adaptive strategies in transboundary landscapes.

In recent decades, research, donor, and practitioner communities have shifted away from one-size-fits-all solutions and embraced multi-stakeholder processes that are context- and issue-specific. More funding for such initiatives is available, but they often lack the long-term commitment needed to enable transformational landscape changes (Reed et al. 2019). Local governance structures thus remain important to the sustainability and

scale-up of MSPs in the absence of donor support. A mix of top-down and bottom approaches to decision-making may help secure the participation of all concerned stakeholders, including marginalized groups. In this process, stakeholder incentives may need to be carefully mapped out to ensure adherence to good governance principles such as anti-corruption, transparency and accountability.

Despite the achievements of MSPs in fostering cross-border collaboration, many gaps in the literature exist and could benefit from greater research investment. For example, robust scientific evidence on the effectiveness of MSPs for biodiversity conservation is limited (Kuster et al. 2018; Garard et al. 2018), let alone for cross-border issues. More attention on establishing standards for evaluating the success of MSPs is needed. The governance structure and type of MSP endorsed by stakeholders may illuminate patterns of conservation interventions across different landscapes. Investigations into whether MSPs can result in better conservation outcomes and sustain cross-border stakeholder engagement through longitudinal studies and social network analysis may also help reveal the full costs and benefits of MSPs.

While MSPs are not panaceas to environmental problems, the decentralized and participatory decision-making structures of MSPs can be effective for managing transboundary resources. The interdependency of actors and the weakness of many existing governance mechanisms in transboundary areas strengthen the rationale for using MSPs to encourage stakeholder participation and collaboration. Collaboration through MSPs can help distribute knowledge to improve outcomes and provide legitimacy in decision-making on issues involving multi-level actors from local communities, park rangers, to national policymakers (Markopoulos 2012). The participation of state and non-state actors can also have transformative effects on changing people's attitudes to build trust and their capacity to mediate conflicts beyond conservation.

To conclude, MSPs can be pivotal in advancing international and national goals on biodiversity conservation. In transboundary landscapes, MSPs are critical engagement tools to support cross-border dialogue and enable diverse stakeholders across jurisdictions to work towards averting the extinction crisis. We see the multi-stakeholder approach as a way of nurturing conditions for social learning and good governance in highly dynamic socio-ecological systems. Investments in monitoring and evaluation and the methodology of MSPs can help contribute to their performance and provide insights into their overall effectiveness.

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