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# LAND AND CONFLICT

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# Contents

<b>Acknowledgements</b>	V
<b>Prevention and resolution of disputes over tenure rights: assessing recommendation 21 Fourteen years after the adoption of the VGGT</b>	1
<b>Bridging the customary-state divide in land dispute management: lessons from Darfur, Syrian Arab Republic, Sierra Leone and Mozambique</b>	11
<b>Addressing land conflicts and disputes in Zambia through innovative geospatial technologies</b>	23
<b>The legitimacy of armed groups in resolving land conflicts in South Kivu (DRC)</b>	35
<b>The role of multi-level and multi-actor partnership in addressing land conflicts</b>	45
<b>The Rural environmental registry (CAR): a paradigm shift in land management and environmental preservation in Brazil</b>	57
<b>Establishment of transhumance committees for a peaceful transhumance in the Sahel</b>	67



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The *Land Tenure Journal* is the peer-reviewed, open-access flagship journal of the Land Tenure Team in the Rural Transformation and Gender Equality Division (ESP) of the Food and Agriculture Organization of the United Nations (FAO).

The *Land Tenure Journal* welcomes authors to submit special issues or articles from a policy perspective (for example on policy options in diverse settings), a social perspective (for example on the realities of land and natural resource users in diverse conditions), an economic perspective (for example on matters related to property valuation and taxation), or a technical perspective (for example on advances in land and natural resources administration or law).

Special issues are led by Guest Editors who are experts on the topic. Interested parties can submit their proposals in accordance with the Journal's submission instructions.

This special issue of the *Land Tenure Journal* (No. 1-2026), dedicated to land and conflict, was made possible thanks to the collective efforts of the Editorial Team, the contributing authors, the reviewers, and the valuable collaboration of FAO colleagues and external partners.

The editorial coordination of this themed edition was led by Antoine Hochet, Editor-in-Chief of the Land Tenure Journal and Senior Expert on Land Governance at FAO headquarters, together with Marco Lankhorst, Senior Legal Specialist at the International Development Law Organization (IDLO), and Jérémy Bourgoin, researcher at CIRAD and the International Land Coalition (ILC). Their collaboration contributed to shaping the conceptual framing and editorial process of this special issue.

The Editorial Team would like to express its sincere appreciation to all the authors who devoted their time and expertise to preparing and refining the articles that compose this themed edition. Their contributions examine the evolving dynamics of land-related conflicts across diverse contexts, ranging from fragile and conflict-affected environments to regions experiencing increasing pressures on land and natural resources. Together, the articles offer important insights into the institutional, social and governance dimensions of preventing and resolving land disputes.

The Editorial Team also wishes to acknowledge the valuable contributions of several colleagues and experts who supported the preparation of this special issue through their insights and engagement. In particular, we would like to thank Mathijs van Leeuwen (Radboud University, Netherlands), An Ansoms (UCLouvain, Belgium) and Ward Anseeuw (FAO) for their intellectual support and contribution to the broader discussions surrounding land governance and conflict.

This themed edition follows a dedicated call for papers on land and conflict, which aimed to document experiences and lessons learned on the prevention and resolution of tenure disputes, including in relation to the implementation of the *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests (VGGT)*. The contributions assembled here provide a practice-oriented perspective on how land governance systems can help address disputes and contribute to more peaceful, inclusive and sustainable development pathways.

The Editorial Team hopes that this collection will contribute to advancing knowledge and informing policy and practice on land governance and conflict prevention worldwide.

# PREVENTION AND RESOLUTION OF DISPUTES OVER TENURE RIGHTS: ASSESSING RECOMMENDATION 21 FOURTEEN YEARS AFTER THE ADOPTION OF THE VGGT

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# 1. Introduction

Across many contexts, disputes over land and natural resources represent a significant and often growing concern of governance (United Nations Environment Programme [UNEP] and United Nations Development Programme [UNDP], 2013; United Nations Human Settlements [UN-Habitat], 2018; World Bank, 2019). Population growth, climate change, migration, and competing demands for food, energy, and conservation all intensify pressure on finite areas of land. Elevated levels of land disputes are more than a symptom of resource scarcity: they are a structural brake on development, peace, and security (UN-Habitat, 2018). Where competing claims remain unresolved, they discourage investment, reduce agricultural production, and erode food security. At the household level, they entrench vulnerability and may trigger cycles of displacement and loss.

At the societal level, when grievances over land overlap with ethnic, political, or generational divides, or coincide with economic or demographic shocks, they can catalyze wider violence (André and Platteau, 1998; Berry, 1993; Lund, 1998). Addressing land conflict is therefore not only a matter of justice but a precondition for inclusive development and lasting peace.

These dynamics came into sharp focus in the years preceding 2012, when an unprecedented surge in large-scale land acquisitions brought issues of tenure and equity to the forefront of global debate. The spike in food prices following the 2008 financial crisis had turned land into a strategic asset, attracting public and private investors, national and international, in often opaque deals with little consultation or compensation. These dynamics displaced populations, generated new conflicts, and brought land issues prominently onto the international agenda (Cotula, 2013; Deininger and Byerlee, 2011; FAO, 2008; Land Matrix, 2023; Zoomers, 2010). The crisis revealed a governance vacuum: national institutions were frequently ill-equipped to balance investment, livelihoods, and legitimate rights, while international standards lagged behind evolving practice.

During this period, a wide range of international and national institutions and organizations – including the Food and Agriculture Organization of the United Nations (FAO), the World Bank, and many others – sought to make land policy an instrument of peace and development. Their efforts combined technical and institutional reforms: promoting tenure security to encourage investment and stability, while advancing participatory and context-specific approaches to ensure inclusion and legitimacy. Programmes of cadastral modernization, recognition of customary rights, and land-administration reform achieved mixed results (Burns *et al.*, 2017; Palmer, Friccka and Wehrmann, 2009). They advanced when they embraced pluralism and credible local mediation and faltered when they treated formalization as a uniform, top-down technical exercise (Chimhowu, 2019; Gochberg, 2021). From these experiences emerged the principle of “fit-for-purpose land administration” (Enemark, McLaren and Lemmen, 2016), privileging accessibility, gradualism, and inclusion over uniformity and rigidity.

It was in this context that the international community sought a shared framework for governing land, fisheries, and forests responsibly. The adoption of the Voluntary Guidelines on the Responsible Governance of Tenure (VGGT) in 2012 marked both a normative and methodological milestone: an open, multi-stakeholder negotiation

that produced a common grammar for tenure governance, linking tenure security to food security, poverty reduction, and social peace (Cotula, 2013; FAO, 2012; McKeon, 2013). The ambition was considerable and continues to guide international debates on tenure governance.

Fourteen years later, land conflict has not diminished; it has diversified and intensified (USAID, 2022; World Bank, 2023). Its drivers have multiplied and become interlinked with wider global dynamics. Investor interest in land continues, in environments increasingly marked by scarcity, degradation, urbanization, and inequality (Land Matrix, 2023; United Nations Economic Commission for Africa [UNECA], 2021). Forced displacement linked to armed conflict has reached record levels, putting pressure on host communities and complicating restitution (UNHCR, 2024). Climate change multiplies droughts, floods, and soil loss, reshaping access to resources and threatening livelihoods dependent on land (Intergovernmental Panel on Climate Change [IPCC], 2019; 2022). The ecological transition, through conservation, restoration, and carbon-market initiatives, can under certain conditions generate new exclusions if it is not aligned with the protection of legitimate rights (Agricultural and Rural Convention 2020 [ARC2020], 2024; Fairhead, Leach and Scoones, 2012; FAO, 2019a).

In this evolving landscape, the VGGT remain as relevant as when they were adopted. Recommendation 21, devoted to dispute resolution, is particularly pertinent for this special issue. It calls for accessible, fair, and timely mechanisms to address tenure-related disagreements, emphasizing recognition of legitimate rights. It also encourages the use of alternative dispute-resolution methods that can de-escalate tensions before they harden into litigation. It further recognizes the role of customary and informal mechanisms where these operate transparently and in line with human-rights standards. Equally important is the effectiveness of procedures – decisions should be enforceable and delivered without undue delay. The impartiality and independence of the institutions involved are also essential, which presupposes safeguards against corruption and political interference. Taken together, these provisions underline that the governance of land disputes depends on the interaction of multiple actors – public authorities, customary leaders, communities, investors, and civil society – within an institutional environment that guarantees both fairness and predictability.

Fourteen years after the adoption of the VGGT, this special issue of the Land Tenure Journal examines how these principles have been implemented in practice and what has changed since 2012. It offers a practice-anchored assessment of how land conflicts are being addressed. The papers draw on experiences from zones of war and fragile peace, cross-border pastoral regions, and areas of high agricultural pressure. The aim is not to present idealized solutions but to identify the institutional and contextual conditions that enable conflict prevention and resolution.

The evidence points to several recurring lessons. Participatory land administration systems and tools help reduce disputes by making land use and rights visible and negotiable. Customary regimes enhance stability when recognized and linked to fair oversight. Dialogue and mediation platforms rebuild trust when they are inclusive, transparent, and sustained over time. However, the studies also underscore that, where institutional legitimacy is weak or absent,

informal power relations and coercive practices tend to dominate processes of land allocation and dispute resolution, undermining prospects for sustainable peace.

These lessons will, in the concluding part of the paper, serve as a lens for revisiting Recommendation 21 of the VGGT. We consider how its guidance on dispute resolution, justice, and institutional integrity stands up to the more complex realities that have emerged since 2012. It also examines how this guidance can continue to apply in the decade to come.

## 2. Global dynamics of land conflicts

Land conflict, even when it plays out between individuals, arises from the interaction of demographic, environmental, economic and institutional pressures that extend across local, national and transnational levels. Examining how these pressures have evolved over the past decade helps situate contemporary tenure disputes within the broader global transformations that shape them. The following subsections trace four important dynamics – armed conflict and displacement, climate change, economic realignment, and the ecological transition – highlighting how these forces condition the governance of land and the prevention and resolution of disputes.

### 2.1 Armed conflicts and displacement

The past decade has witnessed a resurgence of armed conflicts worldwide, reaching levels unseen since the mid-twentieth century (Peace Research Institute Oslo [PRIO], 2024). As reflected in the case studies presented below, land is both an economic resource and a source of power. In eastern Democratic Republic of the Congo, armed groups levy taxes on production and mining chains, creating parallel systems of governance (Hoffmann, Vlassenroot and Marchais, 2016; Sánchez de la Sierra, 2020). In South Sudan, seasonal cattle migrations and competition for water and pasture fuel recurring clashes between herders and farmers, exacerbated by protracted displacement and fragile land institutions (FAO, 2024; Global Protection Cluster [GCP], 2022; Rift Valley Institute, 2016).

In the Syrian Arab Republic, war and reconstruction policies have disrupted irrigation systems and undermined the restitution of land rights (Norwegian Refugee Council [NRC], 2024). These crises generate massive, forced displacement, with more than 120 million people uprooted globally in 2023 (Office of the United Nations High Commissioner for Refugees [UNHCR], 2024). The arrival of displaced populations increases pressure on host-community land, while the reallocation of vacated land often leads to lasting disputes once people return, as documented, for example in post-conflict Côte d'Ivoire (NRC, 2014).

Since 2012, United Nations guidance has increasingly recognized the land dimension of peacebuilding, calling for restitution, mediation and land clauses in peace agreements (UN-Habitat, 2018; United Nations Secretary-General [UNSG], 2019). Nevertheless, translating these commitments into practice has proven difficult (United States Agency for International Development [USAID], 2022). The persistence of unresolved land claims, fragmented responsibilities across institutions, and limited attention to restitution and enforcement mean that agreements frequently fail to produce lasting outcomes. Durable peace therefore depends not only on negotiated settlements but also on capable, trusted, and adequately resourced institutions able to implement and enforce them; where such institutions are absent, land grievances remain a latent source of renewed conflict (USAID, 2022a; World Bank and United Nations, 2018).

### 2.2 Climate change and environmental degradation

Climate change acts as a powerful threat multiplier, amplifying pre-existing inequalities and competition over land (IPCC, 2022; UNEP, 2023). Droughts, floods, desertification, and soil degradation reshape access to resources, particularly in regions where livelihoods depend directly on land. In the Sahel, declining and changing rainfall patterns and the weakening of customary mediation have heightened tensions between farmers and herders (IPCC, 2022; Organization for Economic Cooperation and Development [OECD] and Sahel and West Africa Club [SWAG], 2021). These climatic pressures do not operate in isolation: they intersect with weak or contested central authority, limited security provision, and politicized resource management, producing compound crises in which environmental stress is amplified by governance fragility and social cleavages (Benjaminsen and Ba, 2019; IPCC, 2022; OECD, 2020; Raleigh *et al.*, 2014; Turner, 2021; World Bank and United Nations, 2018). In the Horn of Africa, consecutive droughts have pushed herders into already pressured territories, while in South Asia, rising seas and floods are forcing millions toward overcrowded urban peripheries (International Organization for Migration [IOM], 2023; UNHCR, 2023; World Bank, 2021).

These examples reveal a structural weakness: land laws designed for stable environments fail to accommodate mobility, seasonality, and temporary use rights that support resilience. The challenge is therefore as much institutional as environmental. Resilient land governance depends less on rigid legal prescriptions than on legitimate, trusted institutions capable of mediating change and uncertainty; it requires strengthening adaptive governance capacity and recognizing the value of flexible arrangements – often found in customary and informal systems – that can adjust to shifting ecological and social realities while retaining legitimacy (FAO, 2019b; OECD, 2020; World Bank and United Nations, 2018). Integrating climate adaptation into land policy, therefore, becomes a new frontier for the VGGT's call to secure legitimate rights under changing conditions.

## 2.3 Global economic realignment

The world is entering a period of rapid and decisive economic change. Global trade relations are being reset through the decoupling of major economies, and a resurgence of industrial policy and trade restrictions. These shifts are accompanied by increasingly assertive strategies to secure privileged access to scarce natural resources – land, water, energy and minerals. At the same time, the architecture of development assistance is being transformed. Cooperation that once relied on grants and technical programmes to support governance reforms is giving way to more political and transactional partnerships linked to trade, market access, and resource supply chains.

The conclusions of the fourth Financing for Development Conference in Seville (2025) illustrate a shift. Traditional aid is understood to have reached its limits, while the emphasis shifts to blended public-private finance to mobilize large-scale investment. Initiatives such as the EU's Global Gateway, and China's Belt and Road Initiative, together with comparable facilities from the United States of America and other countries, are designed to channel hundreds of billions of euros. These funds target infrastructure, energy, mineral and agricultural projects. Many of these ventures will depend on land that is already occupied and vital to local livelihoods. Although the biofuel-driven land rush of the early 2010s has largely receded, emerging investment strategies may herald a new and potentially extensive wave of land pressures with profound and as yet insufficiently explored implications for land governance, tenure security, and social stability (Anseeuw *et al.*, 2023; Cotula, 2023; OECD, 2023; United Nations Conference on Trade and Development [UNCTAD], 2023).

## 2.4 Ecological transition

The global drive towards conservation, restoration, and carbon sequestration, though itself under pressure, introduces another layer of tension. While these initiatives pursue legitimate environmental goals, they can produce exclusionary effects when tenure security is overlooked. The literature warns of so-called 'green grabs' – the appropriation of land or nature in the name of sustainability (Fairhead, Leach and Scoones, 2012). Examples include reserves created without consultation, carbon projects that restrict customary uses, or reforestation programmes that displace smallholders (International Panel of Experts on Sustainable Food Systems [IPES-Food], 2022). Although not universal, these patterns demonstrate the need for strong safeguards. Environmental or climate-finance mechanisms must integrate recognition of legitimate land rights, equitable benefit-sharing and informed consent (FAO, 2021; Rights and Resources Initiative [RRI], 2022). Otherwise, policies intended to protect ecosystems risk reproducing the very conflicts they seek to prevent.

# 3. Inclusive and coherent approaches to land conflict prevention and resolution

The forces outlined above – war and displacement, climate stress, environmental transitions, economic change, and governance constraints – interact and reinforce one another. They define the conditions under which local actors attempt to prevent or resolve land conflicts today. The insights presented in this section draw directly on the six contributions to this special issue, to illustrate how, against this broader background, the principles of the Voluntary Guidelines on the Responsible Governance of Tenure (VGGT) are being interpreted and applied in diverse and challenging contexts.

## 3.1 Investing in participation and dialogue to prevent disputes

Experience over the past decade confirms that early and sustained participation is the most effective investment for preventing disputes and maintaining social peace around land. Numerous initiatives illustrate how inclusive processes for clarifying and negotiating land use have reduced tensions and strengthened tenure governance.

Participatory land-administration systems and tools – such as community mapping, low-cost parcel recording, and fit-for-purpose registration – provide the technical foundation for these processes. Programmes such as OpenTenure and SOLA in Zambia (Mabikke, 2026) and the Cadastro Ambiental Rural (CAR) in Brazil (Dweck, Lagüens, Echeverria, Dolabella, 2026) show that mapping enhances tenure security only when it is embedded in dialogue and joint validation at community level. Where maps and registries are co-produced, they clarify who uses what land and build a shared understanding of boundaries and rights that parties can rely on in future negotiations. In the language of the VGGT, this embodies the principles of participation, transparency, and recognition of legitimate rights ('paragraphs 3A–3B, 9.6').

However, dialogue must not be pursued in an ad hoc, project-based manner. Many pilot exercises faded once funding ended because the mechanisms they created lacked institutional anchoring. The most durable initiatives are those that have rooted participatory processes in existing administrative or customary structures, rather than multiplying new committees and forums (Cleaver and de Koning, 2015; FAO, 2022). When participation builds on recognized local institutions – village councils, traditional authorities, land boards – renegotiated tenure arrangements are more likely to endure and the institutional fragmentation that often fuels renewed conflict is avoided.

At a broader scale, multi-stakeholder platforms extend these participatory logics by bringing together communities, investors, and public authorities for continuous negotiation. Platforms described by Ayari *et al.* in Burkina Faso, Ethiopia, Liberia, and Sierra Leone (Ayari *et al.*, 2026) have provided arenas for addressing disputes before they escalate, sometimes influencing policy or investment practices.

Their credibility depends on inclusiveness, transparency, and regular follow-up – features consistent with VGGT Recommendation 21, which calls for accessible, impartial, and timely mechanisms for dispute resolution. However, sustainability remains a challenge here as well: when external support ends or mandates overlap with other structures, trust dissipates and the gains erode.

These experiences together demonstrate that technical clarity and social legitimacy are complementary, not sequential. Participatory tools generate evidence, while dialogue platforms give that evidence meaning through negotiation and agreement. Both require predictable institutional anchors to endure beyond project cycles and to make local consensus a continuing resource for peace.

## 3.2 Interfacing customary and formal systems

Effective dispute resolution also depends on how customary and informal mechanisms interact with formal law and institutions. Much of the literature now recognizes that customary authorities and community-based forums offer crucial advantages: proximity, legitimacy, flexibility, and the capacity to settle conflicts early, before they harden. In South Sudan, Mozambique, and Ghana (Unruh, 2026), such mechanisms continue to mediate most local land disputes, often more efficiently than overstretched courts.

Recognition of these mechanisms, however, is only part of the equation. Once secured, the central challenge is to create a functional interface between customary and statutory systems that preserves customary legitimacy while ensuring procedural safeguards, respect for rights, and enforceability. Where informal decisions are ignored or contradicted by formal courts, or where parties can ‘forum-shop’ between systems, disputes tend to protract and multiply. Conversely, where customary resolutions are endorsed or registered within formal frameworks, as in Mozambique’s community-delimitation model (Unruh, 2026) or Niger’s recognition of local transhumance committees (Gaarde and Mardesic, 2026), outcomes are more stable and respected.

An effective interface also protects human rights and due process, in line with the VGGT paragraph 4.4, and Recommendation 21 (FAO, 2012). It allows informal mechanisms to operate flexibly within a coherent legal order, avoiding both state domination and unchecked, rights-abrogating practices. Ensuring minimal oversight – such as record-keeping, public hearings, or options for review or appeal – strengthens fairness without undermining community ownership (International Development Law Organization [IDLO], 2019a; 2021). The objective is a coherent institutional ecosystem in which each mechanism contributes to tenure stability according to its comparative strengths. This approach avoids competition for authority.

This integrated approach responds to the VGGT’s underlying vision: that legitimate tenure systems, whether formal or informal, should function as parts of a whole, ensuring accessibility, equity, and predictability. Without such coherence, pluralism turns into fragmentation, and conflict prevention gives way to procedural confusion.

## 3.3 Dialogue and consensus are key in areas of limited state presence

In regions where the state’s authority is weak or contested, local dialogue and consensus-building become indispensable forms of tenure governance. In the Sahel and the Horn of Africa, cross-border pastoral areas have long relied on customary and inter-community agreements to regulate seasonal mobility. The Niger–Nigeria transhumance committees illustrate how locally negotiated rules, maps, and charters can reduce incidents and clarify responsibilities even in the absence of strong central oversight (Gaarde and Mardesic, 2026). These initiatives reflect VGGT principles of participation and transparency in fragile environments, and show that minimal, yet consistent dialogue can sustain coexistence across social and ethnic cleavages.

The land sector tends to over-rely on formalization strategies – mapping, planning, consolidation, and titling – that assume administrative capacities largely absent in fragile and least-developed settings. As experiences analyzed by Unruh in Mozambique, Sierra Leone, Sudan and Syrian Arab Republic show, formal land-administration systems have limited relevance where institutions are weak or contested. The presumed benefits of formalization – such as higher productivity, improved access to credit and investment growth – cannot be taken for granted where institutional capacity is limited, legitimacy is weak and access to justice is insufficient (Veldman, 2020). In such contexts, the principles underlying the fit-for-purpose approach emphasize strengthening pre-existing customary and informal arrangements rather than replicating institutional models from more stable settings.

Assumani, analyzing land dispute management in the eastern Democratic Republic of the Congo, reveals the limits of such an approach (Assumani, 2026). In parts of the central Sahel and eastern Democratic Republic of the Congo, land governance has been captured by armed groups that impose their parallel systems of taxation and dispute settlement. These arrangements may create short-term predictability but perpetuate coercion and insecurity, and clearly cannot be engaged with. These experiences serve as a stark reminder of what happens when violent arbitration replaces rule-based governance – the extreme opposite of the inclusive, legitimate, and accountable mechanisms envisaged by the VGGT.

Together, these cases highlight that dialogue is not a luxury but a minimum condition for order in absence of the state. For dialogue to contribute to peace – rather than entrench local hierarchies – it must remain connected to national norms and be supported by broader efforts to rebuild the rule of law and restore institutional legitimacy in line with lessons from post-conflict settings (UN-Habitat, 2019a).

## 4. Renewing the spirit of the VGGT through governance, justice, and the rule of law

Fourteen years after their adoption, the Voluntary Guidelines on the Responsible Governance of Tenure (VGGT) remain the most comprehensive international framework for promoting equitable and peaceful tenure systems. However, the world in which they operate has changed profoundly. The dynamics explored in the previous sections – climate change, war and displacement, economic realignment, and the renewed politicization of development – have reshaped the terrain of land governance. This prompts the question of how the principles of the VGGT can guide practice in a far more complex and contested environment.

The experiences reviewed across the six papers of this special issue point to a consistent lesson: participation, institutional coherence, and local anchoring are indispensable for preventing and resolving land conflicts. Participatory land-administration systems and dialogue platforms help clarify use rights and sustain local consensus when they are rooted in recognized institutions rather than ad hoc projects.

Customary and informal mechanisms contribute stability and flexibility when effectively interfaced with formal law and safeguarded by minimum standards of fairness. Even in settings where the state's reach is limited, structured dialogue and consensus-building can maintain coexistence and prevent escalation. Across these varied contexts, innovation succeeds when it strengthens institutional legitimacy and avoids the proliferation of uncoordinated mechanisms.

While it rightly emphasizes accessibility, impartiality, and timeliness, it gives limited recognition to the broader foundations that make these qualities sustainable: good governance, access to justice, and the rule of law (IDLO, 2025, USAID, 2022b). Too often, interventions in fragile or low-capacity settings have assumed that participatory mapping and the issuance of certificates would suffice to ensure tenure security. In practice, where poverty is widespread, land is scarce, and institutions are distrusted, such approaches rest on a fragile basis. In the absence of impartial courts, effective enforcement, or protection from corruption and discrimination – especially against women – there are multiple avenues to again challenge or undermine the results of such efforts.

Effective and sustained tenure security therefore depends not only on technical instruments or local mediation, but on the embedding of such arrangements in broader governance systems that guarantee accountability, transparency, and integrity in decision-making, backed by accessible justice and credible enforcement (IDLO, 2019b; UN-Habitat, 2019b).

These principles echo the spirit of Sustainable Development Goal 16, which commits all states to promote peaceful and inclusive societies, provide access to justice for all, and build effective, accountable, and inclusive institutions. Rereading Recommendation 21 through this governance and justice lens reveals the way forward. Securing tenure in today's world requires connecting land administration to the broader effort to build trustworthy institutions, capable of resolving disputes fairly, implementing decisions consistently, and protecting legitimate rights for all. In doing so, the VGGT continue to serve not only as technical guidance for land professionals but also as a normative bridge between tenure security, good governance and peaceful development.

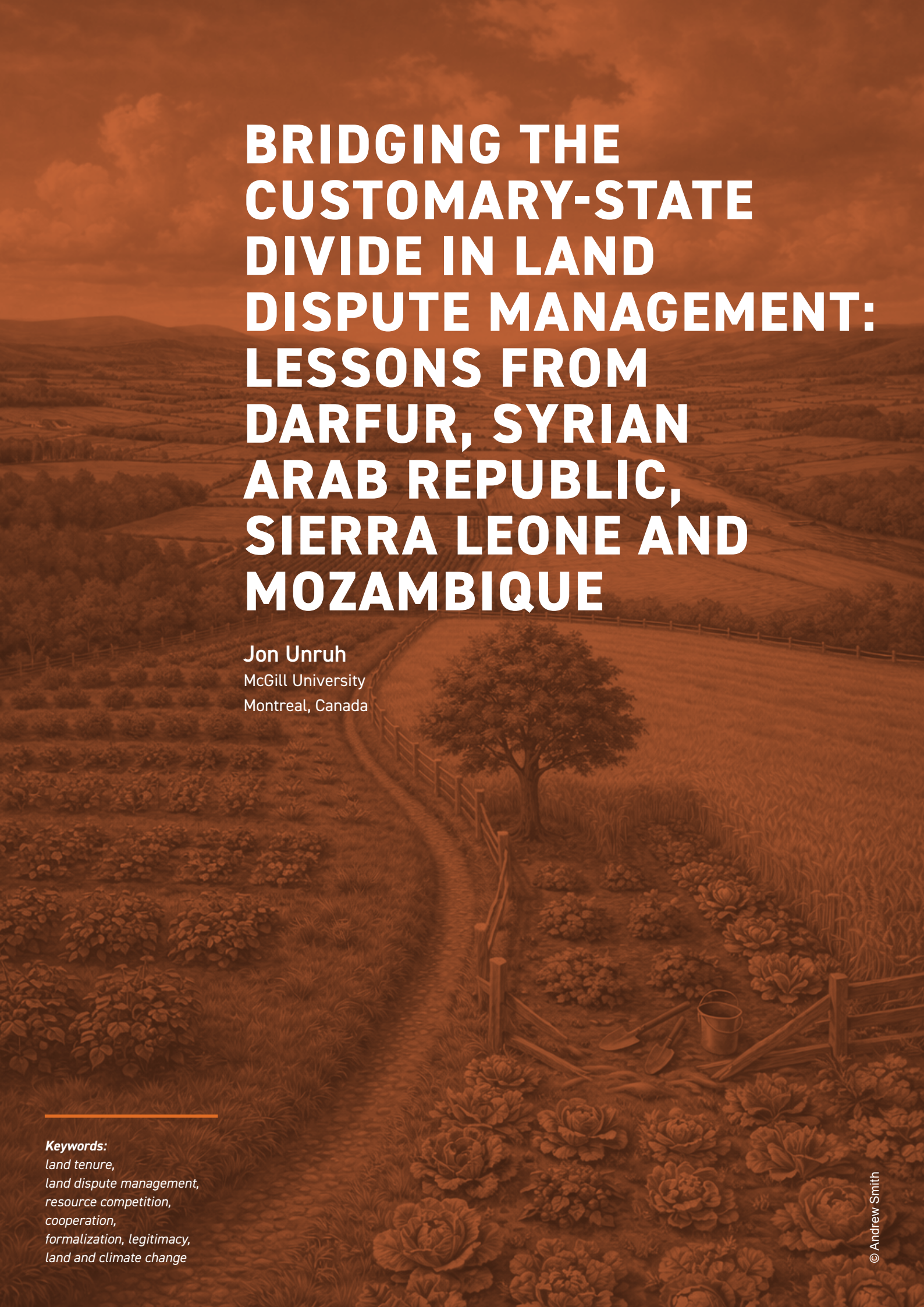
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# BRIDGING THE CUSTOMARY-STATE DIVIDE IN LAND DISPUTE MANAGEMENT: LESSONS FROM DARFUR, SYRIAN ARAB REPUBLIC, SIERRA LEONE AND MOZAMBIQUE

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## Abstract

The increasing demand for land resources has resulted in more regular and intense interactions between state and customary land governance systems worldwide. The problematic nature of this interaction throughout history has produced important lessons for managing and mitigating land disputes effectively. This article looks at four cases where cooperative interaction between customary and state land governance has resulted in successful approaches to managing and mitigating land disputes. The cases illustrate the roles played by different actors and how these roles operate within a framework of 1) legitimacy provided through combined customary-statutory solutions and 2) what 'formalization' means for enhancing civil society's role, customary tenure systems, and alternative dispute management approaches, alongside the state's involvement in these processes.

## 1. Introduction

Increasing pressure on land resources from multiple sources – climate change, migration, population growth, armed conflict and large-scale investment, among others – has pushed customary and state land governance regimes into greater interaction across the globe (Holden and Otsuka, 2014; Mwesigye *et al.*, 2017; Murken and Gornott, 2022). While this frequently occurs in a non-cooperative and confrontational manner, often worsening the management of land disputes (Reda, 2014; Kameri-Mbote, 2020), there are cases where this heightened interaction attributable to increased land pressure has produced innovations in the prevention and resolution of disputes.

This article describes four cases where increasing pressures on land and the resulting enhanced interaction between customary and state land governance have led to successful approaches to land dispute management. Drawing on the most relevant literature and the author's fieldwork in Darfur, Syrian Arab Republic, Sierra Leone and Mozambique, each case examines the land pressures that have led to increased interaction between customary and statutory tenure, the roles played by the different actors in dispute management, and how this interaction provides legitimacy to a combined customary-statutory solution.

The cases are not intended as a comparison, and the literature presented is not intended to be an exhaustive review; instead, the purpose of this article is to describe different ways by which enhanced interaction between customary and statutory tenure arising from land pressures have not always resulted in increased conflict or one form of tenure prevailing over the other. They also support recent ideas regarding the increased role of civil society, customary tenure systems, and alternative methods for resolving disputes (Lankono *et al.*, 2023; Arko-Adjei and Akrofi, 2019), along with new ideas about what 'formalization' means and the state's role in these (Alhola and Gwaindepi, 2024; Msangi *et al.*, 2022).

The cases show different global pressures on land systems, including climate change, forced displacement, the war in Darfur, and Syrian Arab Republic and large-scale investment, migration and post-war recovery in Sierra Leone and Mozambique. The cases also show how state and international donor policies can effectively support or undermine this combined form of customary-statutory dispute management. Each case begins with a brief background before explaining the main approach to bridging the customary-state divide in resolving land disputes and the lessons from these experiences. The final section summarizes the common themes that emerge.

## 2. Methodology

The author gathered information for this article through fieldwork in the four countries described, together with relevant academic and international organizations, NGOs, and government literature. The cases were selected from 26 countries where the author has conducted research, enabling an understanding of land pressures and the interactions between customary and statutory tenure regimes.

The Darfur case describes a customary-formal relationship that emerged during the colonial period and continued into the independence period, with profound repercussions on the war in the decade of the 2000s. Fieldwork involved undertaking 196 individual and group interviews in Nyala, El Fasher, and Khartoum. These included government officials, representatives of the Native Administrations of North and South Darfur, internally displaced persons (IDPs), and officials of the UN and other international organizations. Representatives from domestic organizations were also met with, including the Darfur Lawyers Association, the Darfur Land Commission, representatives of tribal Shura councils, the Darfur Peace and Reconciliation Council, and the Darfur-Darfur Dialogue Committee, as well as academics and leaders of tribal groups. Interview topics included statutory, customary and Islamic land rights, land rights institutions, and how these have interacted over time. The methodology employed in Darfur is fully detailed in Unruh and Abdul-Jalil (2012).

For the Syrian Arab Republic, the fieldwork involved conducting key informants and group interviews, comprising 369 people including IDPs, farmers, herders, and government and international organization representatives in Homs and Damascus governorates. The researcher also interviewed agricultural, water user and farmer association representatives. Also sampled were UN personnel at different levels attached to UNDP, UNHCR, WFP, OCHA and FAO – including agricultural field officers and the Directorates of Agriculture from Hama, Tartous, Aleppo, Dayr-Az-Zoe, Homs and Hassakeh, as well as INGOs and Syrian NGOs. Interviews were conducted with representatives from key Syrian ministries, including the Ministry of Agriculture and Agrarian Reform and the Ministry of Water Resources, and with 142 Syrian refugees living outside of camps in Lebanon, Jordan and Turkey in 2014, 2015 and 2019, respectively. These refugees represented diverse connections to their lands, encompassing rental agreements, land ownership, squatting, and affiliation with

<sup>1</sup> While portions of this article have previously appeared in Unruh and Abdul-Jalil (2012), Unruh (2012), and Unruh (2001), these excerpts were not examined within the context of mounting land pressure, which led to increased interaction between customary and statutory tenure, which subsequently fostered positive dispute prevention and resolution mechanisms.

tribal lands. A comprehensive literature review included relevant sources from donors, governments, academia, the United Nations, and INGOs. The methodology employed in the Syrian Arab Republic is fully detailed in Unruh (2021a) and Unruh (2021b).

The fieldwork in Sierra Leone included holding more than 340 individual and group interviews with farmers, herders, large-scale investors, and Ministry of Agriculture officials in 2005, 2010, and 2019. Fieldwork was also conducted with tribal chiefs and other local leaders, local women's associations, UN and other donor organizations in Sierra Leone, academics with the University of Sierra Leone, government departments of survey and urban planning, and the Ministry of Lands. The research included analyses of government sources, academic publications, and reports from international organizations and NGOs. The fieldwork took place in rural locations throughout every province of the country. The methodology employed in Sierra Leone is fully detailed in Unruh (2008) and FAO (2020).

In 1996, a quantitative social survey of 521 farmers in Nampula and Cabo Delgado was conducted on land rights, refugee return to agricultural areas, and land dispute resolution. Representatives from the Ministry of Agriculture, FAO, USAID, NGOs, and INGOs were also interviewed. In addition, the relevant academic, donor, government, NGO, and INGO literature was reviewed. The methodology employed is fully detailed in Unruh (2002). The four cases are described within a framework of 1) legitimacy provided to a combined customary-statutory solution, and 2) what 'formalization' means for a greater role of civil society, customary tenure systems and alternative ways of managing disputes, along with the state's role in these.

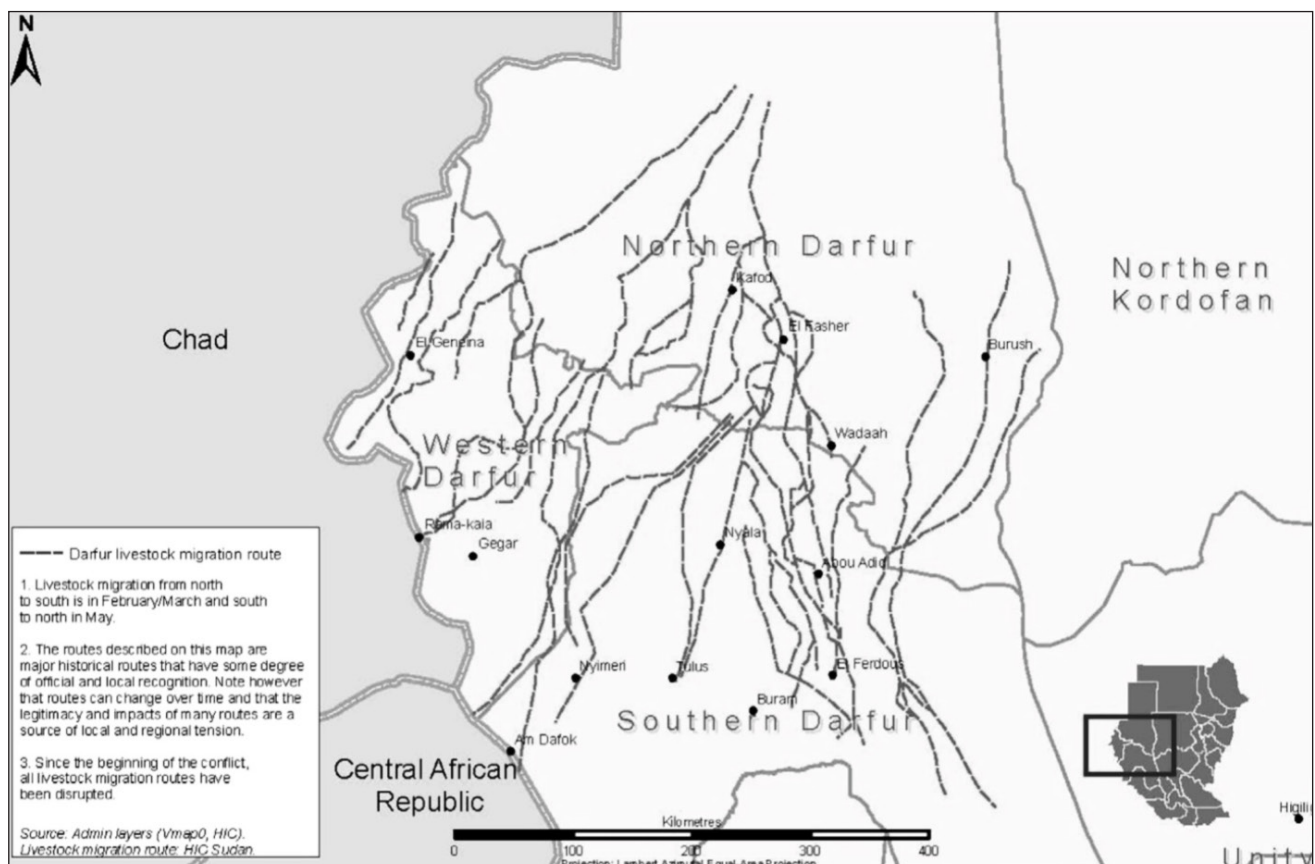
## 3. Darfur

### 3.1 Background

The environmental conditions in Darfur led to land use pressures, which affected both local communities and the state. The Sahel region drought to the north triggered rangeland degradation in North Darfur and surrounding areas, which led to substantial population migration. The Zaghawa agropastoralist tribe and camel nomads relocated to the southern fertile regions during the 1970s (Chavunduka and Bromley, 2011). Fieldwork found that, historically, nomadic pastoralists had seasonal transient land rights within customary tenure to the more southern lands occupied by farming communities. These rights were negotiated by traditional leaders of the nomadic and farming groups as conditions required and operationalized through the establishment of livestock migration corridors that traversed the tribal lands of the farming groups (Figure 1).

This arrangement occurred with an understanding of the times and locations where livestock could access recently harvested crop areas for grazing. However, as environmental pressures mounted, the pressure on resource rights to these southern lands involved permanent migration to areas that pastoralists had previously only visited seasonally, together with changes in the location and timing of livestock movements. Pastoralists also began to engage in farming activities to offset the decimation of their herds.

**Figure 1.** Livestock migration corridors used by pastoralists in Darfur. Most farming lands in the region reside in Western Darfur and Southern Darfur



**Source:** UNEP. 2007. Refer to the disclaimer on page 2 for the names and boundaries used in this map.

## 3.2 Flexibility and adaptation

Fieldwork in Darfur found that increasing pressures on land resources meant having to manage the resource rights interactions between those migrating south, those who claimed and inhabited these lands, and the state. While the customary land tenure systems in Darfur (with the state initially in a supporting role) were, by and large, able to do this, the process created tensions that needed management. Abdul-Jalil (2008) concurs that what proved most valuable in this regard was the flexibility of the customary tenure regimes in Darfur and their ability to manage changing land rights relationships between migrating pastoralists and agriculturalists through negotiations, with state support.

Abdul-Jalil (2008) notes that customary land tenure in Darfur has a long history of flexibility, negotiation, adaptation, and stable management of land rights relations between different groups. As a general rule, the agriculturalist customary tenure system (*hakura*) allowed for the movement, temporary use, and even permanent settlement of nomadic pastoralists as individuals and groups, provided they adhered to customary rules. Nomadic groups participated cooperatively because grazing rights were generally granted under various situations and conditions, depending on the location and status of unharvested crops (Abdul-Jalil, 2008). Pastoralists from outside the area who wished to farm were usually accommodated within uncultivated wasteland or fallowland areas, according to customary *hakura* norms. Pastoralists who operated as individuals or part of family groups would integrate into farming villages under the jurisdiction of the village sheikh. If the number of the pastoralists was large enough to warrant a separate village – such as in the case of the large Zaghawa migrations from the northwest following the mid-1980s drought – they were allowed to have their own village and their own sheikh who would be accountable to the Native Administration of the area (Abdul-Jalil, 2008).

The Native Administration was an outcome of the colonial policy of indirect rule, whereby tribal leaders were confirmed as part of a pre-colonial Native Administration system and were deemed custodians of land belonging to their tribes. This approach linked the customary tribal land rights system to statutory law and policy, which the independent government also embraced for a time (O'Fahey, 2008). Native administrators were entrusted with the role of changing land rights and resource allocation arrangements to meet a variety of circumstances. Such changes included regulating the grazing and farming activities of different tribes to avert conflicts and tensions between farmers and pastoralists (Abdul-Jalil, 2007; O'Fahey, 2008). Some of the specific resource rights adaptations, which the Native Administration managed as increasing numbers of migrant pastoralists began to use the area, included:

1. The establishment and enforcement of boundaries that demarcated grazing and farming areas; regulation of pastoralists' seasonal movement in terms of timing and location of migratory routes from wet season grazing areas to dry season areas; containment and resolution of disputes in the grazing and farming areas; and the opening and closing of water points (Abdul-Jalil, 2007).
2. The management of an arrangement before the war whereby, if pastoralist groups wanted to cross from Chad or point north into Darfur, they would be linked to a local 'advocate' from the local population or to someone from the incoming pastoralist

group who was known locally. The advocate would be able to speak for and attest to the good intentions and behaviour of the group in question. In this way, the pastoralist group would be allowed to stay and negotiate grazing rights. Benefits from such an arrangement would often flow both ways, given that investing in livestock was one of the few ways for farmers to store capital (O'Fahey, 2008).

3. Facilitating a tenure arrangement called *acolgum* or 'eat and go' provided land access rights for people under hardship owing to drought, war, and other calamities. People suffering from hardship were allowed to cultivate land for one to three years or until it was safe for them to depart. Usually, the newcomer only pays a symbolic gift or occasionally rents to the owner (author's fieldwork).
4. Supporting the role of local land sheikhs. The land sheikhs were important in the rainfed areas. They had several responsibilities, including negotiation with nomads regarding the timing for using livestock migration routes and the timing and use of post-harvest fields for grazing while livestock was progressing through the migration routes. Historically, the land sheikh would inform local farmers of the date they needed to have their harvested crops and possessions out of their fields. This role was important because crops would be harvested at different times in different years and areas (author's fieldwork).

Such forms of adaptation are examples of the value of the flexibility and ambiguity of customary tenure (as opposed to rigidity and clarity) because it allows for the elasticity needed in the tenure system to pursue several politically useful (to the state) approaches to land resource, production system and tribal relations management.

These approaches include:

1. adaptation options in drought years;
2. local derivation of 'on the spot' solutions to land resource rights problems as they emerge;
3. variation in livestock migration locations and timing in different years;
4. the state legitimacy needed so that those coming from outside the region and using the statutory tenure system would accept the approach (Unruh and Abdul-Jalil, 2012).

It was unfortunate then that a later Sudanese Government dissolved the Native Administration in the 1970s in order to assert greater political control over the region, creating a precarious institutional vacuum (Elmekki, 2009). The government sought to fill this vacuum by re-instituting the Native Administration, but with members selected by the state instead of local constituencies, thereby maintaining control. This approach compromised the legitimacy of the institution. The result was that the Native Administration, over time, became distrusted and ineffective (Elmekki, 2009). The situation became particularly evident in dispute resolution between nomads and farmers, where the Native Administration had previously played a crucial role (Abdul-Jalil, 2008). Fieldwork verified that the removal and replacement of the Native Administration eventually severely disrupted much of the functionality of the customary tenure system (conflict resolution, land administration, negotiation and enforcement of boundaries and agreements). Widespread tension and conflict over land resources ensued, with these becoming acute and insoluble in the absence of the Native Administration's original, legitimate role and state support.

Ongoing disputes between tribes fed into developing narratives of injustice, victimization, and retribution, which then became aligned with different sides in the civil war.

The research found that an additional state policy prescription further compromised the adaptive capacity of the overall combined statutory-customary tenure system. In 1990, the Government bypassed the land sheikhs and simply announced the date that livestock would be allowed into rainfed crop areas throughout Darfur. This decision was implemented without the usual negotiation between farmers and herders or an appreciation of the variation in harvest times across space and time, particularly in climate change, land degradation and adaptation. In many areas, this meant that livestock entered cultivated areas prior to harvest and destroyed crops. The farmers reacted to this government intervention and the significant increase in crop damage caused by livestock by burning the bush grazing areas around their crops to discourage pastoralists from entering the overall area. The nomads then reacted by taking their herds directly into the unharvested standing crops to graze and by burning farming villages. The farmers then reacted by killing livestock.

### 3.3 Lessons learned

The fieldwork in Darfur highlights the value of flexibility and even ambiguity in land access and use rights for extensive arid and semi-arid areas of Africa, which can manage changing pressures brought on by seasonal climate, land degradation and migration. It also highlights the crucial role of the state in recognizing and supporting this elasticity, with far-reaching consequences if it fails to do so. Other authors also note the need for flexibility in resource rights regimes in Africa and warn of the dangers of assuming that Western perceptions of clarity, predictability and rigidity of boundaries and rights constitute the pervasive solution to problems of land disputes in extensive arid land contexts (Bromley, 2008; Abdul-Jalil, 2008; Chavunduka and Bromley, 2011).

## 4. Syrian Arab Republic

### 4.1 Background

Land rights in the Syrian Arab Republic face multiple challenges that stress dispute prevention and resolution – war, economic decline, climate change, and large-scale forced dislocation and return migration (Unruh, 2021a; 2021b). However, the country has some advantages that can help to mitigate land disputes. In particular, the longstanding ties between customary society and the state help to prevent such issues, and are helpful in the post-war recovery, migration and economic stress (Unruh, 2021a).

This study reveals that rural Syrian Arab Republic has always had a primary feature of land rights: the rich associational life interacting with forms of informality and local to national government. Such a feature provides several conditions for effective dispute mitigation. Prior to the war, the relationships between civil society organiza-

tions and the government provided important linkages between the state at different levels and land rights facts on the ground, including the history of government interaction with the various associations and individual farmers. Thus, civic associations are connected to a wide variety of customary rural livelihoods, comprising members who are well known to each other, and are recognized by the government. This situation enables it to be widely known how and where each member is attached to specific lands within their area, even if they are currently dislocated because of the war.

While it remains to be seen if the newly constituted state following the fall of the Assad regime in December 2024 will continue its relationship with the country's many civil society associations, the likelihood is high, given that many associations are longstanding and primarily driven by civil society. Such relationships would enable a new government to 'catch up' once established.

### 4.2 Civic associations

In the context of land dispute mitigation, the research found that the value of different civic associations is operationally similar – by participating in the association, everyone knows which lands are owned, rented and sharecropped by whom, thus creating a preventive effect on land disputes. The study demonstrates that attempts at taking over lands, including by parts of the state, would likely be difficult in such a context because it would be widely known and widely disruptive. This action would also contravene crucial long-established relationships between the associations and specific parts of government (Unruh, 2021a; 2021b).

An important example is the 'water user associations' connected to irrigation networks. These associations in the Syrian Arab Republic have a long history, cover large areas, and have previously endured and recovered from war. Some areas of the Syrian Arab Republic have been under irrigation for over 2000 years (Caponera, 1954). Therefore, the cooperative aspect and interconnectedness of local landholders with each other and local government is quite high. The fieldwork found that the ability of this institution to 'know where everyone belongs' and (re)confirm tenure rights for individuals and families connected to lands served by specific irrigation canals is quite robust. The close coordination and cooperation between these water user associations and local government (often the Ministry of Water) had government representatives participating in the activities of the associations, and association members participating in regional and local government decisions and meetings that affect them (Unruh, 2021a; 2021b).

Field research in the Syrian Arab Republic found that the reconstruction of irrigation infrastructure damaged during the war is a significant form of forestalling disputes, primarily because of the strong connection between water and land rights. Before the war, those with irrigation water rights also had to have land rights to use the water, such that re-establishing irrigation water delivery facilitated the reconnection of land rights to claimants. This connection is critical, given that irrigation networks in Syrian Arab Republic serve significant populations, and the Assad government's strategy for irrigation rehabilitation was to reconstruct the large public networks first (primary and secondary canals) because these serve the most

people. The overall effect of this approach would be to drive re-attachments to irrigated lands over vast areas for many people who fled the area owing to the war.

The research also found that 'peasants associations' have a long history in the Syrian Arab Republic and have supported dispute resolution, peasants' priorities regarding land rights, vetoes of specific development projects, and making land available to landless sharecroppers and agricultural labourers, and have played a significant role in political life (Unruh, 2021a). Before the war, the government strongly encouraged the establishing of and membership in peasant associations to facilitate communication and provide services (Bata-tu, 1999). A distinct entity is the 'General Union of Peasants in Syria'. The Peasant Union had close to a million members as of 2013, is the country's most influential organization of farmers, and is linked to the government's Ba'ath Party (IBP, 2013). Its members include landowners, non-land-owning operators of large and small farms, and agricultural workers. Local units of the Union are cooperatives established at the village level. The Union also operates at the governorate and federal levels and participated in policymaking in the former government's Supreme Agricultural Council (IBP, 2013). The fieldwork found that such an organization, based as it is on the attachment of specific people and communities to certain lands and with the support of branches of government at different levels, very likely provided a robust mitigation effect on land disputes.

The field research also found that additional civic associations can anchor people to rural lands. There are 'Chambers of Agriculture throughout the country, agricultural commodity processing associations, orchard associations, a national association of beekeepers functioning as an Arab League branch organization, a national veterinarian association comprising 5 000 members, and dairy farmer associations. Such associations have a variety of relationships with farmers and herders, know them and their family members, have worked with them over many years, and have lists of farmers and herders and what lands they occupy or use.

An additional example that the fieldwork found of the close interaction between organizations that attach people to lands and local government is seen in the 'local committees' (as a hybrid governance institution) along with the many neighbourhood community associations that are pervasive throughout the countryside and attend to land rights issues among a variety of other duties (Unruh, 2021a). Local committees comprise the local Mukhtar (a selected elder in rural areas), local government officials, and members of civil society. Such committees, particularly in their relationships with neighbourhood/community associations, are likely to be able to manage a variety of postwar land rights problems that often result in disputes, such as secondary occupations, counter-claims, the return of displaced persons, a returning female head of a household who is absent her husband, and other unresolved property inheritance cases. The local committees were quite active during the war, and humanitarian organizations have used them extensively to select beneficiaries for aid programmes, particularly those which seek to target the most vulnerable (Unruh, 2021a).

In a land context, an important feature of civic associations in the Syrian Arab Republic is the relatively large value placed on elements of customary tenure as compared with statutory tenure in rural areas, even by the government (Aita *et al.*, 2017).

Before the war, there was close coordination in land rights between statutory tenure and customary tenure in rural areas, and farmers and refugees indicate that the former government respected local customary land rights. While this may in part be attributable to the extended duration of Ottoman rule, which allowed interaction between customary and statutory tenure systems (Owen, 2000), at the same time, deficits in the way statutory tenure operated in recent decades have enhanced the utility of customary tenure. The result is a certain predisposition for elements of customary tenure in many rural areas (Unruh, 2021a). Stubblefield and Joierman (2019) describe how, in an operational sense, both the former Syrian government and civil society placed relatively low value on statutory documentation and institutions for rural land rights – such that even in statutory court, customary evidence could be valued more than statutory documentation. A review of court records in the Syrian Arab Republic indicates that local tenure customs and institutions frequently overrode formal legal codes (Aita *et al.*, 2017). One study found that, before the war, 60 per cent of land and property disputes were resolved outside of statutory courts, involving a variety of associations, customary committees, family members, Mukhtars, informal arbitration and Sharia courts (NRC, 2016).

Fieldwork in the Syrian Arab Republic found that during the war, the associational life that facilitated interaction between customary and government land structures and institutions also facilitated effective conflict management, particularly dispute prevention. This engagement emerged as the government and donors distributed designated agricultural inputs as humanitarian assistance. The research observed that allocating seeds, fertiliser, pesticides, and other inputs merits emphasis. Seed provision in the Syrian Arab Republic is a widespread activity engaged in by various humanitarian assistance and development actors and the government, involving hundreds of thousands of beneficiaries in different parts of the country.

Seed distribution is the main link between land possession and dispute prevention because it enables people to plant crops, reinforcing their ties to the land they claim as their own. This process involves: 1) the facts-on-the-ground act of planting, 2) the broader community (civic associations) acknowledgement of rights that permit the use of seeds on specific lands by specific people, and, importantly, 3) receiving the seeds in the first place as a beneficiary. Wartime agricultural assistance, such as the provision of seeds, fertiliser and pesticides, was not randomly distributed in the Syrian Arab Republic, nor was assistance dispensed by request only. Instead, these provisions were provided through very carefully derived beneficiary lists put together by local leadership along with recognized and longstanding farmer associations and affiliated members of local government – all of whom knew which people belonged on which farmlands. The derivation of such lists was monitored and supported by donors, NGOs and the government, who then offered support.

Such beneficiaries can be attached to lands through any number of ways of tenure – ownership, rental, borrowing, inheritance, sharecropping, 'permitted squatters', caretakers, returning displaced persons, and female heads of households and children with missing partners or parents. Thus, those without a recognized long-term presence on the land were not included in beneficiary lists and did not receive inputs, nor would they have been permitted to use them by the community, donors, or local government to claim land. Such an arrangement served as a preventive measure against land dis-

putes. While criteria for deriving beneficiary lists can vary among donors, for most, the objective is to target as many small-scale farmers who rightly belong on the land as possible, with the indirect effect of strengthening smallholder land claims and tenure security. Furthermore, because beneficiary lists are drawn up based on pre-war land attachments, the effect is to support returns to the exact locations and tenure arrangements as existed prior to the conflict, as opposed to land claims being reworked by disputes or other repercussions of the conflict (Unruh, 2021a; 2021b).

## 4.3 Lessons learned

For the Syrian Arab Republic, the research found that the relationship between civic associations and government is the kind of interaction that the UN and other international agencies encourage and promote elsewhere, and encouraged in the Syrian Arab Republic before the war, as a form of good governance. Multiple land governance systems intersect as a primary characteristic of these associations, which include customary, informal, religious, private, state and hybrid forms. In some areas of the country, these administrative frameworks have become fused gradually over time (Stigall, 2014). This interaction in jurisdiction, legality, authority and administration has allowed for support, coordination, and ease of resolution of disputes and implementation of rules and policies. While there are indications that such interactions positively affect forestalling and resolving land disputes as the war winds down, like the Darfur example, these can be heavily influenced by laws and policies to either support or thwart such effects (author's research). It remains to be seen what role the new government sees for itself going forward.

## 5. Sierra Leone

### 5.1 Background

Sierra Leone has an unstable history, with land issues playing a primary role in its civil war (1991-2002) and migration challenges, particularly in the highly problematic relationship between customary smallholders and large-scale investment interests (e.g. Richards *et al.*, 2004; Keen, 2003). Land disputes are nominally dealt with by chiefs, who, prior to the war, were noted for arbitrary, corrupt and self-serving approaches to decisions (FAO, 2020; Richards *et al.*, 2004). Keen (2003) indicates that the chieftaincy system was one of the primary contributors to the war because of longstanding and common abuses, particularly regarding land issues. As a result, some of the worst violence was focused on certain leadership elements in the customary system (Richards *et al.*, 2004).

In Sierra Leone, field research found that the interaction over land between large-scale investors and rural customary societies is an ongoing problem. In the past, land grabs, expropriations, and dislocations carried out by significant land interests with the consent of chiefs were common, resulting in large numbers of land disputes, food insecurity, resource degradation and deforestation.

While the 2022 passage of both the Customary Land Rights Act and the Land Commission Act puts the legal rights of customary landholders front and centre, operationally, there are significant problems with the way in which large-scale investors and local communities interact regarding the location and areas of lands to be leased to large-scale investors.

Considerable ambiguity exists regarding customary boundaries, the total area under the control of different customary communities, and access rights to specific lands within local communities. Essentially, local communities know the approximate boundaries of their customary areas, but do not know how many hectares these areas cover.

When making deals with large-scale natural resource or agriculture investors, customary authorities would often make critical errors, such as:

- Mistakenly including lands intended for local agriculture;
- Including land used by community members who did not agree to give up land; and
- Overstating the number of hectares over which they had jurisdiction.

In effect, these actions could promise investors access to lands belonging to adjacent customary communities. The resulting land disputes were frequent and severe. They occurred in large areas of the country, with the government often acting as a referee in misunderstandings over land allocations, confusion over which laws were applicable, the role of customary law, and ambiguity over boundaries. For an in-depth treatment of the causes of land problems, including large-scale acquisitions of customary land, the interested reader is referred to Richards *et al.* (2004) and Hussein and Gnisci (2005).

### 5.2 Mapping customary lands

The dispute resolution feature of note for Sierra Leone involves the outcome of an FAO project to pilot the mapping of customary lands to improve and formalize the relationship between customary tenure, large-scale investors and the government. The project involved using FAO's mapping software OpenTenure-SOLA (Solutions for Open Land Administration) on tablets. However, the project's value lay not in its technology but in its innovative approach to boundary demarcation. For the demarcation work, local community members (including women and youth) were trained on SOLA and then, together with elders and members of the adjoining landholding community, walked the entire boundary, agreeing on its location as they went. When disagreements or ambiguities over the boundary location were encountered, the mapping exercise halted until the issue was resolved. This participation by community members is what gave the exercise its legitimacy. The result was a mapped boundary of the area claimed by the customary community, which SOLA then used to calculate the total area. This polygon was then superimposed onto the relevant area of Google Earth to produce a detailed map recorded in the national registry and printed in large format for the community to use (Figure 2).

Photo 1. Customary map produced from the FAO mapping project



Including a Google Maps layer in the map was important, as it allowed land-owning families to recognize different parts of their lands: forest areas, cultivated areas, degraded and recovering areas, and the locations of villages, rivers, and boundaries.

The fieldwork found that the outcomes of the mapping work included the following:

- border disputes with neighbouring customary communities were resolved;
- ownership and land use disputes internal to the mapped areas were resolved;
- there was prevention of ownership disputes involving renting by outsiders;
- women's land rights were advanced, particularly regarding inheritance; and
- communities requested legal aid follow-up.

The mapping exercise enabled the communities to negotiate with large-scale investors from a position of knowledge and empowerment regarding which lands were available for leasing to investors, which lands to keep for their agriculture, which land was available to rent, and which areas were claimed for other uses, thereby preventing future disputes. Subsequently, adjoining customary communities demanded mapping assistance.

## 5.3 Lessons learned

The Sierra Leone case demonstrates several features important to dispute resolution and prevention between customary communities and large-scale investors – cooperation, targeting, legitimacy and empowerment. Cooperation between the government, FAO and local communities enabled the targeting of a central problem in community-investor interaction: the ambiguity surrounding boundaries and the area and use under community claim. The approach to mapping, whereby community members were trained to operate the tablets and the boundaries were walked and negotiated with the neighbouring community as the mapping occurred, with the results then accepted by the government, provided considerable legitimacy to the exercise, leading to greater empowerment for local communities, particularly in their interaction with investors.

## 6. Mozambique

### 6.1 Background

The end to the Renamo-Frelimo civil war of 1977–1992 saw the large-scale return of six million dislocated persons (USCR, 1993) to lands that, in their absence, were claimed in many cases by various significant commercial interests. The resulting land disputes were widespread, severe and often violent (author's fieldwork, described in Unruh, 2001). The government sought to address the problem by drafting a new (1997) land law to manage land restitution for the dislocated population and deal with the need for foreign investment in rural lands after the war.

In doing this, the government needed to consider:

1. the large-scale return to lands by small-scale landholders who historically had little or no connection to the state's formal property rights system, but instead held land customarily, had low rates of literacy, and little trust in government;
2. the lack of financial resources with which to pursue restitution and dispute resolution;
3. a history of changing, failed and problematic land and property policies and laws dating back to the colonial period;
4. an ineffective set of land and property institutions subsequent to the war, many of which were of questionable legitimacy in the eyes of the population;
5. a debilitated court system incapable of enforcing government property-related decisions;
6. significant pressure from the international donor community and local and international NGOs to attend to the massive numbers of disputes along with other aspects of the 'land question'; and
7. attract and keep foreign investment in rural lands in order to gain the hard currency and employment needed for recovery.

### 6.2 Law and self-managed land disputes

Managing the volume of land disputes meant dealing with land restitution and investor access to lands simultaneously. To do this, and given its own limitations, the government sought to construct a legal environment whereby the different aspects of the restitution-investor interaction could be 'self-managed' to a significant degree (author's research). The new law prioritized two broad objectives. It aimed to protect land rights for local communities and promote investment in partnerships between local communities and commercial investors (Norfolk and Liversage, 2003).

This approach meant large-scale investors with or applying for title, concessions or other rights needed to re-apply for these under the new law. This re-application brought the investors into the law's mandatory formal consultation with the local smallholder community regarding the occupation and use plans of the applicant (Norfolk and Liversage, 2003).

The local communities were given considerable power in this encounter under the new law, in part because the 1997–1999 Land Campaign (an information dissemination effort) declared that “Mozambique has no free land” (Negrao, 1999), meaning that community claims are contiguous throughout the country. As a result, all foreign and national investors needed to negotiate directly with the relevant local community for use rights to land (De Wit, 2002). This position was given added strength because the new land policy emphasized that occupation ‘according to customary norms and practices’ constituted one way by which a customary community claim was acquired without the need for state documentation (Hanchinamani, 2003). Such rights are not seen as new and do not have to be authorized – the law recognizes and offers them complete legal protection (Tanner, 2002). The result was that land acquired by simple occupation by smallholder communities was considered equal to title.

Additionally, internally displaced persons (IDPs) were allowed full rights to land if there was evidence that their occupation had been in good faith for 10 years (Tanner, 2002). This position was different to that under the previous law, which gave precedence to documented titles, even if they had been incorrectly issued when local communities had already occupied the land. The new legal arrangement gave the investor a documented title equal with, but not superior in legal footing over, local communities, such that even when new investor rights were issued through formal documentation, they did not extinguish local community rights (Norfolk and Liversage, 2003). The law intended that the parties would then need to negotiate a mutually beneficial arrangement (Kloeck-Jenson, 1998; Hanchinamani, 2003).

The negotiation was encouraged by the significant participation of local communities in natural resource management, conflict resolution, and titling of new areas requested by private investors (Kloeck-Jenson, 1998). The law further encouraged negotiation by allowing an investor to obtain a formal title to co-exist with smallholder community occupation rights in the ‘open border model’ (MPPB, 1997). With this option, if an old title or re-application under the new law found that smallholders occupied the land in question, then this did not necessarily compel a loss of rights on the part of the investor. Instead, the ‘open border model’ refers to the legal recognition of the boundary claimed by a specific community and the rights of the smallholder community within it, together with the ‘open’ character of the boundary, which encouraged investors to negotiate an arrangement regarding the exact nature of use rights by the investor within such a boundary (MPPB 1997; Tanner, 2002). In other words, although the land within a community boundary (often quite large) is occupied and farmed by the local community, it could also be exploited by the investor, depending on the intended investment. The logic behind this arrangement is the need to attend to desires for land restitution and investment, while at the same time avoiding having the country zoned into customary and commercial areas (particularly given the negative history of similar arrangements in neighbouring South Africa under apartheid); as well as to help alleviate land disputes and local poverty by encouraging linkages with investors (Tanner, 2002).

The author’s work in Mozambique found that, in this broad legal context, there was the expectation that many restitution and dispute cases would ‘resolve themselves’ (in other words, become ‘self-managed’) through a negotiated arrangement with the investor. Given these circumstances, it is especially encouraged given the

government’s low capacity to become involved in the many existing (and potential future) land disputes. The government further supported the guidance to ‘settle out of court’ by encouraging NGOs to offer legal assistance to smallholder communities.

## 6.3 Lessons learned

The Mozambican case highlights the utility of creating a broad legal environment so that the relevant parties (customary community, investor) are compelled to negotiate mutually beneficial land access and use arrangements, including resolution and prevention of disputes. As in the other cases discussed here, the role of state policy is paramount. The case is instructive in the innovative, technical legal approach taken that positioned customary communities, with no legal documentation, on an equal footing with investors to encourage negotiation, while at the same time not denying access to rural lands by investors.

## 7. Conclusions

Responses to pressures over land resources for rural inhabitants in many regions of the world will involve significant interaction between customary and statutory land rights regimes. The way in which this interaction occurs is critical for successfully managing the disputes emerging from these pressures. Innovations and best practices involving this interaction are needed, and this article describes four cases where the innovations appear to contain promising features.

For Darfur, the central feature is the elasticity of the customary system and its initial recognition and support by the state – contravening conventional Western perspectives regarding clarity and predictability in land rights. For the Syrian Arab Republic, the primary feature is the significant role of civic associations and how these have been constructed and operated over time, involving local government members and customary land regimes.

For Sierra Leone, a donor project successfully targeted a problematic interface between customary society and outside investors, using an innovative mapping project supported by the government. For Mozambique, the government’s realistic approach to its stated limitations in addressing extensive needs for postwar land restitution and foreign investment in rural lands produced an approach for ‘self-managing’ disputes.

Each case holds lessons for legitimacy, the role of policy, and new ideas about what ‘formalization’ means. For Darfur, legitimacy was derived from the negotiated approach to the timing and location of pastoralist migrations into farming areas and the initial support from the state in recognizing the outcome of these negotiations. This legitimacy was then subverted by a policy change that undermined the negotiated approach, which is critical to the elasticity needed to respond to changing circumstances. Prior to this, ‘formalization’ meant recognition on the part of the state of the customary approach to land rights and the land rights relationships between farmers and herders and how these were managed.

Such an approach differs from notions of land rights recognition that pursue clarity, rigidity, and predictability of rights and rules pursued later by the state – with unfortunate consequences.

For the Syrian Arab Republic, legitimacy is based on membership in civic associations where farmers and local government personnel all know one another, together with the support of the state for the way in which the associations operate. State policies supported and used the associations for the state's priorities within civil society, while at the same time allowing it to have agency in matters important to the associations. Formalization, in this case, appears to be focused more on the operation of the civic associations and less on the formalization of rights, boundaries and documentation, as evidenced by the significant role of customary governance in statutory land proceedings. The utility of these associations in bridging the customary-state divide to prevent land disputes through beneficiary lists for agricultural inputs highlights the ongoing value of the associations in wartime and economic hardship.

For Sierra Leone, legitimacy was derived from the method by which the mapping exercise took place – the participation of community members from both sides of the customary boundary to demarcate and resolve issues and then the acceptance by the government of the results. In this case, donor (FAO) and national government policies supported the method and formalization of these boundaries, compelling investors to respect these territorial demarcations. This form of 'formalization' of traditional land rights – essentially from the ground up – holds considerable promise in bringing customary and state land governance regimes into alignment in managing investor-community interaction, particularly dispute management.

For Mozambique, legitimacy was derived from the new land law enacted, which stated that undocumented customary 'occupation' alone was equal to title: the one did not prevail over the other. This legal framework provided customary land governance considerable leverage in the encounter with large landholders and investors in order to agree to the use of land resources within customarily claimed areas. As a state policy, it also obligated large-scale landholders and investors to negotiate directly with customary communities regarding the investment's use, location, and benefits. This approach to formalization – customary occupation equals title – is an important innovation which, while introducing some ambiguity into who claims what and where, and thus some difficulty for investors, nevertheless allowed, in a broad sense, for postwar restitution and rural investment to proceed forward and manage disputes.

The importance of the three primary features of the cases presented here – legitimacy, the role of policy, and formalization – are supported by the Voluntary Guidelines on the Responsible Governance of Tenure (VGGT). The VGGT highlight the importance of government recognition and protection of customary tenure rights – a fundamental aspect of legitimacy for approaches to dispute resolution. In this regard, the VGGT point out the importance of adapting policy and legal frameworks to support customary tenure – which was critical to all the cases examined here. Importantly, the VGGT leave open the different ways by which such recognition could occur to formalize customary tenure institutions.

Regarding relationships with large-scale investors, the VGGT caution against the dispossession of legitimate tenure rights holders, while encouraging a range of investment and production models that do not permanently move large areas of lands from customary to private ownership. Instead, partnerships with smallholder communities are encouraged, involving consultation and participation of customary rights holders. Relevant to both the Syrian Arab Republic and Mozambique cases, the VGGT support the restitution of lands to their original owners and caution strongly against unjust expropriation, which is the source of many land disputes.

All societies experience land disputes; what matters is how they are managed. This article has sought to present four cases where seemingly aggravating processes of increasing pressure on lands and increased interaction between customary and statutory tenure have led to positive forms of dispute resolution without one tenure system prevailing over the other. What is needed is a more extensive compilation of case studies that are able to form sets of 'best practices' that could be tailored to different situations in different parts of the world. In a time when increasing pressures from multiple sources are pushing customary and statutory land tenure regimes into more interaction, expanded awareness is needed regarding the dynamics of these interactions. Understanding what works under different circumstances, and why, is crucial for developing emerging best practices and lessons learned that could become more widely known and applied across different sectors and regions of the world.

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# ADDRESSING LAND CONFLICTS AND DISPUTES IN ZAMBIA THROUGH INNOVATIVE GEOSPATIAL TECHNOLOGIES

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## Abstract

Land conflicts and disputes present significant challenges to sustainable development in Zambia. Competing land claims, unclear tenure systems, and increasing urbanization have intensified tensions, particularly in areas governed by customary tenure. With the majority of Zambia's land under traditional authority, overlapping legal frameworks often lead to disputes over ownership and land use. In response, various geospatial technologies have been introduced to improve land documentation and reduce conflict.

This paper focuses on one such initiative – the Social Tenure Domain Model (STDM) – an open-source geospatial tool developed to document and map customary land rights, to resolve existing disputes and prevent future conflicts. Using the Chamuka Chiefdom as a case study, the paper explores the practical application of STDM in a customary setting. By analysing their implementation, outcomes, and challenges, this study offers insights into the effectiveness of geospatial technologies in conflict resolution. The findings provide valuable lessons for policymakers, researchers, and practitioners involved in land governance and dispute resolution in Zambia and beyond.

## 1. Introduction

Land conflicts and disputes pose significant challenges to sustainable development in Zambia, where issues such as competing land claims, unclear tenure systems, rapid population increase, and urbanization pressures contribute to tensions among communities. Zambia's traditional land tenure systems – coupled with the existing legal frameworks and the majority of land under customary tenure – have given rise to conflicting claims over land ownership and use. While Zambians have witnessed several types of conflict, wherever conflict occurs, land and natural resource issues are often among the root causes or major contributing factors. Land is one of the most important economic assets and a source of livelihoods; it is also closely linked to community identity, history, and culture (United Nations, 2012).

In Zambia, several innovative geospatial initiatives have been piloted to document customary land rights, aiming to prevent land disputes and enhance tenure security. One such initiative is the Social Tenure Domain Model (STDM), developed by UN-Habitat's Global Land Tool Network (GLTN). STDM enables local communities to map customary land claims – including boundaries and contested areas – and supports traditional leaders in mediating conflicts. The paper examines the implementation and impact of STDM in Chamuka Chiefdom, highlighting the successes and challenges in issuing customary certificates, resolving disputes, and strengthening land governance. Before examining the impacts of STDM in the selected case study, it is essential to establish a theoretical and contextual understanding of land tenure systems and the nature of land conflicts in Zambia.

## 2. Land tenure systems and the dynamics of land conflicts in Zambia

Land in Zambia is characterized by two tenure systems: statutory and customary tenure. The dual system of landholding reflects the country's history of colonial settlements on present-day State land and the separation of the local population into native reserves. This dual tenure system grants unequal land rights to citizens.

The evolution of Zambia's land tenure systems can be traced back to the pre-colonial era, when land ownership and access were primarily based on customary norms. Land was communally held, and individuals derived land rights through membership in a social group, typically a village or clan. As Bates (1976) notes, the right to claim land was intrinsically linked to one's citizenship within a village, a status that could be granted or denied by a headman. This system ensured that all land was managed under customary rules, with authority vested in traditional leaders who allocated land based on lineage, need, and community consensus. Colonial intervention began formally in 1924, when the British Colonial Authority assumed administrative control over Northern Rhodesia. A pivotal moment came in 1928 with the Council-in-Order's declaration that introduced the division between Crown Land and Native Reserves (van Loenen, 1999). Crown Land was reserved exclusively for white settlers and was governed by British statutory law. The Governor had the power to grant freehold or leasehold titles, with leaseholds extending up to 99 years, and in agricultural areas, even 999 years.

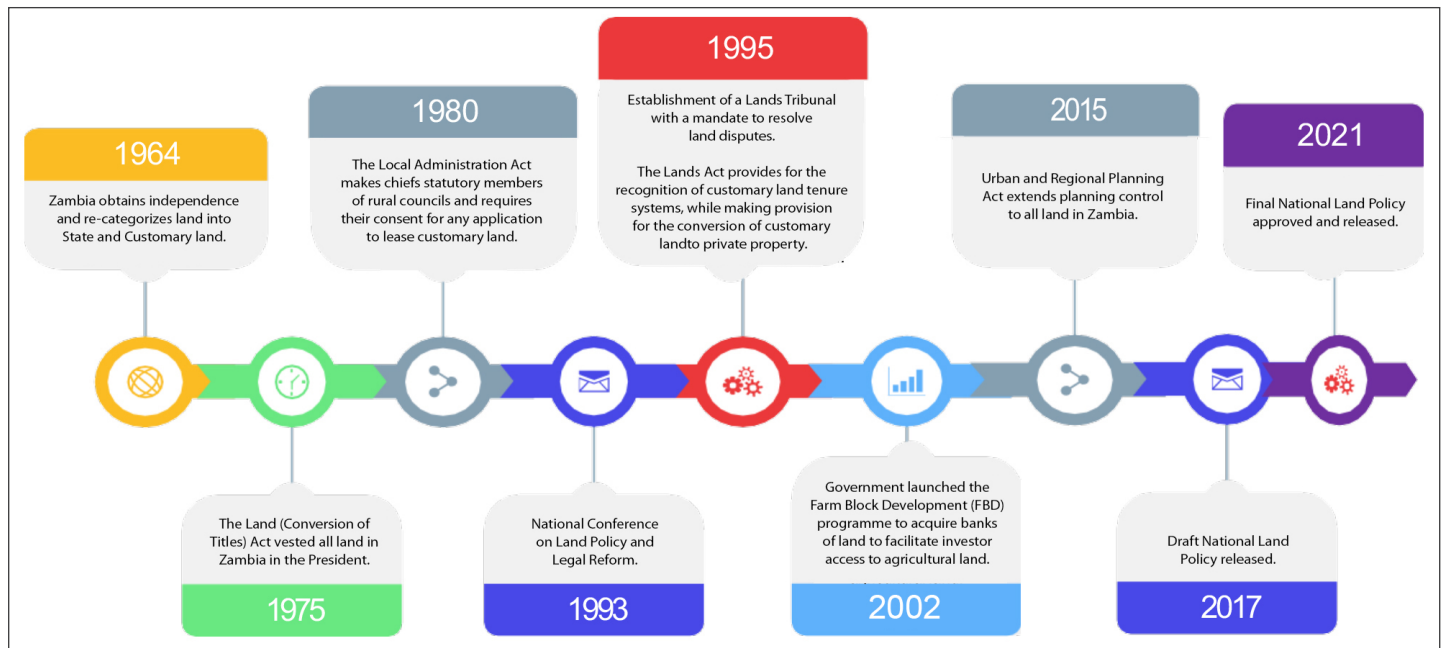
This legal and spatial restructuring of land ownership had far-reaching consequences. The most fertile and mineral-rich lands were systematically allocated to settler farmers, ensuring their dominance in commercial agriculture and mining. Though many settlers departed following Zambia's independence in 1964, much of the prime agricultural land remained under white ownership.

### 2.1 Customary vs statutory land tenure systems

The introduction of this dual land tenure system – Crown Land for settlers and Native Reserves for Africans – resulted in the systematic dispossession of Indigenous Peoples. Africans were excluded from formal legal ownership and confined to marginal lands, managed under customary tenure with no formal documentation or security. The dual system created a deep and lasting divide in land access, rights and tenure security. The resulting loss of livelihoods, forced displacement and marginalization generated widespread resentment and laid the foundation for enduring land-related grievances and conflicts in Zambia.

After Zambia's independence in 1964, land was reclassified into State Land (formerly Crown Land) and Customary Land (including reserves and trust land), with all land vested in the President. English law applied to State Land, while customary law governed Customary Land.

Figure 1. Evolution of land tenure in Zambia



Source: Author's own elaboration

The Barotseland Agreement initially recognized the Litunga's authority over land in Barotseland, but this special status ended in 1970. At independence, customary tenure covered about 94 percent of the land, managed through diverse traditional practices. Statutory tenure, under 99-year leases, accounted for only 6 percent.

Although most land in Zambia remains under customary tenure systems, conversion of customary land to statutory leasehold titles has increased to facilitate privatization. However, the full extent of these conversions remains unclear due to the absence of a comprehensive National Land Audit. Amid growing demand for land and the pressures of unplanned, rapid urbanization, the need for accurate, up-to-date land data has become increasingly urgent.

These dynamics have placed land governance – particularly issues of transparency, accountability and equity – at the forefront of Zambia's development agenda. The dual system of landholding reflects the country's history of colonial settlements on present-day state land and the separation of the local population into native reserves. The dual tenure system – customary and leasehold tenure – presents unequal rights to land among citizens: an indigenous form of landholding that is generally communal in character, and another landholding that is regulated by statutes.

## 2.2 Drivers of land disputes in customary areas

Zambia's colonial history, characterized by land dispossession, forced resettlements and unequal land distribution, has left a legacy of unresolved land issues. Colonial policies, such as the establishment of large-scale commercial farms and the creation of reserves for Indigenous Peoples, have contributed to land disputes and inequalities that persist to this day. In rural areas of Zambia, longstanding land conflicts exist between local communities and large-scale commercial farms over land ownership and boundaries. Similar land disputes arise over chieftdom boundaries.

The increasing conversion of customary land to statutory leasehold in Zambia has contributed to rising land disputes. Chiefs and traditional leaders play a central role in allocating customary land, but there is limited coordination between traditional authorities and government institutions. The authenticity of consent letters issued by chiefs to convert land is often contested. When land is converted, it is often unclear whether proper procedures were followed, leading to disputes between community members, investors and local authorities.

Table 1. Land Tenure Composition in Zambia Size (%)

DATA SOURCE / TIME	TENURE TYPE	
	Statutory	Customary
At independence (1958 map)	6 %	94 %
2015 National land audit assessment by Ministry of Lands and Natural Resources	19 %	81 %
Current assessment by Ministry of Lands and Natural Resources based on land registration figures	40 %	60 %

Source: Ministry of Lands and Natural Resources (MLNR)

Evidence shows conflicts are increasing on both customary and state land. A study by Mushinge, Kabunda-Munshifwa and Shamaoma, 2018, identifies the main causes on state land:

- Illegal allocation of land by some politicians and council employees.
- Invasion of idle or undeveloped private or public land.
- Double allocation of state land.
- Provision of insufficient land information to the public.
- Insufficient supply of affordable state land.

They also allude to ineffective cadastral surveying as one of the causes of land conflicts (ibid., p. 6). Zambia has only a few licensed land surveyors, and lengthy, unpredictable approval times for survey records from the Surveyor General's Office have resulted in a significant backlog of properties that remain unsurveyed (Chileshe and Shamaoma, 2014). As a result, municipalities usually allocate unsurveyed land to would-be developers, which, in turn, contributes to encroachment, misallocation, and land conflicts. Most municipalities lack appropriate survey equipment and rely on tapes and low-accuracy handheld Global Navigation Satellite System (GNSS) receivers to set out plots and show clients locations on the ground. This practice leads to misallocation and encroachment.

Furthermore, the rapid and sometimes informal nature of urban expansion has led to overlaps in boundaries between customary and state land. These overlaps fuel disputes between traditional landholders and those who hold government-issued leasehold titles. Land disputes, particularly in peri-urban areas of Lusaka such as Mungule Chieftdom, are rising due to double land allocations by local councils. While the government initiated a National Land Titling programme to provide tenure security to all Zambians, the current sporadic issuance of title deeds involves too many processes and causes unnecessary delays. Data collection is slow and paper-based, leading to poor data maintenance and potential corruption. Lease preparation is still done manually, using typewriters, and is not automated, despite an information system that could generate titles (Tembo, Minango and Sommerville, 2018).

To better protect customary land claims and prevent land disputes, several innovative geospatial initiatives have been undertaken to document customary lands in Zambia.

### 3. Innovative geospatial technologies for land governance

In Zambia, several development partners have piloted approaches to resolve land conflicts using innovative participatory geospatial technologies. Most initiatives involve participatory mapping and make use of advanced tools such as GPS, aerial photos and remote-sensing images. They also use unmanned aerial vehicles (UAVs) – including drones – geographic information systems (GIS) and other computer-based technologies.

These initiatives help amplify the voices of rural communities and vulnerable groups, especially women, in boundary harmonization, negotiations and dispute resolution. However, it is important to evaluate the context carefully before opting to use modern geospatial technologies. In some instances – for example, in post-crisis contexts with absentee rights-holders, returnees, occupants, existing grievances or potential restitution – rushing to record land rights may fuel conflict rather than resolve it (FAO and IFAD, 2022).

## 3.1 Leveraging geospatial technologies for land conflict resolution in Zambia

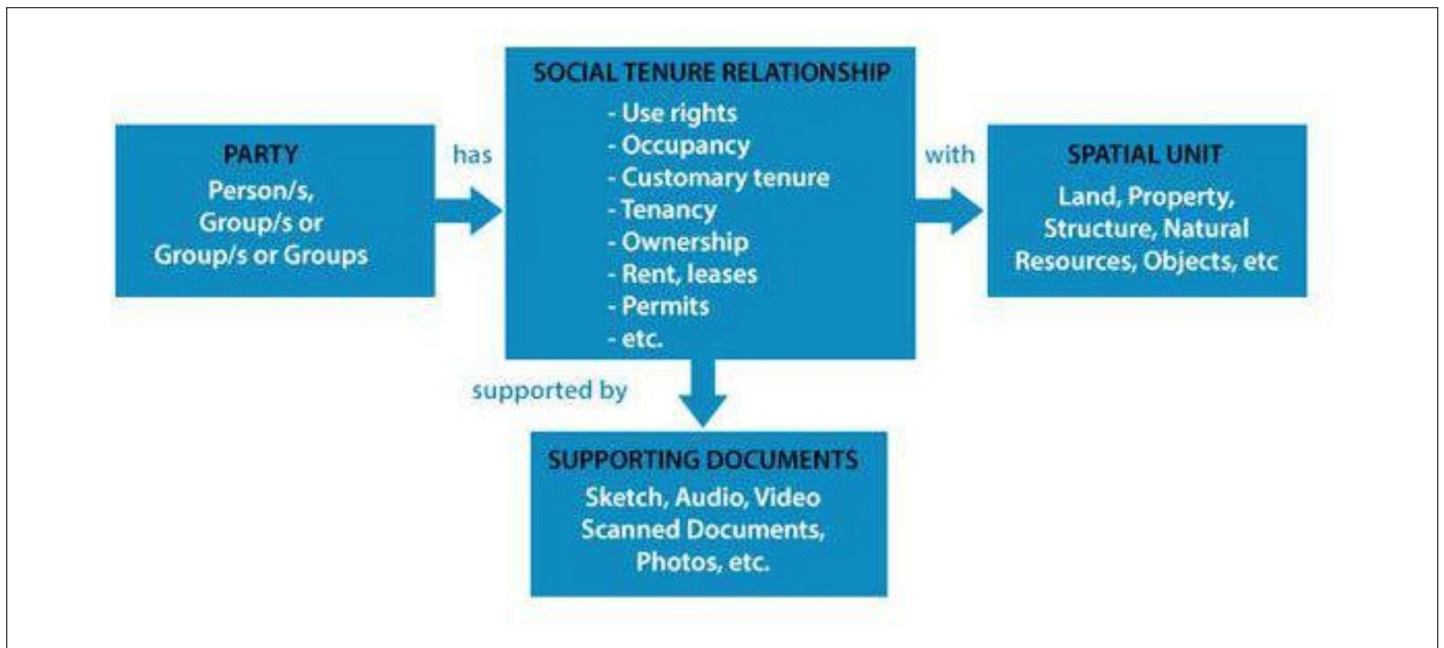
Geospatial technologies in land administration help address land conflicts in Zambia by providing accurate, up-to-date mapping of land boundaries and ownership, particularly in areas with overlapping customary and statutory claims. These tools enable transparent documentation of land rights, support participatory mapping with communities, and improve coordination between traditional leaders and government institutions. By making land information more accessible and reliable, geospatial technologies reduce disputes caused by unclear boundaries, double allocations and unrecorded land transactions. Examples of innovative geospatial land administration tools used in land conflict resolution include:

### I. The Social tenure domain model (STDM)

STDM, developed by UN-Habitat, is an open-source land information tool that offers a complementary land administration system that is pro-poor, gender-sensitive, affordable and sustainable. STDM allows the recording of all possible types of rights – formal, informal, customary or overlapping – without requiring full formalization (such as a title deed). It recognizes that people often live on or use land without legal documents, especially in customary and peri-urban areas. STDM is explicitly meant for developing countries, countries with very little cadastral coverage in urban areas with slums, or in rural customary areas. It is also meant for post-conflict areas. The focus of STDM is on all relationships between people and land, regardless of their level of formalization or legality (Lemmen, 2013).

STDM acknowledges multiple, co-existing claims on land, which is particularly relevant in Zambia, where customary tenure rights are often unregistered. It facilitates the mapping of social tenure relationships, such as shared access or communal ownership, that are not captured in formal systems. This visibility of claims reduces ambiguity and can prevent or resolve conflicts by clarifying who uses or controls which land. When they escalate, this innovative geospatial tool provides evidence-based records of occupation and use. Such documentation can support alternative dispute resolution mechanisms (e.g., customary mediation or local tribunals) or formal legal proceedings.

Figure 2. Schematic of the Social Tenure Domain Model



Source: GLTN

## II. Mobile applications to secure tenure (MAST)

USAID is helping to address longstanding land tenure inequities and conflicts through its Mobile Applications to Secure Tenure (MAST). MAST is a suite of technology tools and inclusive methods that use smartphones and a participatory approach to map and document land and resource rights efficiently, transparently and affordably. It is designed for inclusive land documentation, with provisions to include persons of interest so the process does not inadvertently simplify the representation of rights or consolidate collective rights into an individual one. Using MAST, local communities can identify land boundaries, map conflict areas and gather validated information that traditional leaders need to mediate land conflicts, and finally issue land ownership documents. USAID's Integrated Land and Resource Governance programme and its two local partners have documented the land rights of more than 30 000 parcels in Zambia. The initiative has affected 155 000 rights holders, nearly half of whom are women (Bessa, 2021).

## III. Medici land governance (MLG) national land titling programme

In 2018, the Ministry of Lands and Natural Resources (MLNR) signed a memorandum of understanding (MoU) with Medici Land Governance (MLG). The partnership aims to pilot collection of landownership information for 50 000 parcels in Lusaka City using modern technology. The pilot uses drone imagery, artificial intelligence for identifying property boundaries, tablets and apps to collect ownership information from landowners, and automated production of survey diagrams and general plans. To reduce boundary disputes – a common source of land conflict in urban and rural Zambia – Medici Land Governance uses drones to capture high-resolution aerial imagery (10 cm) of demarcation areas.

Parcel boundaries are digitized from those images by a team of GIS technicians using open-source QGIS.

Before titling, MLG conducts sensitization and participatory mapping with residents and traditional leaders. This approach ensures communities understand the process and helps prevent conflicts resulting from lack of consent or misinformation. During enumeration, disputed parcels are mapped, and an adjudication committee resolves disputes identified within the area. Most disputes recorded so far concern boundaries and intra-family inheritance.

## 4. Case study: application of the Social tenure domain model (STDM) in Chamuka Chiefdom

### 4.1 Case study profile

Chamuka chiefdom is located in Chisamba District, Central Province, and sits between two rapidly growing urban areas, Kabwe in the north and Lusaka in the south. The chiefdom covers 2 978.5 km<sup>2</sup> and is located between latitude 14°30' and 15°00' S and longitudes 28°00' and 28°30' E. It is 1 138 meters above sea level (Timberlake, Chidumayo and Sawadogo, 2010). It is one of the 7 Chiefdoms in the Lenje establishment, which consists of 207 villages. Each village is headed by a village headperson. It shares boundaries with the chiefdoms of Mungule and Liteta in the south west and west respectively (Katungula, Antonio and Nyamweru-Ndungu, 2020).

In terms of population, Chamuka has about 207 villages with a population of 6 781 people. According to the Ministry of Agriculture of Chisamba district and village land registers, Chamuka chiefdom comprises about 49 percent males and 51 percent females (Mwanza, Kalaba and Munshifwa, 2023). The chiefdom is home to the Lenje speaking people with His Royal Highness Dr. Morgan Kumwenda as Chief Chamuka V.

## 4.2 Choice of methods

The study used both qualitative and quantitative research methods. Empirical data were purposely collected from one selected chiefdom (Chamuka Chiefdom), where successful land disputes have been resolved using the STDM innovative geospatial tool to secure land tenure rights for communities.

A comprehensive review of existing literature was undertaken to identify relevant case studies, theories, concepts and debates related to land conflicts and disputes in Zambia. Various types of documents, including policy papers, government reports, legal documents, organizational publications and archival records, were analysed. The analysis aimed to understand the policy context, legal frameworks and institutional practices relevant to land tenure and conflict-resolution mechanisms in Zambia.

Chamuka Chiefdom had informal land documents such as village registers and individual customary land certificates known as Customary Certificates of Land Occupancy (CCLO). They were issued by Chief Chamuka V through the piloting of the STDM tool. Qualitative data from textual sources, such as interviews, focus-group transcripts, social-media content and online forums, were analysed using thematic analysis.

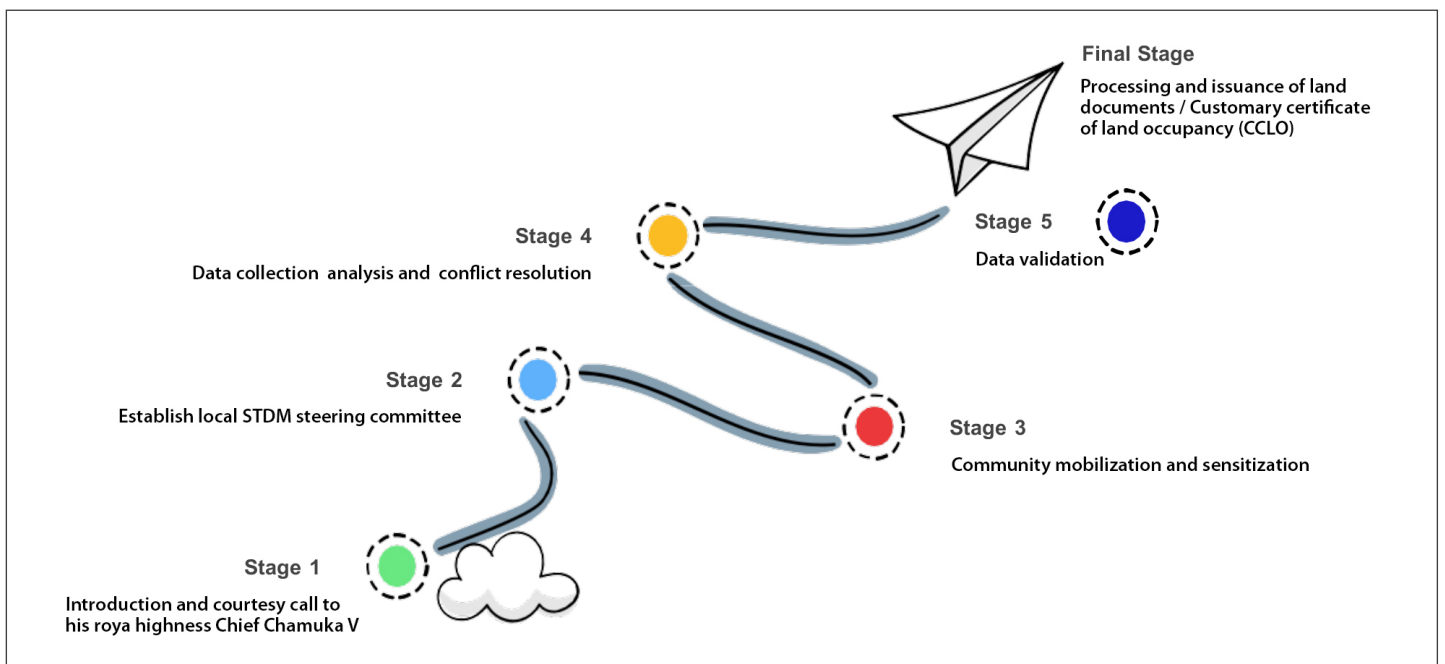
The research methodology adopted enabled a rigorous, systematic analysis of existing information and data to generate insights and contribute to scholarly understanding of land conflicts and dispute-resolution mechanisms in Zambia. While several approaches have been adopted by the Zambian government, non-governmental organizations and local communities to mitigate and resolve land-related disputes, the study specifically focuses on "The Chamuka Chiefdom Model (CCM)." In this model, the application of STDM in conflict-resolution mechanisms has proved successful in reducing land disputes and promoting land-tenure security in Zambia.

## 4.3 Chamuka Chiefdom model implementation process

In 2016, UN-Habitat's Global Land Tool Network (GLTN) partnered with the People's Process on Housing and Poverty in Zambia (PPHPZ) and the Zambia Homeless and Poor People's Federation (ZHPPF). The collaboration implemented STDM in Chamuka Chiefdom, targeting 11 villages including Kaputula, Bulemu, Shipunga and others.

The initiative, known as the Chamuka Chiefdom Model (CCM), aimed to reduce land disputes and promote land-tenure security by documenting customary land rights through participatory and inclusive processes. Using STDM's innovative, non-conventional land information system, the model enabled local communities to map and record land claims, boundaries and social tenure relationships without requiring formal land titles. Implementation followed a stage-by-stage process, ensuring transparency, community participation and alignment with traditional leadership structures. The Chamuka Chiefdom Model now serves as a replicable approach for improving customary land governance and reducing land-related conflicts in Zambia.

Figure 3. Stages in the Chamuka Chiefdom Model



Source: Author's own elaboration

## Stage I: traditional engagement and vision setting

The participatory mapping process under the Chamuka Chiefdom Model began with a courtesy call to His Royal Highness Chief Chamuka V to present the STDM process, share the vision and seek approval from the traditional authority. Unlike other contexts where STDM is externally introduced, the initiative in Chamuka Chiefdom was demand-driven, arising from the Chief's personal interest after observing its successful implementation in the neighbouring Mungule Chiefdom in 2015. Chief Chamuka's proactive support laid a strong foundation for the project.

The initial engagement brought together traditional leaders, community members and government officials from Kabwe municipality to develop a shared understanding of the STDM tool and its potential. The dialogue built consensus. It formally endorsed continuation of the mapping process, setting the stage for inclusive and collaborative land documentation efforts in the Chiefdom.

## Stage II: formation of the local STDM steering committee

Following initial consultations, Stage 2 established the local STDM Steering Committee to oversee and implement key project activities, including community profiling, enumeration, mapping, data entry and analysis across the 11 target villages. The committee comprised grassroots civil society representatives, village headmen and local volunteers, each selected from their respective villages to ensure community ownership and participation. Under the leadership of His Royal Highness Chief Chamuka V, deliberate efforts were made to promote gender equality and encourage women to take leadership roles within the committee. This inclusive structure ensured that the process reflected community priorities and values while building local capacity for land governance.

## Stage III: community mobilization and sensitization

Stage 3 focused on mobilizing and sensitizing community members across the 11 project villages. Stage 3 aimed to raise awareness of women's land rights, national land laws, and the land recordation process, ensuring that all stakeholders – especially marginalized groups – understood their rights and roles. Key principles of human rights and alternative dispute resolution mechanisms were introduced to promote peaceful and equitable engagement. To support transparency and accountability, community engagement by-laws were developed collaboratively to govern the entire land documentation process. Village headmen played a central role in educating villagers about the importance of land documentation. They emphasized that the Customary Certificate of Land Occupancy is not for sale and cannot be converted into a statutory title deed issued by the government. For the STDM process to be socially legitimate and widely accepted, it was aligned with the Chiefdom's cultural, historical, and social norms, respecting community customs and values at every step.

## Stage IV: participatory enumeration, data collection, and conflict resolution

Stage 4 marked the core of the STDM process. It involved participatory enumeration alongside simultaneous data collection and analysis. The stage empowered communities to gather land-related data and seek locally driven solutions to land-related conflicts. Community volunteers from the 11 villages were trained to use STDM tools, handheld GPS devices, and mapping technologies to collect, enter, and analyze data. Activities included household profiling, land parcel mapping, and data verification.

A key feature of this stage was the use of alternative dispute resolution (ADR) mechanisms such as mediation, reconciliation, and negotiation to address both latent and active land disputes. The community-based conflict resolution process involved civil society organizations, traditional leaders, and the disputing parties, fostering peaceful, culturally acceptable outcomes. Parcel boundaries were geo-referenced, harmonized, and mapped.

Landholders were invited to pre-validate their land claims with support from village headmen. To ensure inclusivity and legitimacy, women, youth, and vulnerable groups were specifically engaged in reviewing and ratifying boundary maps before full community validation. Unresolved disputes were escalated to the chiefdom council, where mediation occurred in the presence of the chief. At the end of the process, village land maps were produced and publicly displayed in accessible locations for further community validation and feedback, reinforcing transparency and ownership of the process.

## Stage V: validation, certification, and public issuance

Stage 5 focused on validating maps and collecting information from the local community. Residents reviewed and confirmed critical details, including plot sizes, landholder names, and the locations of communal resources such as schools, markets, and health centres. The local STDM Steering Committee incorporated all corrections and validated claims into the final land records. Once complete, Customary Certificates of Land Occupancy were prepared and signed by His Royal Highness Chief Chamuka V.

The finalized certificates were registered in the village land register and issued to beneficiaries at a public ceremony held at the Chamuka Chiefdom Palace. The ceremony brought together community members, traditional authorities, government officials, civil society organizations, and the media to celebrate the culmination of a transparent, inclusive, and conflict-sensitive land documentation process. The public issuance reinforced trust, legitimacy, and recognition of land rights within the chiefdom.

## 5. Results and discussion

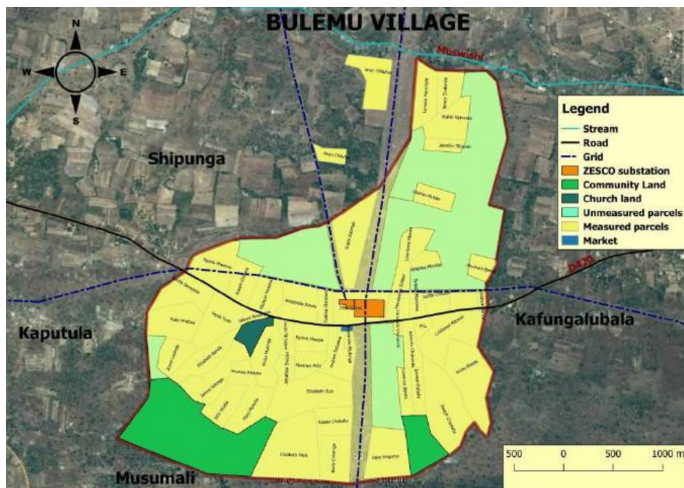
The discussion in this section is based on the successful results of piloting the Social Tenure Domain Model (STDM) in the Chamuka Chiefdom in central Zambia. Tenure documents (Customary Certificates) have been issued to customary occupants by the traditional authorities. This Chamuka Chiefdom Model is being upscaled and replicated in other chiefdoms in Zambia.

### 5.1 Villages mapped

By 2024, a total of 57 villages in the Chamuka Chiefdom (out of 207 villages) have been mapped and enumerated using innovative land tools. This marks a significant upscaling of the technology from the 11 villages initially piloted in 2016. As a result, the village land maps provide evidence of land rights, including the transaction, the parties involved, the land involved, and the acceptance by the entire community and the chiefdom authorities. This proof offers a first step on the tenure ladder to provide evidence of land rights in cases where formal land registration (statutory titles) does not exist.

The village maps also serve as tools for delineating boundaries and defining identities to avoid conflicts with neighbouring villages. The systematic village mapping has been expanded from the pilot villages to 57 of the 207 villages in the chiefdom. With support from other partners, the traditional authorities are committed to rolling out this mapping exercise to cover the entire Chamuka Chiefdom.

Figure 4. Village Mapped using STDM in Chamuka Chiefdom



Source: UN-Habitat/GLTN

### 5.2 Distribution of Customary Certificates

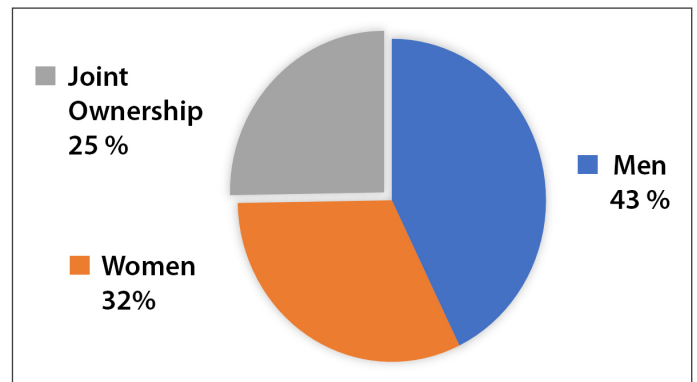
Since 2016, the Royal Establishment of the Chamuka Chiefdom has issued Certificates of Customary Land Occupancy to 4 752 households. Of these, 1 518 (32 percent) are registered in the names of women and 2 033 (43 percent) in the names of men. An additional 1 201 certificates (25 percent) were issued under joint ownership,

covering a total population of approximately 29 216 people in the chiefdom. These tenure documents have empowered villagers by giving them a formal voice over their land, safeguarding their rights and securing access to land vital to their livelihoods.

Gender equality, one of the ten core principles of the Voluntary Guidelines on the Responsible Governance of Tenure (VGGT), emphasizes equal tenure rights for women and men, including the right to inherit and transfer land (FAO, 2022). The distribution of customary land certificates in the Chamuka Chiefdom aligns with this principle and demonstrates that women and men can participate equally in land ownership and governance. To promote gender equality, the Chamuka Chiefdom developed by-laws and approved guidelines requiring that 50 percent of all available land be allocated to women.

Where both spouses are present, the guidelines emphasize joint ownership and registration on Certificates of Customary Land Occupancy. This approach is designed to protect women's land rights and reduce intra-family land conflicts, particularly when the husband dies and the woman's name is not recorded on any land documentation. Through formal systems and informal community practices, the Chamuka Chiefdom Model has shown that inclusive land administration is possible and essential for equitable and sustainable rural development.

Figure 5. Customary certificates of land Occupancy



Source: Author's own elaboration



## 5.3 Resolution of disputes over tenure rights

According to the findings, a total of 536 inter-family land disputes and 8 village-boundary disputes were identified and successfully resolved through community mediation and alternative dispute-resolution (ADR) mechanisms. Villagers in Chamuka who benefited from this intervention confirm that boundary disputes were widespread before the implementation of the Social Tenure Domain Model (STDM) and participatory enumeration processes.

By leveraging innovative geospatial technologies, STDM facilitated the peaceful resolution of land-boundary disputes. As a result, the STDM has become a key instrument for dispute resolution and reconciliation within the Chiefdom. This approach aligns with the Voluntary Guidelines on the Responsible Governance of Tenure (VGGT), which recommend providing accessible mechanisms to prevent or resolve disputes at an early stage. The VGGT further emphasize that dispute-resolution services should be equally accessible to women and men, considering location, language, and procedural fairness (FAO, 2022).

## 5.4 Strengthened local capacities on tenure governance

Over 73 community members have been trained to collect geospatial information and are now proficient in using the Social Tenure Domain Model (STDM) tool. The initiative promoted the effective participation of all community members – men, women, and youth – in decisions related to their tenure systems through existing traditional institutions.

The capacities of community change agents were strengthened through training in open-source geospatial technologies for securing land rights. Additionally, over 87 change agents were trained to advocate for women's land rights and to apply alternative dispute-resolution (ADR) mechanisms. Women, in particular, have been empowered with a voice and the opportunity to participate fully in decision-making and governance processes concerning land and tenure, reinforcing inclusive and equitable land administration within the Chiefdom.

## 5.5 Better negotiation for investment

Participatory community mapping has enabled the Chamuka community to gain a clear understanding of its land resources and to develop chiefdom by-laws protecting communal land from irregular or contested acquisitions by outsiders. The process also enabled the community to identify and set aside land for future development and potential investment opportunities.

Under the Chief's leadership and in collaboration with the government, the community negotiated successfully with a Chinese investor for prompt and fair compensation in exchange for land to establish a manganese processing plant. To make space for the factory, five families were relocated to a new area with basic services and arable land. These families relied on their Certificates of Customary Land Occupancy to negotiate fair compensation and resettlement terms. The planned investment occupies 92 hectares of land previously inhabited by the five families and is expected to create over 300 permanent jobs for residents in the short term. Employment is expected to increase in the long term (Katungula, Antonio and Nyamweru-Ndungu, 2020). The process aligns with the VGGT. They emphasize that when land cannot be returned to its original holders, states must ensure prompt and just compensation either through financial means or by providing alternative solutions (FAO, 2022).

## 5.6 Improved tenure-responsive land use planning

The successful implementation of the Chamuka Chiefdom Model has led to the development of tenure-responsive land use planning. Land use planning is rarely a neutral process; it is often influenced by stakeholders seeking to control access to land, ownership of land, and land use. As such, it is essential to employ participatory tools such as the Social Tenure Domain Model (STDM). Alongside STDM, continuous verification mechanisms and flexible monitoring approaches are needed to promote sustainable land use and ensure secure land tenure in a conflict-free environment.

In Chamuka, the community has successfully implemented land-use planning in villages mapped during the project. Guided by the extensive data generated, they engaged with government authorities, development partners and other stakeholders. This collaboration was particularly relevant in the context of the government's decentralization policy, which included the rehabilitation of a 65 km road from Chisamba to Kabwe that traverses the Chamuka Chiefdom.

While such infrastructure projects often encounter land tenure-related conflicts, the Chamuka Chiefdom has shown that with inclusive planning and secure tenure systems, development can proceed through peaceful negotiation and without disputes.

## 5.7 Sustainability approach

The Chamuka Chiefdom Model began as a pilot initiative in 11 villages and, due to its success, was later scaled up to 57 villages with the support of UN-Habitat. To ensure sustainability, the chiefdom authorities, in consultation with local communities, agreed on a nominal fee of about USD 10 per household receiving a Customary Certificate of Land Occupancy. The fee covers the production and printing costs of certificates. A dedicated STDM Resource Centre was constructed, made fully operational and equipped with desktop computers and access to electricity. The Centre now serves as the central hub for all STDM activities in the Chiefdom and as a learning platform for other chiefdoms seeking to replicate the model.

The establishment of the Centre has also led to a significant increase in computer literacy among local community members, a level that was previously limited.

## 6. Conclusions and recommendations

### 6.1 Conclusions

Addressing land conflicts in Zambia requires comprehensive reforms that tackle underlying structural challenges, strengthen land-governance institutions, and promote inclusive, participatory approaches to land management. The Chamuka Chiefdom Model illustrates how participatory and innovative geospatial technologies can be effectively applied to secure tenure rights for vulnerable communities and resolve land disputes.

The model shows that low-cost, community-driven solutions can improve perceptions of tenure security, stimulate local development, and reduce land-related conflicts – even where formal land-administration systems are weak or absent.

Although the Customary Certificates of Land Occupancy (CCLO) issued by Chief Chamuka V are not yet backed by Zambia's statutory legal framework, they are widely recognized and respected within the community. These certificates are issued by a competent traditional authority whose role is enshrined in the Constitution of the Republic of Zambia. The Voluntary Guidelines on the Responsible Governance of Tenure (VGGT) reaffirm the importance of recognizing and protecting legitimate tenure rights – even those not yet formally acknowledged in law (FAO, 2022). They help prevent arbitrary evictions and ensure the security of customary-rights holders.

### 6.2 Recommendations

To effectively address land conflicts in Zambia, there is a pressing need to strengthen land administration systems and legal frameworks. Key actions include clarifying land rights, enhancing legal protection for vulnerable groups, and establishing efficient mechanisms for dispute resolution. One of the key challenges identified is the legal and operational limitations on land registration, particularly in customary areas. Challenges include inadequate data collection and management systems as well as weaknesses in the current regulatory framework for systematic adjudication. The existing legal provisions primarily support sporadic titling, with statutory titles only initiated upon the collection and signing of invitation-to-treat documents. Furthermore, many traditional leaders remain apprehensive about issuing formal title deeds, fearing the erosion of their authority. To address these challenges, reform of the legal framework and exploration of mechanisms to recognize Customary Certificates of Land Occupancy (CCLOs) as legitimate tenure documents within the statutory system are needed. They should be pursued in ways that do not undermine the role of traditional leadership.

Promoting community-based land management (CBLM) is another critical strategy. CBLM empowers local communities, particularly women, youth, and marginalized groups, by involving them in land governance and decision-making processes. Such participatory models are vital for strengthening livelihoods and play a significant role in improving environmental conservation outcomes. Evidence suggests that communities with secure tenure rights are more likely to adopt sustainable land management and conservation practices. In contrast, those with insecure rights are more prone to land degradation and resource conflicts. It is equally important to invest in tenure-responsive land-use planning that balances various land uses, protects natural resources, and promotes equitable access to land for present and future generations.

Transparency, accountability, and public participation in land governance must be enhanced through the strategic use of technology. Tools such as Geographic Information Systems (GIS) and the Social Tenure Domain Model (STDM) can improve land information management and increase access to accurate, reliable land data. Article 253(1) of Zambia's 2016 amended Constitution underscores equitable access to land, secure tenure for lawful landholders, recognition of Indigenous cultural rites, and sustainable land use. It also emphasizes the effective administration and resolution of land disputes. The Voluntary Guidelines on the Responsible Governance of Tenure (VGGT) stress that decisions affecting people's tenure rights should be made through inclusive, informed, and participatory processes. These processes must actively engage those with legitimate tenure interests, particularly where power imbalances exist (FAO, 2022).

Strengthening institutional and individual capacities within government ministries, civil society organizations, and traditional authorities is necessary to mediate and resolve land disputes effectively. Strengthened dialogue and mediation capabilities will help ensure tenure-related problems do not escalate into broader conflicts. The VGGT recommend peaceful, inclusive approaches to dispute resolution and urge revision of laws and policies to remove discriminatory elements that fuel land-related tensions (FAO, 2022). Local customary mechanisms should be supported and improved to provide fair, gender-sensitive, and accessible avenues for promptly addressing conflicts over land, fisheries, and forest tenure rights.

Combined, these strategies provide a comprehensive, practical roadmap for sustainable, inclusive and conflict-sensitive land governance in Zambia. They also demonstrate the relevance and replicability of the Chamuka Chiefdom Model for addressing land tenure challenges across diverse contexts.

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# THE LEGITIMACY OF ARMED GROUPS IN RESOLVING LAND CONFLICTS IN SOUTH KIVU (DEMOCRATIC REPUBLIC OF THE CONGO)

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**Keywords:**

*Land conflicts,  
Land governance,  
Ruzizi Plain*

## Abstract

This article analyzes the phenomenon of local actors resorting to armed groups to resolve land conflicts in the southern region of the Democratic Republic of the Congo (Democratic Republic of the Congo). The various interventions of these groups in the allocation of agricultural land and the settlement of land disputes contribute to the emergence of new regulatory practices and reshape local land and political dynamics. Based on field data, this article seeks to partially deconstruct prevailing stereotypes that associate armed groups in eastern DRC solely with deadly violence. Moving beyond a normative approach, armed groups are examined as emerging forms of political authority that complicate land governance but may also, in the eyes of local populations, effectively fulfill conflict resolution functions traditionally linked to land tenure security. The gun, therefore, has arguably become an essential tool – at least from the perspective of rural communities – in securing the conditions necessary for farming and, by extension, for survival.

## 1. Introduction

The involvement of armed groups in land regulation, the installation of certain local chiefs in positions of power, and the resolution of social conflicts continues to complicate land and political dynamics in South Kivu, Democratic Republic of the Congo (Democratic Republic of the Congo) (M'munga Assumani, 2023). In fact, some actors turn to both state and non-state armed forces – within the limits of their access – to secure land rights when conflicts arise (Mushagalusa Mudinga and Ansoms, 2015). On this point, Chris Huggins (2010) argues that during the war in eastern Democratic Republic of the Congo, land issues were a key driver in the mobilization of armed groups. This was particularly evident when local political elites exploited the breakdown of public authority to recruit armed individuals capable of seizing land. These groups often assumed *de facto* land governance roles by issuing land titles to their supporters (Huggins, 2010).

Moreover, in a context where the military, political, and economic networks supporting non-state armed forces are neither prosecuted nor dismantled (Verweijen and Iguma Wakenge, 2015), Jason Stearns *et al.* (2013) demonstrate that some armed groups exert significant political and economic control over their local strongholds and are reluctant to relinquish this power. The political crisis and successive wars in the DRC have contributed to the emergence of alternative forms of authority and socio-economic regulation, in which armed groups play a central role (Vlassenroot, 2008). These groups are repositioning themselves within the local political arena, trading part of their original militant agenda for a more institutionalized role as new forms of political authority (Mushagalusa Mudinga and Nyenyezi Bisoka, 2014), using armed violence to assert power in the resolution of land disputes.

In other words, beyond securing land for their own ethnic groups, armed groups have expanded their sphere of intervention to include the protection of individual land rights and broader domains of local governance (M'munga Assumani, 2020). Increasingly, when land disputes remain unresolved, local actors turn to these groups to guarantee access to land.

As a result, both customary and state land authorities are confronted with complex local configurations. Analyzing these dynamics offers a more nuanced understanding of the population's relationship with armed groups and the state in the governance of local land affairs.

To fully grasp the complexity of armed group interventions in land conflict resolution, we draw on the concept of "governance through violence" (Grajales, 2016). The literature shows that public authority is no longer monopolized by the state but is shared with various societal actors: tribal leaders, political figures, gang leaders, armed groups, or rebel movements (Gayer, 2016; Debos, 2016). Adam Baccko and Gilles Dorransoro (2017) add that "civil war results in the loss of this monopoly through violent contestation, leading to a situation of divided sovereignty." In the Colombian context, Jacobo Grajales (2016) shows how paramilitary violence facilitated the development of new domains of public intervention. Governance through paramilitary violence emerged in a setting where the state and armed groups co-produced political, military, and social order as part of efforts to defeat guerrilla forces. Acting on behalf of the state, paramilitaries used armed violence to impose their form of governance across all sociopolitical spheres in Colombia while promoting their own economic interests. This perspective on governance through violence will guide our analysis of armed group interventions in land conflict resolution in the Congolese local political context.

Governance through violence appears to be empirically grounded in 21st-century war-torn societies (Badie, 2016). Beyond state structures, Bertrand Badie argues that in contemporary societies – especially in the Global South – new wars are embedded in the fabric of society and decoupled from traditional political centrality. Armed violence thus becomes embedded in social spaces where warlords reposition themselves through ethnic, tribal, clan-based, or clientelist solidarities. The weaker the state, the more military, paramilitary, or militia-based actors assume basic allocation functions within society (Badie, 2016; Gayer, 2016). In this sense, the assumption of political functions by paramilitary, rebel, or militia actors forms the basis of governance through violence in so-called war-torn societies, including the Democratic Republic of the Congo, Colombia, Liberia, Sierra Leone, the Central African Republic, Somalia, Afghanistan, South Sudan, Mali, and Burkina Faso (Badie, 2016).

The concept of governance through violence also leads us to revisit the notion of public authority (Lund, 2006). According to Christian Lund, public authority can be understood as the outcome of power exercised by various local institutions and imposed by external ones, in relation to the idea of the state. The exercise of authority is closely tied to the legitimacy of the institution in question – not only because an institution must be legitimate to wield authority, but also because effective authority involves specific claims to legitimacy (Lund, 2006). In this sense, it is important to emphasize that the legitimation of public authority takes many forms, but territorialization – through the demarcation and assertion of control over a geographic area – offers a particularly powerful language of authority (Lund, 2006).

Moreover, whether by deliberate intent or by circumstance, the political practices that constitute public authority operate across multiple registers – from subtle idioms to more coercive means – often in paradoxical combination (Lund, 2006).

From this perspective, the coexistence of multiple forms of public authority can give rise to overlapping or intertwined territorialities, especially in contexts marked by institutional pluralism and competing actors seeking to assert themselves within the local political arena. In such settings, the manipulation and negotiation of rules result in unpredictability, inconsistency, paradox, and ultimately institutional incongruity. These overlapping and often contradictory relations reflect the rivalries among institutions of public authority over local political power (Lund, 2006). Viewed from this angle, state institutions, customary authorities, armed groups, and related entities may coexist, overlap, clash, or disqualify one another in the governance of land. This institutional entanglement reflects a complex political context where neither the state nor customary systems dictate the rules of land conflict resolution; instead, authority lies with whichever institution offers the most effective access to land security—often placing armed groups at the center of the equation (Laurent, 2013).

In light of the above, the objective of this article is to understand the factors that shape the legitimacy of armed groups' authority in resolving land conflicts in South Kivu, despite the existence of competent state institutions. The article is structured in three parts. First, I describe the ethnographic fieldwork and research methodology. Second, I examine the dynamics of land governance in the Ruzizi Plain. Third, I trace the interventions of armed groups in land conflict resolution in the Ruzizi Plain.

## 2. Ethnographic setting and methodology

As a reminder, this section describes the ethnographic setting, and the methods used for data collection.

At the turn of the nineteenth and twentieth centuries, two approaches were used in Poland to comprehensively reorganize the land ownership boundaries. The first approach, already known as "land consolidation", corresponds to the contemporary approach to this tool. For a long time, another approach was also used, called "land colonization", during which buildings belonging to landowners were moved out of villages (or new ones were built) to create farms consisting of a single plot. Such actions could be implemented practically only in cases where the buildings were of low value and built of wood.

### 2.1 Ethnographic setting

The Ruzizi plain stretches across the territories of the Democratic Republic of Congo, Rwanda, and Burundi. The Ruzizi River forms a natural border between these three countries. The Congolese side covers 46 percent, or 800 km<sup>2</sup>, of the total 1,750 km<sup>2</sup> area of the Ruzizi Plain (Amani Roger, 2014). On the Congolese side, part of this plain lies within the territory of Walungu (Kamanyola), and a larger portion within the territory of Uvira. The Congolese section of the Ruzizi Plain studied during fieldwork is bounded to the north by Rwanda (the Bugarama Plain), to the south by Lake Tanganyika into which the Ruzizi flows, to the east by the Ruzizi River separating it from Burun-

di (the Imbo Plain), and to the west by the Mitumba mountain range (Amani Roger, 2014). The territory of Uvira, where most of the Ruzizi Plain is located, covers an area of 3 148 km<sup>2</sup> (Muchukiwa, 2016).

It consists of three administrative chiefdoms: the Bafuliiru, the Bavira, and the Barundi, now referred to as the Ruzizi Plain chiefdom. The names of these chiefdoms correspond to the identities of the ethnic groups that were territorialized by the Belgian colonial administration in 1928 (Muchukiwa, 2016). The socioeconomic life of the population in this region is closely linked to land, and depends on agriculture and the rearing of small and large livestock. Agriculture is subsistence-based, with the most commonly cultivated crops being cassava, maize, rice, sweet potatoes, peanuts, beans, and eggplants (Amani Roger, 2014). These crops serve primarily for subsistence, with any surplus transported to the cities of Bukavu and Uvira.

It is also important to note that the period from 1996 to the present has been marked by two wars that have affected the DRC. The first, in 1996, was led by the Alliance of Democratic Forces for the Liberation of Congo, and the second, in 1998, was launched by the Congolese Rally for Democracy (Kabamba and Lanotte, 1999; Mamoudou Gazi-bo, 2010). These two wars appear to have led to the proliferation of self-defense armed groups that at times took the place of the national army in Kivu in an attempt to protect the integrity of the national territory (Kabamba and Lanotte, 1999; Willame, 2010). In other words, the two Congo wars were marked both by incursions carried out by regular armies from neighboring countries and by movements of population and more or less autonomous armed groups. These wars triggered a perception of invasion, which led to the formation of community-based self-defense groups in eastern Congo (Vlassenroot, 2013). These groups attempted to resist external aggression, particularly from Rwanda (Willame, 2010).

The Ruzizi Plain is indeed one of the indisputable epicenters of internalized armed conflict in Kivu and, more broadly, throughout the Great Lakes region of Central Africa from the colonial period to the present (Verweijen *et al.*, 2020). In this relatively recent history – marked by armed conflicts, interethnic tensions and violence around territorial issues, power struggles, and access to land – social relations within the region have become increasingly complex. The Ruzizi Plain has become one of the main locations for the settlement of armed groups (Muchukiwa, 2006). Some of these groups have become key actors not only in the resolution of land conflicts, but also in many other sociopolitical spheres. This explains why this region was chosen for the study: it is home to several armed groups that local populations frequently turn to for resolving land disputes.

### 2.2 Methodology

This contribution is based on a twelve-month ethnographic investigation conducted between 2019 and 2022 across two distinct field sites. Data from the first site were collected between November 2019 and May 2020, and again in September 2020. During this period, the research focused primarily on a few key individuals: actors involved in land conflicts, members of both demobilized and active armed groups, and other interlocutors whose significance emerged directly through in situ experience. Data for the second field site were collected between October 2021 and January 2022. On that occasion, I returned to

some interlocutors I had already met during the first phase in order to complete my notes, while also expanding the scope of inquiry to new participants. This allowed me – among other things – to gather more nuanced and contrasting accounts regarding the involvement of armed groups in local land governance.

To produce data in the field, I used participant observation, semi-structured interviews, group interviews, and written sources. As for participant observation, I spent twelve months in the villages of the Ruzizi Plain, with an additional month in Bukavu, working with national organizations involved in the non-violent management of land conflicts. I visited families whose members had been kidnapped by armed groups and held for ransom, as well as families who had lost relatives due to land-related disputes. These visits helped me understand how armed groups engage in the economy of armed violence and how land conflicts lead to loss of life. I also took part – unexpectedly – in the resolution of land conflicts by judicial officers from the national police and by national NGOs. I learned how police officers settle land disputes, often using a form of arbitration that follows a win-lose logic and is at times based on kleptocratic practices (i.e. corruption). Within a national NGO working on the non-violent resolution of land conflicts, one staff member offered me a speaking slot during workshops on conflict transformation between landowners and land tenants.

The second method used during fieldwork was individual semi-structured interviews. In this approach, the researcher relies on a set of relatively open-ended guiding questions aimed at eliciting information from interlocutors (Quivy and Campenhoudt, 2011). The interviews were conducted individually, in-depth, and in confidence. A total of 80 semi-structured individual interviews were carried out, each lasting between one and three hours. Regarding group interviews, Olivier de Sardan (2008a) notes that they can be impromptu, unintentional, or not initiated by the researcher. At the outset of fieldwork – and given the sensitivity of the research themes – it was unclear whether group interviews would even be feasible. As field immersion progressed, opportunities for such interviews gradually arose with certain interlocutors. In total, 14 group interviews were conducted, with the number of participants ranging from 2 to 12.

The final method of data production was documentation. In this regard, I drew on books, academic articles, dissertations, and theses relevant to the research topic in order to place field data in dialogue with existing literature. The following section will attempt to highlight the key issues related to land governance in the Ruzizi Plain, South Kivu.

### 3. Land governance issues in the Ruzizi Plain

During and after the colonial period, the traditional land tenure system co-evolved with the modern land tenure system in the Ruzizi Plain. In other words, two types of land governance coexist in this region: the traditional system based on local (ethnic) communities, and the modern system based on formal land laws (Muchukiwa, 2016). In customary land governance, authority over land derives from the role of the chief within a specific ethnic community (Huggins, 2010;

Muchukiwa, 2016). According to local tradition, land is the collective property of the community, represented by the village chiefs. These village chiefs, known as *batungwa*, are appointed by the *mwami* on the basis of their age and wisdom. The *batungwa* are both village and clan leaders. They are also land chiefs, referred to as *notables*, who report to the *mutuali*, the head of the larger administrative unit (Muchukiwa, 2016). Village chiefs exercise customary political authority and control over village land resources, after paying customary dues – *tulo* – to the *mwami* (the “king”).

Through the payment of these customary dues, the village chief expresses his allegiance and submission to the group chief and the *mwami*. Within the village, it is the families who must pay customary dues (land taxes) each year to the local chief to renew their customary land rental agreements. In other words, village chiefs hold customary use rights to land and can themselves grant parcels to newcomers who express a need for land. To acquire land in the Ruzizi Plain, interested parties make an oral request to the village chief. If there is vacant land, they pay a land tax known as *kabindi kamavu*, meaning “jug of beer or drink,” paid either in kind or in cash to the village chief. No official document is issued by the customary authority. Everything is handled orally.

It is therefore important to note that the land context of the Ruzizi Plain is characterized by the conflicting coexistence of different land tenure systems: the customary system (in which land authority derives from the role of customary chiefs), the modern system (which relies on national laws and regulations and is managed by the public land administration through formal land acquisition procedures and cadastral records), and the informal system (which encompasses situations where the state is absent and where the customary system does not apply) (Huggins, 2010). It is within this informal land system that the violence of armed groups emerges most visibly – mobilized by local actors seeking to secure access to land. The final section of this contribution highlights the involvement of armed groups in resolving land conflicts in the Ruzizi Plain.

## 4. Interventions of armed groups in the resolution of land conflicts in the Ruzizi Plain

This section is based on two points. First, I will describe the perceptions of the local populations regarding the factors that lead some inhabitants of the Ruzizi Plain to resort to armed groups in the context of land conflict resolution. Second, I will outline the populations' views on the legitimacy of the security strategies employed by armed groups within land governance dynamics.

## 4.1 Populations' perceptions on the use of armed groups in the resolution of land conflicts

The ethnographic accounts described in this subsection reveal that both customary and state authorities are no longer above the fray; they are also stakeholders in land issues. In other words, armed groups continue to impose themselves in the resolution of land conflicts in place of the competent institutions.

The following accounts are telling:

*"The inhabitants resort to armed groups for the following reasons: the State is less absent than interested; no one can touch them wherever they settle; they want to control the land because they have found business in it; the inhabitants no longer trust the capacity of the national army, even though it could be the security machine; some military and police officers collaborate with armed groups. The population often resorts to armed groups because they quickly resolve certain problems existing in the area. A large part of the population fears armed groups more than the military and police. This fear results in solutions being found quickly"*

**Interview in the Ruzizi Plain, November 11, 2021**

*"Most people resort to armed groups to find solutions to land conflicts following the incapacity of the Congolese State, which does not want to put an end to the activism of these armed groups. Some inhabitants consider that armed groups rule quickly on land conflicts, using intimidation instead of turning to the Congolese State"*

**Interview in the Ruzizi Plain, November 10, 2021**

Similarly, other interviewees shared the following remarks:

*"The favor we have with armed groups is that they administer justice at an affordable price. With the State, one might be asked for USD 100 to secure my field, while with armed groups, USD 20 is enough to secure it. Another favor of the armed groups' judgments is that their solutions are quick. We call them bakafanya mbio (they settle land conflicts quickly when we resort to them). In our area, we have two governments: the bush government and the city government (here where I am with you). I support the bush government (armed groups), because they resolve land conflicts justly even though they are thieves"*

**Interview in the Ruzizi Plain, November 23, 2021**

*"The inhabitants resort to armed groups to find quick solutions. It is a government that rules quickly on land conflicts and many other problems of the population. Armed groups get involved in securing land to seek money. Both complainants and accused pay money to armed groups"*

**Interview in the Ruzizi Plain, November 17, 2021**

*"Armed groups are a shortcut to securing land. Actors in land conflicts resort to them to secure their lands because the land law does not conform to the expectations of the local population; the procedure to secure land in the Democratic Republic of the Congo is long and costly. At the village level, the elders who rule on conflicts through the lubunga (consultation framework) are also influenced by actors who are rich. While being in the bush,*

*armed groups enforce also the law in the city, because security services have failed their mission"*

**Interview in the Ruzizi Plain, November 26, 2021**

From the above accounts, we note that actors in land conflicts resort to armed groups following the passivity of the State (corruption of authorities responsible for local land governance and costly, lengthy procedures to secure land), the promptness of armed groups in resolving land conflicts ("*bakafanya mbio*"), the impunity observed towards actors who engage armed groups, the legitimization of violence by armed groups by some local actors, the clandestine collaboration of armed groups with certain national army soldiers, and the mismatch between modern land law and customary land law and local land practices.

## 4.2 Populations' representations of the legitimacy of group strategies in land security issues

The descriptive analysis based on the accounts of my interlocutors allows me to highlight the strategies through which armed groups legitimize their authority in resolving land conflicts at the local level:

*"Armed groups apply default judgment because most of them are uneducated. They act on intuition. The inhabitants legitimize their judgment because they are fearful. Under these conditions, the peasants fully agree that the weapon secures the land to prevent their heads from being taken – 'kichwa inaenda'"*

**Interview in the Ruzizi Plain, November 18, 2021**

*"One must comply with the words of the armed groups. If one does not obey their way of governing the land, they use violence. Armed groups manage to kill if one of the actors in the land conflict refuses to recognize their way of settling the conflict. Before killing, they proceed with kidnapping to take the actor who disobeyed their law into the bush, to impose a ransom. If the actor does not pay the ransom, the armed groups kill the kidnapped person"*

**Interview in the Ruzizi Plain, November 10, 2021**

*"The strategies used by armed groups include telephone intimidations, kidnapping one of the people in conflict. They legitimize their authority by force because they have weapons"*

**Interview in the Ruzizi Plain, October 26, 2021**

*"Armed groups often wait for the conflicting actors in their fields to terrify them. Armed groups have more power than other authorities because they use weapons in securing the land. They also use phone calls and messages"*

**Interview in the Ruzizi Plain, November 21, 2021**

*"Armed groups write and send letters slipped under the accused's door forbidding them to cultivate someone else's land. They use kidnappings, phone calls and messages, and killings. Sometimes, armed groups delegate elder wise men to tell a land conflict actor to leave another's field. I am convinced that a weapon secures the land"*

**Interview in the Ruzizi Plain, November 17, 2021**

From these accounts, it appears that the fear of the population towards armed group violence, the default judgment (judgment by armed groups in the absence of one land conflict actor), the intuition of armed groups, obedience to the armed groups' law, killings, harassment and telephone intimidations, kidnappings for ransom, letters slipped under doors, delegation of elder wise men to advise a conflict actor, or surprise visits to contested lands are tactics that armed groups mobilize to assert authority in land conflict resolution. It becomes clear that armed groups deploy armed violence to reposition themselves in land issues within the local political arena, and this violence is deeply embedded in the populations' imagination. Similarly, to legitimize their authority in land security in favor of certain local actors, armed groups constantly mobilize draconian strategies, as evidenced by the following interlocutors:

*"Sometimes, armed groups intimidate the accused by placing posters on a tree in the field forbidding them from stepping onto the field supposedly belonging to a farmer favorable to them"*

**Interview in the Ruzizi Plain, November 11, 2021**

*"Armed groups kidnap land conflict actors in their fields to demand money. After getting the money, armed groups order the accused never to return to the fields if they do not want their heads to be taken – 'kichwa inaenda'"*

**Group interview in the Ruzizi Plain, November 17, 2021**

*"To impose their governance at the village level, armed groups use intimidation, carrying weapons, collaboration with some population members, kidnappings, killings, and whipping. They also make the accused sleep in holes they themselves have dug"*

**Interview in the Ruzizi Plain, November 11, 2021**

Indeed, armed groups, as more or less the institution in charge of land matters, constantly mobilize violent tactics to impose their authority locally. The above accounts particularly highlight kidnappings for ransom, killings, posters stuck on trees in contested fields, phone calls, imprisoning the accused in holes they dig themselves, intimidations, whipping, benevolence to show they defend the rights of the people, collaboration with some inhabitants, creation of positions in contested fields, destruction of tractors belonging to conflict actors deemed unfavorable to the justice of armed groups, and forbidding people from entering fields.

From the above, it is important to clarify the term "kichwa inaenda." Kichwa inaenda is a Swahili expression that expresses the extreme violence of armed groups towards land conflict actors supposedly targeted by their justice. Kichwa inaenda ("take the head off") means that any actor in a land conflict or other conflicts who does not obey the armed groups' law must be executed. Field accounts reveal that for them, it is the firearm that enforces the law. This is an informal land system (without custom and without the State) where land is regulated at the point of the gun and through land taxes. Consequently, we notice that some local actors trust armed groups more than customary chiefs and the State, notably because of their speed in arbitrating land conflicts. It is clear that land law, whether customary or statutory, is distorted by armed groups in order to arrogate to themselves, through armed violence, the benefits linked to the rents captured from land conflict arbitration. Therefore, land security should not be seen as official or customary, because it involves different political spaces where armed groups occupy a central place.

This analysis somewhat aligns with the contributions of Gillian Mathys and Koen Vlassenroot (2016), who discuss concrete cases of armed groups' involvement in land mediation or arbitration of land conflicts in Bunyakiri, Kalehe territory, South Kivu.

These are various factions of the Raia Mutomboki groups ("angry citizens"), who attempt to assert their right to intervene as mediators in land conflicts between individuals. On this subject, Emery Mushagalusa Mudinga and An Ansoms (2015) add that state and non-state armed forces are mobilized by actors to intervene in land access and control in South Kivu. Similarly, Chris Huggins (2010) indicates that during the war, customary authorities encouraged young people to take up arms to protect community lands; these militias temporarily took charge of land administration and issued property titles, which are sometimes currently contested.

These are informal property titles – "small papers" – that armed groups issue to farmers who have paid land tax for land rental or an agricultural campaign. These small papers allow them to rigorously organize land tax collection in rural areas. Indeed, this practice consists of identifying land tax contributors to enable them to secure their land access when armed groups return to carry out forced tax collection on peasant lands. During collection, any farmer who does not have a land title issued by the armed groups risks being kidnapped for ransom. Under these conditions, the land ransom may exceed the land tax, because these armed groups impose fines on any farmer kidnapped for not observing their practical norms in local land governance. Thus, the small papers issued by armed groups in the local political arena fit into the theoretical debate on the use of writing in land transactions in rural Africa (Lavigne Delville, 2002a).

Furthermore, other contributions link the nature of the State and the land issue in the Democratic Republic of the Congo. These contributions show that many land disputes are not really about land, but rather manifestations of the governance crisis prevailing in Eastern Congo (Mushagalusa Mudinga and Nyenyezi Bisoka, 2014; Mathys and Vlassenroot, 2016; Vlassenroot, 2013; Huggins, 2010; Bisa Kibul, 2019). They indicate that land conflict problems should be seen as governance and public authority fragility issues. Indeed, in the absence of a capable or impartial State to adjudicate land conflicts, local actors turn to non-governmental institutions and other social spaces that enjoy stronger local influence or legitimacy than the State. On this point, Emery Mushagalusa Mudinga and An Ansoms (2015) add that following the widespread practice of resorting to armed forces in land issues in South Kivu, the debate must be oriented towards a State crisis. According to these two authors, this crisis manifests itself in the failure and incapacity of institutions in their sovereign roles.

In view of the above, it should be noted that armed groups have made land a hub of accumulation to consolidate their authority in the local political arena. It is in this perspective that armed groups derive economic profits from their interventions in resolving land conflicts and in collecting land tax or land fees. It is clear that armed groups have managed to convert their armed capital into political and economic capital to favor their social ascent in the local political arena (Chebli, 2022; Hoffmann and Vlassenroot, 2014).

## 5. Conclusion

Based on an empirically grounded analysis, this contribution reveals that armed groups legitimize their authority in land regulation through armed violence and their speed in resolving land conflicts, operating alongside customary and modern institutions whose civil jurisdictions are delayed due to corruption. In other words, this is a governance of land by armed violence. This leads us to speak of "armed land law," which relates to legal anthropology (Rouland, 1990; Vanderlinden, 2013). It is well known that legal anthropology also focuses on practical norms or pragmatic rules invented by local actors alongside customary and state norms (Olivier de Sardan, 1995; Carbonnier, 1978), as is the case with the use of armed violence in land governance in South Kivu. I therefore support the idea that armed violence is a regulatory practice of land tenure, especially since a local land system requires a pragmatic approach that pays particular attention to the actual practices of actors (Lavigne Delville, 2002b).

The recourse to violence by armed groups in resolving land conflicts thus falls under pragmatic, unformulated rules but recognized in practice within the local political arena. From this perspective, it is the researcher's responsibility to uncover, expose, and analyze them based on actors' practices and their discourse (Olivier de Sardan, 2008b), as is the case with the bottom-up analysis mobilized in this contribution through the accounts of my interlocutors. Armed groups then redefine themselves as "enforcers of justice," mobilizing armed violence or other forms of arbitrariness such as the imposition of fines called "land ransoms" on those who violate their practical norms regarding land. Consequent to the constant expansion of the phenomenon of reinvention of land practices by armed groups, a form of "land security through armed violence" emerges in rural South Kivu.

This goes hand in hand with competition between different forms of political authority that seek to govern rural land and capture land rents, among which armed groups have ended up occupying a central place. Hence, I argue that the rifle has certainly become an indispensable instrument from the perspective of rural populations in the search for and attainment of the security conditions necessary for agriculture and thus for life.

Indeed, in a socio-political context where local populations turn to armed groups to regulate complex situations for which the state is unable to provide an effective solution, these armed groups must be understood as new forms of political authority that challenge the state's authority in land governance. Based on the knowledge produced on the ground, this article allows us to deconstruct – at least in part – the clichés associated with deadly violence exercised by armed groups in Eastern Democratic Republic of the Congo. Beyond a normative approach, armed groups must be analyzed as new forms of political authority that complicate land governance and can, autonomously, effectively carry out, in the eyes of the populations, the tasks of resolving land conflicts that refer to land security.

Ultimately, it should be noted that this article constitutes a significant contribution that prompts reflection on the role of armed violence in land governance. It is clear that firearms are increasingly mobilized by local actors in land regulations outside of the supposedly competent normative frameworks. However, further reflection is needed on aspects not developed in this article, notably the limits of resolving land conflicts through armed violence, the sustainability and legitimacy of informal land titles issued by armed groups, and the co-evolution of armed groups and the state in land governance.

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# THE ROLE OF MULTI-LEVEL AND MULTI-ACTOR PARTNERSHIP IN ADDRESSING LAND CONFLICTS

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## Abstract

Land access is a critical foundation for human development, shaping food security, livelihoods, and social identity. Nevertheless, it is also a frequent source of conflict, often linked to weak governance, unequal power relations, and entrenched social inequalities. This article examines the potential of the dialogic multi-stakeholder approach to address land-related conflicts by fostering dialogue, empowerment, and long-term collaboration among diverse actors, including governments, civil society, the private sector, and grassroots organizations. Drawing on the Land for Life Initiative, implemented across Ethiopia, Burkina Faso, Liberia, and Sierra Leone, the article highlights how Multi-Actor Platforms (MAPs) have advanced inclusive land reforms and behaviour change. These advances align with international standards such as the Voluntary Guidelines on the Responsible Governance of Tenure (VGGT). While challenges such as representation, scalability, and sustainability persist, the initiative demonstrates that systemic change through dialogue and trust-building is key to addressing both specific disputes and broader conflict catalysts.

## 1. Introduction

Land access is frequently contested, as competing interests—such as those of communities, investors and state authorities—clash at local and regional levels. These disputes matter because secure and equitable land rights are closely linked to food security, rural livelihoods and social stability. In many low- and middle-income countries, most people depend directly on land for subsistence and income (FAO, 2022; World Bank, 2024). Resolving such conflicts is therefore essential for advancing sustainable development.

Conflicts over land vary widely, from neighbourly disputes to large-scale agricultural investments impacting entire populations. They often stem from systemic and structural imbalances—persistent disparities embedded in economic, social, political or environmental systems. These imbalances arise when policies, practices or mechanisms favour certain groups, leading to persistent inequality and conflict. Systemic drivers of land conflict include corruption, marginalization, power imbalances, inadequate legal frameworks, and limited capacity or awareness. Addressing these root causes requires systemic change. The Land for Life Initiative has demonstrated that multi-stakeholder partnerships can effectively tackle land conflicts at various levels through systemic approaches.

To address land-related disparities and conflict, the Committee on World Food Security (CFS) adopted the Voluntary Guidelines on the Responsible Governance of Tenure (VGGT) of Land, Fisheries and Forests in 2012. These guidelines encourage multi-stakeholder partnerships to implement their principles, inspiring projects such as the Land for Life Initiative. Launched in 2017 by Welthungerhilfe and local partners in Ethiopia, Burkina Faso, Liberia, and Sierra Leone, the initiative is funded by the German Federal Ministry for Economic Cooperation and Development (BMZ). It uses Multi-Actor Platforms (MAPs) at national, district, and community levels to promote inclusive land reforms aligned with international standards, including the VGGT and the Right to Food. The project empowers civil society and marginalized groups—such as women and youth—to foster equal

partnerships and decision-making over land. The article highlights that systemically induced conflicts—such as disputes between communities and investors, denied land rights to women, or inadequate local implementation of laws—can be resolved or mitigated through dialogue, empowerment, and long-term collaboration. Among the key actors are governments, civil society, the private sector, and grassroots organizations. Multi-stakeholder dialogue, particularly when fostering long-term relationships, trust, and generative conversations, holds significant potential in this regard.

The Land for Life Initiative's seven years of implementing multi-stakeholder partnerships have provided valuable insights into what makes dialogic partnerships succeed or fail in resolving land conflicts and driving systemic change. This article explores these insights, including the approach's concepts, examples, potential, enabling factors, and limitations.

## 2. Approach

Over seven years, the Land for Life Initiative has distilled key lessons on what influences the success or failure of multi-stakeholder partnerships. It has also examined their capacity to transform policies and practices, and their role in tackling the root causes of land conflicts. These experiences are summarized in the Land for Life Toolbox, which details the approaches and tools developed and adapted throughout the initiative (Land for Life, 2025).

While dialogue is a common conflict-resolution tool, the initiative found its impact grows significantly when trust-building and strong relationships are prioritized alongside the quality of the dialogue itself. The article examines the potential and limitations of this approach for addressing land-related conflicts.

A distinctive feature of the Land for Life approach is the establishment of multi-stakeholder partnerships at both national and decentralized levels. These partnerships foster inclusive governance, ensure that decision-making reflects local realities, support local policy implementation, and build trust among conflicting parties such as investors, traditional authorities, and small-scale farmers.

To make such collaborations successful, the initiative identified seven key principles. These include context-specific partnership design, alignment with international frameworks such as the VGGT, representation of both marginalized and influential actors, and the importance of collective leadership. They also emphasize adaptive management and the recognition that a neutral secretariat is essential to upholding these principles.

At the centre of this framework is the principle of Dialogue for Change—the focus of this article. Dialogue for Change is a process-oriented exchange of ideas, thoughts, and emotions aimed at fostering understanding, mutual respect, and collaboration to drive transformation in land governance. Its key components are:

- Shared analysis and understanding: diverse perspectives converge to address complex issues.
- Collaborative problem-solving: participants develop solutions and make informed decisions together.

- Joint advocacy: shared positions are communicated using evidence-based persuasion.
- Strengthening relationships and leadership: dialogue fosters empathy, rapport, and collective leadership.
- Conflict resolution: active listening and constructive communication address disputes and misunderstandings.

The initiative seeks to achieve generative dialogue. As shown in Figure 1, dialogue can progress from one-sided exchanges to collaborative problem-solving, where stakeholders work as partners. In many cases, dialogue is initially characterized by one-sided, legally prescribed consultations or heated debates aimed at convincing the other side of one's own opinion. The goal of Land for Life is to elevate the conversation to a higher level—reflective and, eventually, generative dialogue.

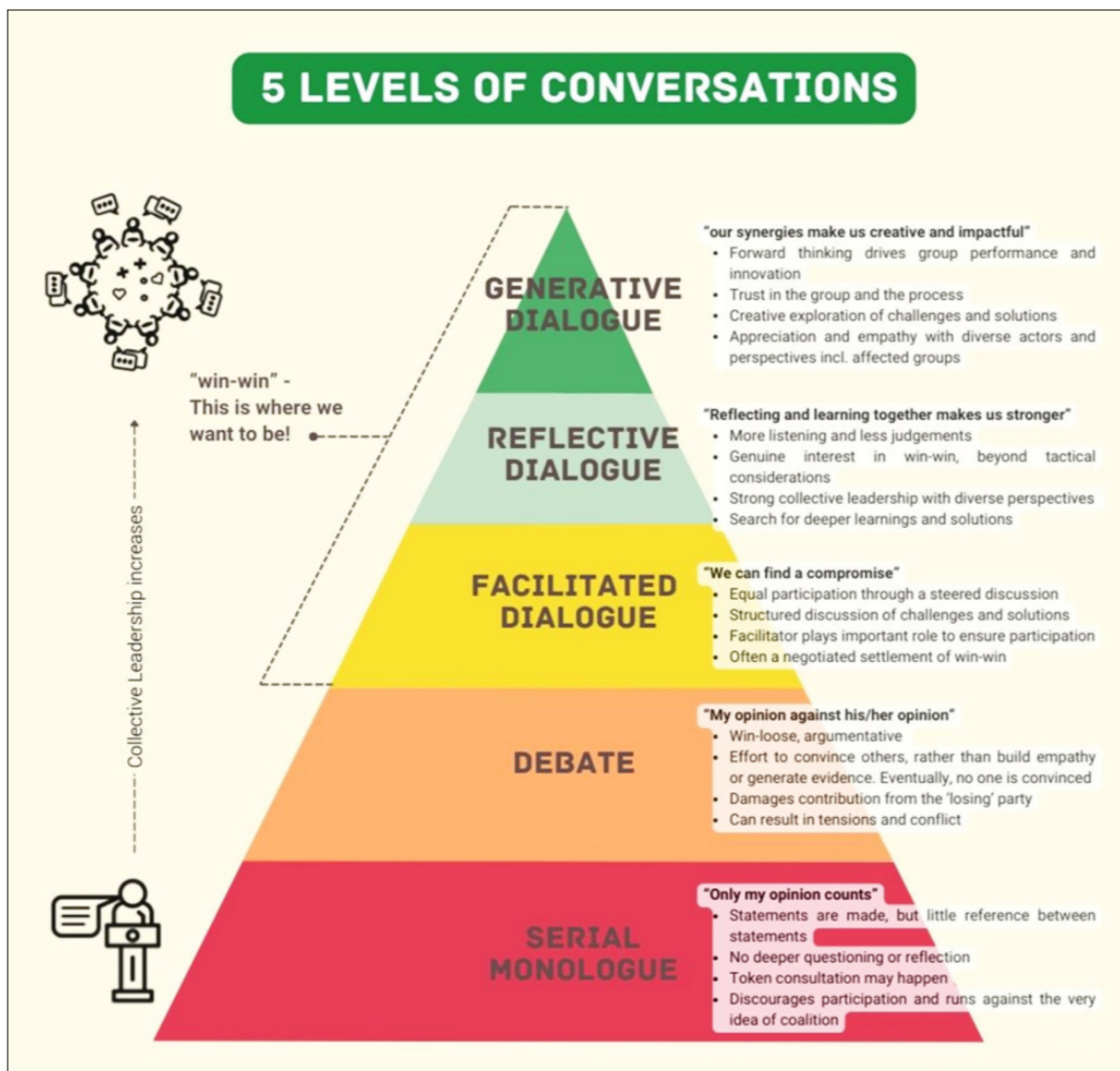
Such a desired form of dialogue is expressed through a stronger focus on the common problem or goal, on listening, understanding, and empathy for other perspectives, and a genuine interest in win-win solutions. In practice, there are different levels of conversation

between those two extremes. A dialogue that begins as a monologue or heated debate gradually improves through regular, long-term exchange and collaboration, guided facilitation, and trust-building processes.

Even if the highest level of generative dialogue is rarely fully achieved, it is already a significant success when dialogue is raised to a level that enables equal participation and structured discussion of problems and solutions. This progress also allows the negotiation of compromises. Facilitating multi-actor partnerships, therefore, requires a careful balance of idealism and pragmatism.

At Land for Life, consistent platforms engage participants over time, evolving from recognizing a need for change to developing joint visions and plans, expanding partnerships, and achieving meaningful shifts in practices or policies. Furthermore, establishing and connecting different levels of multi-actor partnerships (MAPs — such as national-level MAPs that address reform processes and local partnerships that tackle on-the-ground realities and conflicts — enhances the quality, legitimacy and implementation of policies.

Figure 1. Stakeholder dialogues framework for achieving common goals



## 3. Dialogue for change in practice

### 3.1 How structured dialogue addressed community-investor conflicts in Ethiopia

#### I. Background and context

Ethiopia's foreign direct investment in agriculture over the past two decades has brought economic opportunities. It has also generated conflicts with local communities over land use, compensation, and environmental impacts (Cochrane and Legault, 2020). Land for Life Ethiopia addresses these challenges through Community-Investor-Local Government Forums (CILGFs).

Regions like Lume Woreda in Oromia, known for their agroclimatic potential, have attracted international investors to cultivate high-value export crops such as fruits and flowers. However, these investments have often occurred in weak governance contexts with limited community participation, creating significant challenges. Many local farmers were displaced with little or no compensation, leaving them without income and fostering widespread distrust and frustration. Environmental concerns, including chemical pollution from agricultural practices, further fuelled grievances. Even when investors implemented Corporate Social Responsibility (CSR) measures, communities claimed their efforts were top-down and insufficient.

The situation resulted in a complex mix of conflicts: disproportionate land loss, environmental degradation, and mistrust among communities, investors, and local authorities. Addressing these issues required a structured and inclusive approach.

#### II. The approach: community investor local government forums

To tackle these conflicts, civil society organizations such as Land for Life Ethiopia, with support from international partners including Welthungerhilfe, have established Community-Investor-Local Government Forums (CILGFs). The approach was developed by GIZ and later adopted and implemented by Land for Life.

The initiative began with a thorough context analysis. It examined regional and district-level conditions related to investment practices, disputes, land rights and environmental protection. This analysis informed initial stakeholder engagement and laid the foundation for trust-building activities. These included extensive stakeholder dialogues that focused on developing a shared understanding of the problems and issues at stake, rather than attempting to solve them immediately. The engagement was crucial for building trust and encouraging participation in the multi-stakeholder dialogue.

Another emphasis in this initial phase was capacity strengthening. Joint training sessions on land rights, agricultural investment and the role of state actors in protecting citizens' rights were provided to both community members and local government officials. This knowledge-building phase aimed to create a more level playing field for discussions and to empower all stakeholders to engage effectively.

The forum itself was established through a joint meeting to launch the dialogue process and to clarify a shared vision and each actor's responsibilities. The CILGF in Lume includes representatives from one investor, five local government entities, traditional local elders and 18 community members. Regular monthly dialogues, facilitated by experienced mediators, form the core of the CILGF's activities. Owing to the initial groundwork in building trust, common understanding and capacities, and the ongoing nature of dialogue, sensitive and complex yet pressing issues and conflicts could be addressed over time.

#### III. Outcomes

The introduction of the CILGF in Lume Woreda has had varying impacts on long-standing land-related conflicts between communities and investors.

One concern is community empowerment. Through the entrenchment of legal knowledge among community participants, their confidence in articulating their rights and negotiating on more equal terms with investors and local government officials has increased. While sensitive questions around compensation payments remain unresolved, there have been tangible improvements for communities on the ground. These include improved working conditions, more job opportunities for local youth and the elevation of corporate social responsibility projects.

Conversely, the process has also led to behavioural changes among investors. They have become more responsive to community concerns, such as chemical pollution that had previously caused grievances. Investors have adopted better waste management practices and taken steps to minimize the impact of their operations on nearby water bodies and farmlands.

Most significantly, the forums have fostered a culture of conversation and mutual respect, creating a formal opportunity for frequent communication among stakeholders who had not previously communicated often or at all. This continuous involvement has led to increased trust among communities, investors and the local government, marking a shift away from the distrust and hostility that had existed before.

At the same time, the approach has limitations. So far, the scope of the intervention has not allowed for resolving historical grievances, particularly regarding compensation for expropriated smallholders, as these are complex and often overlooked in favour of current and future conflicts. Connecting different levels of dialogue presents challenges, such as linking the CILGF to national dialogue processes, thereby hindering its ability to influence higher-level policy reform and drive systemic change.

The long-term sustainability of CILGFs is uncertain, as they currently rely on support from the Land for Life initiative and are not financially supported or owned by public or private entities. Furthermore, the approach addresses a specific local context, and scaling it to encompass all conflict-affected regions remains a significant challenge.

## 3.2 Connecting local conflict resolution with national reform through multi-stakeholder dialogue in Sierra Leone

### I. Background and context

Land conflicts have long plagued Sierra Leone, with roots tracing back to the civil war (1991–2002). The Truth and Reconciliation Commission (TRC) identified unequal land allocation and resource access as significant contributors to the conflict. These issues intensified after the war as the country sought foreign investment to exploit its natural resources (TRC, 2002).

In the post-war period, international interest surged in agriculture, mining, and fisheries. However, land governance systems granting Paramount Chiefs significant authority over land led to non-transparent negotiations between chiefs and investors, marginalizing landowners with traditional rights. These unfair practices fuelled tensions between communities, traditional authorities, and investors, sometimes escalating into violent clashes that destabilized regions (Kpaka, 2024; United Kingdom Department for International Development, 2013).

Discriminatory practices against women, particularly widows and divorcees denied rights to the land they had worked, compounded these issues. The TRC called for reforms to end customary laws discriminating against women in ownership and inheritance. In urban areas, disputes often involved dual land sales and encroachments, while in rural areas, natural boundary erosion led to ownership conflicts. In 2022, Sierra Leone adopted two new laws—the National Land Commission Act and the Customary Land Rights Act. The reforms aim to modernize land governance, ensure gender equality, and address long-standing disputes related to customary land tenure.

### II. Approach: District multi-stakeholder platforms (DMSPs)

To address land conflicts, Land for Life, in partnership with stakeholders including FAO, has established and strengthened multi-stakeholder dialogue platforms at national and local levels. The National Technical Working Group (TWG) on land governance, created with FAO support during the implementation of the Voluntary Guidelines on the Responsible Governance of Tenure (VGGT), includes civil society organizations (CSOs), government agencies, private-sector representatives and traditional leaders.

Recognizing the need for localized dialogue, Land for Life initiated District Multi-Stakeholder Platforms (DMSPs) that involve local decision-makers, including government agencies, traditional authorities, CSOs, media and landowners. These platforms hold regular meetings and can convene emergency sessions to address emerging conflicts while also enhancing the inclusion of grassroots perspectives in the national TWG.

DMSP membership is institution-based and varies by district, with a steering committee guiding activities. The committee includes three permanent representatives (from government, CSOs and traditional authorities) and two non-permanent members (for example, media or grassroots representatives).

The DMSPs fulfil multiple roles:

- **Addressing local land conflicts:** DMSPs handle disputes raised through a district facilitator, who receives grievances and engages with communities. Issues are discussed during monthly meetings or through ad hoc subcommittees. Leaders of conflicting parties may be summoned, and resolutions are documented with follow-ups to ensure stability.
- **Ensuring policy inclusivity:** DMSPs advocate for inclusive national policies by facilitating consultations on draft laws, such as the National Land Commission and Customary Land Rights Bills. They mobilize rural communities to engage with policymakers and emphasize conflict-sensitive issues, including equality, land acquisition, and grievance mechanisms.
- **Implementing policy frameworks locally:** Following the 2022 land legislation, DMSPs educate communities about the new laws through simplified guides, training, and local-language materials. They support the establishment of local land committees and new grievance-redress mechanisms. DMSPs also monitor implementation of the laws, provide feedback to national authorities, advocate for equity, and promote inter-district collaboration to share best practices.

By integrating local and national efforts, DMSPs play a pivotal role in addressing conflicts and promoting sustainable land governance.

### III. Outcomes

In line with the roles that DMSPs play in connecting and shaping national and local land governance, several achievements can be noted. The DMSPs have successfully mediated several local disputes. In Sorogbema Chiefdom, Pujehun District, a land dispute between two families was resolved amicably. In Samalane, Pujehun District, they mediated between local communities and SACOFIN Agricultural Company regarding land mapping and lease payments. In Dodo Chiefdom, Kenema District, they resolved a long-standing family land dispute, restoring peace.

Furthermore, they were instrumental in shaping Sierra Leone's 2022 land legislation. The Ministry of Lands acknowledged their role. The Customary Land Rights Act and the Land Commission Act address conflict-inducing issues, including protection of customary land rights. They also align governance with the VGGT. These laws strengthen land governance and conflict resolution through clear frameworks and the promotion of gender equality. They also establish local land committees, modernize land registration, and balance

state and private ownership. By encouraging sustainable land use and community participation, the laws address current and future land conflicts. DMSPs will also contribute to their implementation.

The DMSP's strength lies in its diverse composition, integrating political actors, government offices, CSOs, academia, and grassroots representatives. Key stakeholders, including paramount chiefs, the Office of National Security, and local councils, ensure DMSP actions are enforceable through broad cooperation.

At the same time, the DMSP concept faces limitations. It lacks legal recognition, which threatens sustainability without donor support and hinders full cooperation from some public institutions. Capacity levels are uneven: civil society organizations are often more engaged than government institutions. Bureaucratic processes also slow public participation. Women, youth and vulnerable groups remain under-represented, despite efforts to include women in land discussions. DMSPs currently operate in seven of fourteen districts, which reduces national impact. Documentation and resource limitations hinder effectiveness. Reliance on donor funding raises concerns about long-term sustainability. Securing cooperation from conservative political and traditional stakeholders also remains difficult. Addressing these issues is essential for promoting equitable land governance in Sierra Leone.

### 3.3 Addressing conflict over women's access to land through establishing dialogue with customary authorities in Burkina Faso

#### I. Background and context

In landlocked Burkina Faso, gender inequalities in land rights persist, rooted in traditional cultural norms. Women face significant barriers to land ownership and secure tenure, despite legal frameworks recognizing their equal rights. The *Plateforme nationale Multi Acteurs sur le foncier* (PMAF, Multistakeholder Platform on Rural Land Tenure), supported by Land for Life, addresses this issue through a dialogic approach. It facilitates discussions between women and traditional authorities, who play a key role in land allocation and dispute resolution.

Agriculture and pastoralism are the primary livelihoods in Burkina Faso, with women accounting for 60.1 percent of the rural workforce (INSD, 2019). However, land ownership remains unequal. The 2021 Demographic and Health Survey showed that only 17 percent of women owned land, compared with 37 percent of men (INSD, 2021). Further, the 2018 SIGI study found that while 60 percent of women accessed agricultural land, their use rights were limited to small family parcels (0.25–3 hectares). By contrast, 90 percent of men held ownership rights to larger private or family lands, averaging 10 hectares (OECD, 2018).

Customary law in rural areas exacerbates these disparities, leaving women's land use rights precarious and revocable. The coexistence of customary and statutory tenure systems creates conflict. Patriarchal norms often undermine formal laws, leaving women struggling to assert their claims. The PMAF sought to bridge this gap by fostering dialogue and awareness between traditional leaders and women, changing practices, and recognizing women's legitimate land rights.

#### II. The PMAF approach: fostering dialogue and Understanding between customary authorities and Women

The primary challenge was that many customary authorities did not recognize or support women's land ownership rights under traditional, paternalistic land governance and inheritance systems. Women, on the other hand, strove for secure land tenure rights as the foundation for their economic empowerment, security and well-being. Without secure land tenure, women are hindered from effectively engaging in agricultural activities, which serve as the primary source of livelihood for many rural families in Burkina Faso. The challenge, therefore, was not only legal but also deeply cultural and social.

To address this issue, the PMAF developed a strategy to engage and involve customary authorities in dialogue. The approach included multi-level dialogue formats, fostering understanding and empathy for women's realities, as well as raising awareness of international standards and women's land rights.

To address this issue, the PMAF developed a multi-pronged strategy to engage and involve customary authorities in dialogue, combining grassroots action with national-level advocacy.

##### Multi-level dialogue and engagement:

- Partnered with the Women's College of the Confédération Paysanne du Faso, with support from Oxfam, to conduct advocacy tours across Burkina Faso's 13 regions.
- Created spaces for dialogue between rural women and traditional leaders, leading to immediate actions—for example, in Kougougou a widow's unjust land deprivation was resolved on the spot.
- Organized a national workshop on women's land rights in June 2023, in collaboration with Oxfam, GIZ and the Ministry of Women's Affairs. The event brought rural women, traditional leaders and state authorities together to strengthen the national framework for women's land tenure security.
- Engaged five women's associations to enhance their legal knowledge and advocacy skills.

##### Using international guidelines:

- Hosted a national dialogue workshop in June 2022 on the Voluntary Guidelines on the Responsible Governance of Tenure (VGGT).
- Sensitized customary leaders from across Burkina Faso on the importance of secure land access for women, linking local practices to internationally recognized standards.

The case displays the need to address the structural underlying causes of land conflict. By engaging multiple stakeholders at various levels and fostering awareness and understanding of the realities, context and policy frameworks, PMAF is tackling deeper systemic and structural imbalances. These imbalances underpin conflict over women's access to land in Burkina Faso.

### III. Outcomes

A central aspect of change in the Burkina Faso case is attitudes. In several communities, traditional leaders publicly advocate for women's land rights. Such advocacy represents a significant behavioural change and may have a cascading effect on other customary chiefs and on men and women in rural communities. The story of a widow in Kougougou, whose situation was immediately addressed by local chiefs, illustrates the power of these behavioural shifts.

Change is also evident among women. In one success story, a women's cooperative in the Hauts-Bassins region secured communal land for market gardening. With the support of PMAF members, such as Fédération Nationale des Organisation Paysannes (FENOP, National Federation of Peasant Organizations), Groupe de Recherche et d'Action pour le Foncier (GRAF, Land Research and Action Group) and Observatoire national du Foncier au Burkina Faso (ONF-BF, National Land Observatory of Burkina Faso), 20 women in Mogtédou obtained land certificates through FENOP. A further 26 women in Padema secured land access certificates with GRAF's help. ONF-BF enabled 32 women to secure land-use rights.

PMAF is now exploring local land charters as an innovative tool. These community-driven agreements, recognized by national law, offer a culturally sensitive approach to securing women's land rights. While the Burkina Faso case shows that holistic, well-designed dialogue can trigger deeper change processes, myriad complexities exist in addressing recurring conflict patterns. The inclusion of traditional authorities in the dialogues required their general openness or incentive to engage in the process. The first signs of behavioural change do not necessarily mean that deeply rooted societal and cultural norms have changed immediately. Having women's land rights enshrined in policy and accepted by several traditional leaders does not guarantee that local household-level decision-making, as well as institutional structures and capacities, enables women to secure tenure rights successfully. However, it is an example of how increasing exchange, awareness, and understanding between conflicting parties through dialogue can build the foundation for addressing the underlying causes of conflict.

## 3.4 How a national multi stakeholder process addresses land conflicts on a structural level through inclusive land reform in Liberia

## I. Background and context

Land governance in Liberia has long been marked by conflict, stemming from historical top-down policies that disregarded indigenous land rights. Colonial settlers introduced a private property system that clashed with native Liberians' collective land practices, creating land insecurity among indigenous communities. This legal system prioritized private ownership, undermined traditional tenure systems, and fuelled persistent land disputes. The absence of a unified national land rights policy further exacerbated these issues, leaving communities and investors uncertain about ownership and usage. These unresolved conflicts contributed to Liberia's civil war. They also facilitated unregulated large-scale agricultural land investments and cases of land grabbing, underscoring the need for inclusive land reform (Rights and Resources Initiative, 2020).

In 2009, the Land Commission was established to address these challenges. It initiated nearly a decade of negotiations over land governance reform before the adoption of the Liberia Land Rights Act in 2018. Earlier reform attempts faced resistance from civil society and international partners over provisions such as Free, Prior and Informed Consent (FPIC), women's land rights, and recognition of customary tenure. The new law adopted these provisions (Pott and Toe, 2023).

The Land Rights Act (LRA) introduced a legal framework recognizing four land categories—customary, government, private, and public land—to secure tenure nationwide. Since then, the Liberia Land Authority (LLA) has collaborated with communities, civil society, and international partners to implement the law, issue statutory deeds, and register customary land rights. However, implementation has been hindered by limited government funding, inadequate technical expertise, and overlapping land claims arising from legacy concessions for mining, logging, and agriculture. Additionally, civil society organizations in the land sector often lack resources and capacity to fully support reform, leaving gaps in conflict resolution.

Despite these obstacles, the LRA's passage and ongoing efforts by the LLA, civil society, and international partners mark significant progress. Resolving Liberia's land conflicts will require bridging the gap between formal law and traditional practices, ensuring inclusivity, and strengthening local institutions to manage land effectively.

## II. The approach: a national multi-actor platform on land governance in Liberia

In February 2018, the Land for Life Initiative supported civil society organizations (CSOs) and the Liberia Land Authority (LLA) in launching the Multi-Actor Platform (MAP) on Land Governance and Responsible Agriculture Investment. The aim was to advocate for people-centred land governance. Early on, the platform adopted an advocacy, collaboration and dialogue approach, contributing to the passage of the Land Rights Act (LRA) in October 2018. Representing diverse sectors—including public and private entities, community leaders, CSOs and government agencies—the MAP facilitated inclusive discussion and mutual decision-making, which is vital in Liberia's context.

With inclusive and collective governance structures—including a general assembly, steering committee and thematic working groups—it emphasizes dialogue, collective leadership and dialogic change processes. The approach marks a departure from confrontational or isolated consultations and helps transform collaboration and conflict resolution.

Through advocacy—such as collaborative policy briefs and community-level evidence generation—and through varied dialogue formats, including a national land conference in 2022 and inclusive stakeholder reviews, the MAP strengthened policy engagement. These efforts ultimately supported adoption of the Land Rights Act and contributed to developing its implementing regulations in 2022.

In recent years, the Land for Life (LfL) initiative has encouraged the decentralization of multi-actor partnerships (MAPs), recognizing the importance of regional contexts. In this regard, regional platforms were established in western and south-eastern Liberia to give local communities a voice in national policy-making processes. The initiative marked an important step toward bridging the gap between national changes and local realities. Through their decentralized platforms, the MAPs have hosted forums to discuss land conflicts in eight counties.

A complementary component to ensure effective collaboration and to address land-governance issues such as land conflict is capacity-building. The programme aimed to equip participants with the knowledge and skills necessary for effective land management and dispute settlement. Community members and municipal officials received training on the Land Rights Act (LRA), land-formalization procedures, and conflict-resolution methods. This capacity-building also targeted MAP stakeholders, focusing on agile management and partnership and fostering collective leadership among them.

### III. Outcomes

Recognizing that land-related issues stem from structural misalignments, the multi-actor partnership (MAP) contributed to two key national policy processes that laid the groundwork for addressing local land issues and conflicts. The Land Rights Act (LRA), adopted in 2018, is a transformative law designed to correct historical injustices, promote social equity, and encourage economic development through secure, equitable land tenure. The LRA aligns with international standards, such as the VGGT, and acknowledges various land ownership categories, including private, customary, government and public land. It also introduces dispute resolution mechanisms, sustainable land management provisions, and protections for women's land rights.

To operationalize the LRA, it was essential to bridge differing opinions among stakeholders and develop regulations. The MAP contributed to the 2022 regulations, which outline procedures for implementing the Act. Key provisions include guidelines for mapping and registering community land claims and for creating Community Land Development and Management Committees (CLDMCs) for inclusive governance. The regulations also provide steps for resolving boundary disputes, formalizing customary rights, and conducting education campaigns to empower communities to manage land rights sustainably.

These regulations are critical for translating the LRA's principles into effective land governance. The inclusiveness and continuity of the MAP structure ensured that both the Act and its implementation reflected local realities and bridged gaps between civil society and government. Regional MAP structures amplified local voices and supported awareness and capacity building for using the policy framework in conflict resolution, linking national and local processes for better alignment.

Despite these advances, the MAP faces challenges, including limited influence on high-level policymakers, weak land data management systems and underdeveloped decentralized structures for resolving grassroots conflicts. Funding constraints and minimal private-sector engagement also hinder effective conflict resolution and responsible investment. These challenges underscore the need for the MAP to address systemic gaps to achieve sustainable and equitable land governance.

## 4. Discussion and limitations

This article argues that Dialogue for Change and dialogic multi-stakeholder partnerships have the capacity to address specific land-related conflicts. They can also tackle systemic root causes, such as inadequate or unenforced policy frameworks and marginalizing practices. Their success in doing so depends on two key elements: the level of dialogue – ranging from mere serial monologue to forward-looking, “win-win” conversations – and the establishment of collective, trust-based, long-term change processes within emerging partnerships.

Examples from Ethiopia, Sierra Leone, Burkina Faso and Liberia illustrate this potential, while also highlighting conditions for success and revealing certain limitations.

Across all cases, the principles identified for the success or challenges to multi-stakeholder partnerships offer valuable insights for conflict resolution. For instance, in Ethiopia and Sierra Leone, context-sensitive design, thorough context analysis and substantial investment in trust-building activities – such as joint analyses and capacity building – were found to increase the likelihood of success. Dialogue proved to be more effective when viewed as a tool for fostering long-term change processes and continuous collaboration, rather than as isolated consultations or debates. This factor was key in addressing grievances and encouraging behavioural change, such as prompting investors to respond to community concerns about environmental pollution.

In Burkina Faso, well-facilitated dialogue aimed at fostering empathy and understanding successfully altered marginalizing practices within traditional systems. Such change was achieved even when efforts were limited to specific campaigns rather than integrated into a long-term partnership. In Ethiopia, the case study shows that establishing a continuous, long-term forum for exchange has taken important first steps toward building openness and trust.

These steps are needed to address persistent issues and hostilities between communities and investors. However, it also highlights that significant further steps are still required to fully resolve these challenges.

Additionally, empowering marginalized groups proved critical to ensuring meaningful and equal participation in dialogues with more powerful stakeholders—among them investors, governments and customary leaders. Such empowerment entails enhancing communities' and women's ability to understand and assert their rights. The cases from Sierra Leone and Liberia further illustrate that connecting local dialogue and conflict resolution efforts with national reform processes can amplify impact. Reforms that align with international standards and are inclusively designed by local actors to reflect on-the-ground realities help address systemic drivers of conflict. Unclear or unenforced policies are often significant conflict enablers. Similarly, the multi-level design of dialogues and partnerships can streamline policies, raise awareness and improve enforcement on the ground, contributing to conflict resolution. By adhering to international standards, such as the Voluntary Guidelines on the Responsible Governance of Tenure (VGGT), reform processes gain legitimacy. In some contexts, they also provide a foundation for addressing sensitive issues, such as women's land rights, with customary leaders in Burkina Faso.

However, the approach's limitations were evident across the four cases. Its success hinges on the willingness of different actor groups to engage in dialogue or long-term collaboration. Achieving this often requires a careful and sensitive approach, alongside the involvement of influential actors already engaged in the process. Engaging relevant groups, such as the private sector, senior government officials or customary leaders, can be challenging and may lead to imbalances in participation. This often results in one actor group, such as civil society, being the most active participant in the process, which diminishes its appeal to other sectors.

Ensuring meaningful representation of marginalized groups, such as women and youth, remains a critical yet persistent challenge, particularly when membership in MAPs is institutionally based.

Another recurring challenge has been the scope of implementation. The context-sensitive design and extensive trust-building processes required for success demand significant time and resources, making it difficult to scale the approach across multiple regions and levels. In Ethiopia, for example, connecting different levels of dialogue proved difficult owing to infrastructure and resource constraints. Additionally, funding limitations have been a significant factor, as all cases relied solely on donor funding, with little financial ownership from private or public sources. This reliance raises concerns about the long-term sustainability of these processes and partnerships.

## 5. Conclusion

In conclusion, it is necessary to emphasize the systemic and structural imbalances that drive land-related conflict. Addressing these challenges requires a shift from merely resolving individual disputes to tackling the root causes embedded in governance systems, power dynamics and societal inequalities. The Land for Life Initiative demonstrates that multi-stakeholder partnerships, underpinned by generative dialogue and long-term collaboration, can play a pivotal role in creating inclusive reforms, fostering trust and addressing conflicts. While challenges remain—particularly in ensuring representation, scaling efforts and securing sustainable funding—the initiative offers valuable insights into the transformative potential of collaborative approaches. By prioritizing long-term relationship building and systemic change, these partnerships provide a pathway towards resolving land-related conflicts and promoting sustainable development.



Workshop on rural women's land rights in Ouagadougou, aiming to promote equality and legal security in Burkina Faso



Participants, including CSOs, Liberia Land Authority and other key stakeholder at the MAP Liberia Land Platform regional forum in Sinje



Traditional chiefs holding up the "VGGT JE M'ENGAGE" poster symbolizing Burkina Faso's commitment to land governance principles



Flower farm showcasing agricultural investment in Ethiopia



Group photo taken after the completion of the monthly community investor and local government forum in Ethiopia



Women receiving a copy of the Customary Land Rights Act in Sierra Leone



Community engagement meeting on land rights in Sierra Leone

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# THE RURAL ENVIRONMENTAL REGISTRY (CAR): A PARADIGM SHIFT IN LAND MANAGEMENT AND ENVIRONMENTAL PRESERVATION IN BRAZIL

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## Abstract

The article aims to present the Rural Environmental Registry (CAR), an instrument introduced by Brazil's 2012 Forest Code to enforce mandatory environmental preservation on rural properties. The motivation behind this legislation is to minimize the negative externalities of individual activities. Left unchecked, these activities can harm society as a whole by degrading water, soil and biodiversity, which are critical inputs for agriculture. The article will demonstrate how CAR can contribute to sustainable policies, particularly in Brazil's more conflict-prone regions. On the one hand, CAR provides an entry mechanism for historically marginalized communities, serving as a significant tool for acknowledging their territorial existence. On the other hand, it integrates multiple existing databases, enables progressive analyses, and applies financial instruments that encourage and reward data consistency. With CAR, Brazil stands at a critical technological and political juncture in defining environmental conservation. The registry contributes directly to both equitable and sustainable development.

## 1. Introduction

The Rural Environmental Registry (*Cadastro Ambiental Rural*, or CAR), established by Brazil's 2012 Forest Code, represents a pivotal shift in how the country manages land use and environmental conservation in rural areas. As a comprehensive, strategic initiative, CAR addresses environmental and social challenges through a standardized system. It aims to overcome historically complex landscape management and deforestation challenges in Brazil. Based on this initial motivation, CAR has emerged as a tool capable of articulating several mechanisms for forest conservation and sustainable development.

CAR was designed to ensure compliance with environmental conservation requirements for rural properties. Brazil has struggled with deforestation, unlawful land seizures and unresolved land disputes, exacerbated by unreliable land records and inadequate recognition of indigenous and traditional communities' rights (Souza *et al.*, 2020; Stabile *et al.*, 2020; De Siqueira *et al.*, 2017). By providing an environmental-dimension registry for rural lands, CAR facilitates the documentation and monitoring of their features and land use, thereby significantly affecting areas prone to conflict (Chiavari, Lopes and de Araujo, 2021; Camara *et al.*, 2023).

Mandatory for all rural properties, CAR is a self-declaratory instrument created by the Forest Code to facilitate farmers' compliance with environmental legislation. CAR registration is a prerequisite for participating in the Environmental Regularization Programme (PRA). The system has become a permanent registry with specified deadlines for different property sizes. Notable progress in registration has been made in states such as Bahia and Minas Gerais, each with more than one million registrations, often facilitated by trained municipal technicians. Other states have engaged third-party companies to assist small producers. Overall, CAR has attained practically 100 percent coverage of private land in Brazil<sup>1</sup>.

This article explores CAR's multifaceted role in addressing environmental challenges, agricultural production, and social equity. It seeks to underscore CAR's potential to promote sustainable development in Brazil.

## 2. The genesis and objectives of CAR

The 2012 Forest Code marked a pivotal moment in Brazil's environmental management and land-use policy, emerging from intense debate and negotiation. CAR was central to this political arrangement. Forestry legislation had been in place since 1934 and, since 1965, it had been highly protective. However, there had been no comprehensive monitoring mechanisms to ensure compliance with environmental requirements. Nor had there been sufficiently wide-ranging or reliable land registers to serve as a reference for such policies. Brazil faced serious landscape management challenges, including deforestation driven by logging and agricultural expansion, illegal land appropriation, and frequent land-tenure disputes. In many cases, these disputes led to violent conflict, particularly affecting small landowners, peasants, traditional communities and Indigenous Peoples (Souza *et al.*, 2024). These issues created a complex web of conflict and inefficiency.

In discussions on the new Forest Code in 2012, the creation of a universal, self-declaratory registry covering all land tenure situations, coupled with mechanisms to verify the information, emerged as a solution to enable the comprehensive application of environmental conservation requirements (Souza Filho *et al.*, 2015). Although the CAR does not have legal value as a land ownership or possession register, its existence and its wide accessibility through an online map mean that its use extends beyond the registration of vegetation conservation.

Traditional communities have had much more limited access to formal land tenure instruments than farmers, even small ones. Their collective norms and institutions are not reflected in legislation and formal rules regarding land governance. CAR emerged as an inclusive mechanism that at least allowed them to self-declare their territorial existence (Gonçalves, 2022).

As pointed out by De Siqueira *et al.* (2017, p.22), "CAR can be an opportunity for better access to social and agricultural public policy programs for communities; stronger internal cohesion and empowerment of traditional groups; collective discussions and agreements concerning the adoption of environmental land management strategies—also to address internal and external territorial threats; and it can potentially give visibility to these populations in the socio-environmental policy debate".

CAR registration is a relatively straightforward process. CAR requires rural landowners to document their land's environmental features, including native vegetation, rivers, forests, cultivated areas and more.

<sup>1</sup> Serviço Florestal Brasileiro, 2025, Painel da Regularização Ambiental

This documentation ensures that critical ecological areas are conserved and managed sustainably. It mandates the protection of two types of areas. Permanent Preservation Areas (APPs) encompass buffer zones around water bodies, steep slopes and mountaintops, where interventions are strictly regulated to prevent environmental degradation. The Forest Code requires a minimum buffer ranging between 30 and 500 metres around natural water bodies, depending on their width. The buffer is intended to ensure that these ecologically sensitive areas are preserved.

The second type of protected area is the “Legal Reserve”. It mandates that every rural property in Brazil maintain a proportion of native vegetation ranging from 20 percent to 80 percent of the property area, depending on the biome<sup>2</sup>. The legal framework imposes strict parameters against unauthorized deforestation, empowering environmental authorities to prohibit activities that cause environmental damage and promoting the restoration of degraded areas. The regulatory measure closely aligns with CAR’s objectives, emphasizing accountability and the restoration of environmental integrity in rural management.

To implement CAR, the federal government developed a system for registering rural land and acquired satellite imagery covering the entire national territory, enabling the identification of native vegetation cover. Responsibility for verification rests with the states, which presents one of the main challenges in implementing the policy, as discussed later in this paper. The federal government did so to assist the states in fulfilling their responsibilities. It is an intergovernmental policy that requires cooperation between the federal and state governments.

In the initial years of CAR’s implementation, a significant effort was made to consolidate the registry. State governments and rural technical assistance agencies supported the registration of small landowners. Public adherence to the registry was remarkable. In 2016, two years after the implementation of the Rural Environmental Registry System, there were already approximately 3 million registrations. By 2018, that number had grown to approximately 5 million, and by early 2025, the database had reached over 7.7 million registrations, covering the entire private land area in the country. CAR’s registration process for rural properties is well established across all states. However, the registry continues to grow due to the inclusion of small farmers and traditional communities, as well as ongoing property updates.

In essence, CAR represents a significant shift in Brazil’s approach to landscape management and environmental regulation. By providing a formal, standardized system for documenting and managing rural properties, CAR addresses longstanding issues related to land conflicts, environmental degradation, and the rights of marginalized communities. It reflects a commitment to fostering sustainable development, enabling the integration of environmental and social considerations into land management practices. As Brazil continues to balance economic development with environmental protection, CAR remains a pivotal tool in advancing these objectives.

## 3. CAR’s contribution to public policies

### 3.1 Conservation and restoration policies for native vegetation

CAR was initially conceived primarily to support environmental regulation for rural properties. Each farm must comply with the conservation parameters established by the Forest Code, particularly those regarding permanent preservation areas and legal reserves. To ensure compliance, it is essential to assess the environmental condition of each property. The registry maps the perimeter of the farm, the polygons of native vegetation, anthropized areas and other environmental attributes, such as water bodies and topography.

Once the property and environmental dimensions have been mapped, it is possible to verify their adherence to Forest Code parameters. If the property does not meet the requirements for native vegetation conservation, it must join the Environmental Regularization Program (PRA). Through the PRA, actions are established to restore deforested areas. Alternatively, Environmental Reserve Quotas (Portuguese acronym: CRA) may be acquired to compensate for the native vegetation deficit in the Legal Reserve on another property. As Soares-Filho *et al.* (2014) state, “improving transparency and providing a pathway to environmental compliance. SICAR could facilitate the market for CRAs and payments for ecosystem services, which will be critical to offset the often prohibitive costs of forest restoration, especially for small landowners”.

**Table 1.** Serviço Florestal Brasileiro (SFB), CAR public consultation panel (Power BI dashboard).

AREA TYPE	AREA (KM <sup>2</sup> )	EQUIVALENCE
Registered properties	5 650 510	2/3 of Brazil
Native Vegetation Cover	2 368 898	Algeria
Legal Reserve	1 909 333	Mexico
Permanent Preservation Areas	287 789	Italy
Native Vegetation to recover (APP + RL)	440 443	Sweden

<sup>2</sup> In the Amazon, 80 percent; in Amazon transition areas, 35 percent; and in other Brazilian biomes, 20 percent.

To gauge the scope of this protection, areas registered in CAR total almost 2 million km<sup>2</sup> of Legal Reserves (RL) and 290 000 km<sup>2</sup> of Permanent Preservation Areas (APP). Together, these correspond to 25 percent of the national territory. Within this total, landholders have declared approximately 440 000 km<sup>2</sup> of native vegetation recovered (including APP and RL areas).

## 3.2 Empowerment of marginalized communities

Historically, marginalized and traditionally excluded groups have faced substantial barriers to accessing formal land tenure systems. A crucial step in increasing visibility and ensuring access to rights for small farmers, peasants, and traditional peoples and communities was the creation of specific modules. These modules register Agrarian Reform Settlements and Traditional Peoples and Communities. The adoption of these modules and state agencies' efforts have resulted in the registration of 21 742 agrarian reform settlements, benefiting 756 484 families. Through the Traditional Peoples and Communities Module, 3 657 communities have already been registered, bringing together a total of 281 816 people<sup>3</sup>.

The registration of traditional territories (PCT) in the CAR/PCT module has advanced in most states. Maranhão, Bahia and São Paulo lead in registrations, with other states following. States such as Pará have developed unique strategies to engage communities, resulting in significant coverage and numerous beneficiaries. CAR is crucial for addressing these disparities and highlighting the environmental conservation efforts promoted by these communities.

Formal recognition through CAR enables traditional communities, peasants and small farmers to access government programmes and benefits that support sustainable development and environmental conservation. This inclusion integrates these communities into formal land management frameworks and provides opportunities to participate in public policies for equitable and sustainable development. With CAR, these communities can receive financial assistance, technical support and other resources to promote environmental stewardship and improve living conditions (De Siqueira *et al.*, 2017; Mourão, Sessim and Souza, 2024).

## 3.3 Integration with existing land databases and improved land tenure

The challenges in Brazil's land tenure system stem from historical disorganization and inadequate separation between public and private lands. Many rural properties remain irregular, with unclear property rights exacerbated by overlapping registrations and "land grabbing" (Flexor and Leite, 2017).

While CAR is beneficial, it is not yet integrated with other land registries and databases, which limits its effectiveness in dealing with illegal land acquisition and land disputes. As Sparovek *et al.* (2015) note, "Current public arrangements that promote conservation can, in conjunction with voluntary schemes on private lands where conversion to agriculture is favoured, provide important additional nature conservation without conflicting with national agricultural production objectives". This underscores the need to consolidate CAR data with other land records to improve accuracy and resolve long-standing issues.

### Enhanced data accuracy

CAR's ability to cross-reference data from multiple sources significantly improves the accuracy of land records. In regions with incomplete or inconsistent historical data, CAR can identify inaccuracies and, over time, support updates to land records. Enhanced accuracy is vital for resolving land disputes, managing land use and implementing effective environmental policies. By integrating information from various land registers, CAR builds a reliable, comprehensive database that supports better decision-making and land management.

### Progressive analyses

CAR's open, large-scale data collection facilitates sophisticated analyses of land use and environmental impacts. By aggregating detailed information on land holdings, environmental features and usage patterns, CAR enables policymakers and researchers to conduct in-depth studies and develop informed strategies. Such analysis supports evidence-based decision-making and helps refine land management practices, contributing to more effective policy implementation and sustainable land use.

Brazil's historical land tenure issues, such as fragmented and uncoordinated registries, continue to challenge land management. The absence of a unified land database exacerbates these issues, complicating efforts to manage land effectively and address land grabbing and illegal deforestation (Chiavari *et al.*, 2016). Although it is not a legal register of land ownership or possession, CAR is probably the most extensive and accessible register of rural properties. As such, it serves as a pillar for integrating data between various official registries.

## 3.4 Application of financial instruments

CAR plays a pivotal role in applying financial instruments that incentivize the collection of accurate, consistent environmental data. The approach encourages compliance with CAR's requirements and promotes sustainable practices.

### Rural credit

Since January 2024, all agricultural loans have used CAR to verify that rural properties comply with environmental parameters. It also prevents financing in areas where illegal deforestation has been detected or that overlap with protected or indigenous lands.

<sup>3</sup> Ministério da Gestão e Inovação dos Serviços Públicos – Diretoria do CAR, 2025, Consulta Pública do CAR (CAR Public Database).

This measure has significantly encouraged updates to the registry and prompted landholders to comply with the Forest Code.

#### Financial incentives

Landowners who comply with CAR's requirements can benefit from subsidies and credits for sustainable land management practices. These incentives provide tangible rewards for maintaining environmental standards and encourage compliance with CAR's regulations. Official rural credit lines offer a 0.5 percent reduction in annual interest rates for properties with an approved CAR analysis. By funding environmentally friendly practices, CAR creates an economic rationale for sustainable land management and fosters broader participation in conservation efforts.

#### Environmental credits

Facilitate the creation and trading of environmental assets that offset impacts or participate in carbon markets. The system provides an economic incentive to maintain high environmental standards and encourages landowners to invest in conservation practices. Such credits support CAR's goal of environmental preservation and create opportunities for economic benefits through credit trading, thereby promoting sustainable land management.

## 3.5 Traceability of supply chains

Brazilian exports of rural commodities (especially beef, soy, and coffee) have been under intense scrutiny by international institutions, which have denounced imports from areas subject to deforestation. These organizations include government authorities, NGOs, consumer organizations, and think tanks, primarily from developed countries. CAR provides an important mechanism for certifying the origin of exported products. Ensuring supply chain traceability is essential for Brazilian exports, which increasingly depend on CAR verification to comply with import requirements. CAR's integration with other registries and its role in financial mechanisms help tackle these issues, although the fragmented nature of existing land data limits its effectiveness.

In summary, CAR's contribution to environmental policies is multifaceted, addressing key challenges related to land management, environmental preservation, credit provision, supply-chain transparency and social equity. By empowering marginalized communities, enhancing data accuracy and applying financial instruments, CAR plays a crucial role in fostering a more equitable and sustainable approach to land and environmental management in Brazil.

## 4. Technological and political implications

CAR marks a significant advancement in both technological and political realms. By integrating advanced technologies and confronting controversial political issues, CAR represents a transformative approach to environmental regulation in Brazil.

Its impact spans improving data accuracy, fostering social stability, and promoting transparency and public access to environmental data on rural properties.

### 4.1 Technological advancements

CAR's implementation relies heavily on sophisticated technological tools that enhance the effectiveness of environmental regulation. These advancements address complex challenges associated with land tenure and environmental preservation.

Environmental regularization of rural properties in consolidated permanent preservation areas (APP) and legal reserves (RL) comprises four main stages:

1. registration and analysis of CAR data;
2. adherence to the Environmental Regularization Programme (PRA);
3. submission and approval of the Recovery Project for Degraded Areas (PRADA); and
4. recovery of APP and RL liabilities, with compliance monitoring. (Lopes, Segovia and Chiavari, 2023).

At the core of CAR's technological framework is the use of geospatial tools to map and monitor land use across Brazil. These tools use satellite imagery and geographic information systems (GIS) to provide detailed representations of land parcels, environmental features, and land-use patterns. Despite these advancements, Brazil's historical lack of organization in land occupation has led to overlapping registrations and inconsistent data. Geospatial technology enables real-time monitoring of deforestation hotspots and facilitates more effective land management. Integrating geospatial data with CAR's registry enables policymakers and land managers to gain valuable insights into land-use dynamics and make informed decisions to address environmental challenges.

CAR employs digital platforms to streamline the registration process and improve accessibility for landowners, allowing for the electronic submission of land information and reducing the bureaucratic burden of traditional paper-based systems. Digital tools also enhance the transparency and efficiency of CAR's operations, enabling quicker processing of registrations and more effective management of land records (Mourão, Sessim and Souza, 2023).

Additionally, Brazil's Forest Code establishes a comprehensive programme to support and incentivize environmental preservation and recovery, promoting ecological sustainability alongside agricultural activities (Brasil, 2012, Article 41). This programme includes financial incentives such as reduced interest rates on agricultural credit, better terms for agricultural insurance, and tax deductions for preserved or restored areas. These mechanisms are crucial for promoting biodiversity, soil conservation, water regulation and carbon sequestration.

The Forest Code permits the sustainable economic use of Legal Reserves, provided such activities comply with strict environmental guidelines and receive approval from relevant authorities. This balance between economic activity and conservation priorities underpins CAR's multidimensional goals of promoting sustainable development<sup>5</sup>.

## 4.2 Political dynamics and social impact

CAR's implementation has significant political implications, influencing governance and social stability. Its introduction affects various stakeholders, including government agencies, landowners and marginalized communities, and has broader implications for land tenure and environmental policy.

### Governance and policy integration

CAR is a critical tool for integrating land management policies with broader governance frameworks. By providing a centralized, standardized registry, CAR enhances the ability of government agencies to enforce regulations, monitor compliance and deal with conflicts.

### Social equity and conflict resolution

CAR's impact on social equity is noteworthy, as it tackles long-standing issues. The registry helps rectify historical injustices and promote social stability by enabling marginalized stakeholders to upload their territorial data. CAR's emphasis on social equity aligns with broader goals of inclusive development and social justice.

CAR's technological and political implications are integral to its success in transforming environmental regulation in Brazil. By leveraging advanced technologies and addressing critical political issues, CAR represents a forward-looking approach to land tenure and environmental preservation, with the potential to affect governance, social stability and sustainable development significantly. The Forest Code facilitates technological integration and encourages environmental services through incentives for ecosystem conservation and recovery, supporting sustainable land management practices and engaging with global sustainability targets<sup>6</sup>.

## 5. Challenges and future directions

Despite its significant contributions, the Rural Environmental Registry (CAR) faces several challenges that affect its effectiveness and potential. Addressing these challenges is crucial for ensuring CAR's continued success in land management and environmental preservation.

## 5.1 Implementation challenges

The process of analysing registrations remains a major challenge in implementing CAR-related policies. There is significant heterogeneity in the effort, investment and technical capacity that states allocate to CAR analysis. Significant progress has been made with the introduction of automated analysis mechanisms developed by some states and within the federal SICAR. However, automated analysis does not replace the work of environmental analysts in all cases, and teams dedicated to analysing registrations remain necessary.

In 2023, states such as Alagoas, Goiás, Mato Grosso, Minas Gerais, Pará, Paraná and the Federal District made notable strides in analysing CAR data by expanding technical teams and adopting automated analysis tools. However, states such as Piauí, Pernambuco, Rio Grande do Norte and Roraima have yet to initiate this phase (Lopes, C.L. *et al.*, 2023).

The use of automated CAR analysis tools has increased markedly and is now implemented in six states: Amapá, Mato Grosso do Sul, Minas Gerais, Pará, Paraná and São Paulo. These tools are practical for properties that require minimal data correction and lack environmental liabilities. For example, in Pará, 23 000 CAR registrations were analysed using CAR 2.0, covering 776 000 hectares, compared with more than six million hectares analysed manually (Lopes, C.L. *et al.*, 2023).

The practical implementation of CAR faces several challenges:

### Resource constraints

Adequate funding and technical support are essential for effective operation. Resource constraints can limit government agencies' and local authorities' ability to process registrations, conduct field inspections and address land-record discrepancies. Ensuring sufficient resources is critical for CAR's sustained success and extensive coverage.

### Technical limitations

The effectiveness of CAR depends on the quality and accuracy of its technological tools. Outdated software, insufficient data resolution, or difficulties integrating diverse data sources can affect the registry's reliability. Addressing these issues requires ongoing investment in technology upgrades, personnel training, and improvements to digital platforms.

### State capacity deficits

CAR is a responsibility of the states, despite federal support in establishing the system. State-level capacity building is essential to CAR's success. Priorities include qualified personnel, digital infrastructure, data storage, and related resources.

Despite advancements, analysing CAR registrations remains challenging. About 30 percent of registrations have undergone some form of analysis, yet only 3.3 percent have fully completed and validated the process. With more than seven million registrations across 27 federative units, low-quality technical submissions necessitate multiple reviews.

<sup>5</sup> Brasil (2012). Article 17.

<sup>6</sup> Brasil (2012). Article 41.

Many registrations are outdated and require re-evaluation. A key challenge is contacting landowners to correct and update registrations. Not all states have dedicated teams for CAR analysis, and those that do often face resource constraints. Successful states such as Mato Grosso and Pará increased analysis capacity by hiring dedicated analysts. In some cases, the lack of adequate cartographic bases and high-resolution thematic maps hinders accurate identification of land features. Automated analysis tools developed by the Brazilian Forest Service (SFB) streamline the process, especially for properties without environmental liabilities.

## 5.2 Political and social obstacles

CAR's implementation encounters political and social obstacles that influence its effectiveness and acceptance. In 2023, states such as Mato Grosso, Pará, Paraná and São Paulo made significant progress in completing CAR analyses, largely thanks to automated tools. Espírito Santo remains the most advanced state, with approximately 77 000 thoroughly analysed registrations, supported by the Espírito Santo Agricultural and Forestry Defence Institute (Idaf/ES).

Despite these advances, completing CAR analyses remains a significant challenge. Only about 2.7 percent of registrations nationwide have been thoroughly analysed, with Espírito Santo, Mato Grosso do Sul and Pará leading the way. Many registrations require data rectification, with nearly 90 percent in São Paulo needing corrections. Communication issues with landowners present a major obstacle, but states such as Acre and São Paulo have made progress by establishing dedicated notification teams and call centres.

### Resistance from stakeholders

CAR's analysis may face resistance from landowners, agricultural producers and political actors with vested interests. Some stakeholders may perceive CAR's regulations as restrictive or burdensome, leading to opposition or non-compliance. Confronting this resistance requires effective communication and engagement, along with incentives and support to encourage participation.

### Equity and inclusion

Ensuring that CAR tackles these issues is a key challenge. CAR aims to empower marginalized communities and address historical injustices, but its implementation must be sensitive to their needs. Brazil's historical land-tenure challenges, characterized by disorganized occupation and overlapping claims, exacerbate the difficulties CAR faces. Without a unified cartographic base and integrated land records, CAR's effectiveness is compromised. Ensuring inclusive and equitable processes requires ongoing dialogue with Indigenous and traditional communities, mechanisms for handling grievances and fair treatment.

## 5.3 Future directions

Looking ahead, several strategic directions can enhance CAR's impact and address existing challenges.

### Strengthening technical capacity

Investment in CAR's technological infrastructure is essential to improve functionality. Measures include upgrading software, enhancing data resolution and ensuring data integration. Building technical capacity through training and staff support remains crucial to maintain registry quality and accuracy.

### Enhancing stakeholder engagement:

Effective engagement is key to addressing resistance and promoting compliance. Work with landowners, agricultural producers and other stakeholders through consultations, workshops and outreach programmes to build support and foster collaboration. Providing clear information about CAR's benefits and ensuring responsive concern management can enhance stakeholder buy in and facilitate smoother implementation.

### Promoting inclusivity and equity

Ensuring that CAR's implementation is inclusive and equitable requires continued efforts to meet the needs of marginalized communities. These efforts include providing support and resources, handling grievances, and ensuring fair and transparent processes. The integration of recent legislative changes and improvements in land governance must align with CAR's objectives to tackle both historical and ongoing land-tenure challenges. Promoting social equity and inclusion strengthens CAR's legitimacy and effectiveness in achieving its goals.

In summary, addressing CAR's challenges and pursuing strategic enhancements are crucial for realizing its full potential in land management and environmental preservation. By overcoming implementation challenges, tackling political and social obstacles, and focusing on future improvements, CAR can continue to play a vital role in advancing sustainable development and promoting equitable land tenure in Brazil.

## 6. Final considerations

The Rural Environmental Registry (CAR) represents a transformative initiative in Brazil's approach to land management and environmental regulation. Established under the 2012 Forest Code, CAR addresses complex challenges in landscape management, environmental conservation and social equity through an integrated, standardized system. This registry plays a crucial role in documenting and monitoring rural properties, ensuring compliance with environmental standards, and providing a platform for marginalized communities to declare the territories they have traditionally occupied.

Throughout its implementation, CAR has faced various challenges, including resource constraints, technical limitations, and political and social obstacles. Despite these hurdles, significant progress has been made, with technological advancements and proactive strategies contributing to its success. Automated analysis tools and enhanced communication efforts have been instrumental in advancing CAR's objectives, although more work is needed to fully realize its potential.

Looking forward, it is essential to continue investing in CAR's technological infrastructure, strengthen stakeholder engagement, and promote inclusivity and equity. Dealing with resource constraints, improving data integration, and fostering collaboration among stakeholders will be critical for overcoming existing challenges and enhancing CAR's effectiveness. Moreover, ongoing efforts to align CAR with recent legislative changes and improve land governance frameworks will further support its role in sustainable land management.

In conclusion, CAR stands as a pivotal tool in Brazil's efforts to balance economic development with environmental protection. Initially conceived as a mechanism for verifying environmental conservation, CAR has evolved to support a more complex approach to environmental management. The approach combines land-use control; economic instruments, incentives and restrictions; supply-chain traceability; and the involvement of social minorities.

By providing a comprehensive and transparent landscape management system, CAR's success in helping Brazil navigate the complexities of land tenure and environmental regulation will depend on sustained commitment, innovation and collaboration among all stakeholders. By addressing its challenges and building on its achievements, CAR can significantly impact sustainable development in Brazil, fostering a more resilient and inclusive future.

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# ESTABLISHMENT OF TRANSHUMANCE COMMITTEES FOR A PEACEFUL TRANSHUMANCE IN THE SAHEL

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## Abstract

This paper examines how transhumance committees and exchanges between local authorities and pastoral civil society actors can help establish peaceful cross-border transhumance. In the Niger, FAO directly supported the establishment of three regional transhumance committees and a national transhumance committee created by ministerial decree in 2019. Their members include government representatives, traditional leaders, local authorities, pastoralists, farmers, women, and youth organizations. These multi-stakeholder bodies played a key role in organizing transboundary meetings, which led to the signing of two local bilateral agreements between the bordering provinces of the Niger and Nigeria in 2022. These agreements provide secure access for transhumant pastoralists to natural resources. They also protect the livelihoods of host populations.

This paper demonstrates how these committees addressed conflicts in the area. It draws on the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries, and Forests in the Context of National Food Security (VGGT) and its technical guide, aiming to improve the governance of pastoral lands. It also illustrates how this approach is being replicated in other countries, such as Mali, Mauritania, and Senegal, and shares lessons learned for the benefit of other countries and stakeholders seeking to enhance the governance of pastoral lands for conflict prevention.

## 1. Introduction

The practice of pastoralism is particularly well adapted to the Sahel region due to its arid and semi-arid climate conditions and the scarcity of resources. In some countries, such as Mauritania, pastoralism even accounts for more than 50 percent of agricultural GDP (Ndiaye *et al.*, 2025). Pastoral systems are usually based on the mobility of livestock driven by pastoralists to access feed, often following a cyclical and seasonal pattern. In the Sahel, this mobility mainly follows a North–South dynamic. Herders move North during the rainy season and South during the dry season, following the availability of rain and thus feed. Pastoralists also traditionally consider other factors when choosing their destination, such as crop farming calendars and avoiding cropping areas in the growing season. Additionally, they avoid humid areas to reduce disease risk during the rainy season.

Due to the long distances that pastoralists and their livestock cross, pastoral mobility sometimes crosses political borders. To ease this transboundary mobility, the Economic Community of West African States (ECOWAS), which until recently united 15 countries in the region, adopted Decision A/DEC/1998 in 1998. This decision encouraged and partly led member states to implement institutional arrangements at national and regional levels to ensure peaceful cross-border transhumance.

However, despite increasing recognition of pastoralism's vital role in rural livelihoods, pastoral systems in the region are confronting a growing number of challenges. Competition has increased in recent years due to other land uses, including crop farming, protected areas, extractive industries, infrastructure, and urbanization.

Crop farming systems and pastoral systems traditionally shared benefits. Pastoralists benefited from crop residues after harvest as feed for their livestock, while crop farmers gained from soil fertilization thanks to manure. Those traditional alliances, however, are disappearing for several reasons, including increased pressure on those resources. Such pressure has been aggravated by climate change, population growth, and resource depletion (Moritz, 2006; Brottem and Turner, 2024).

Conflicts between different land user groups have intensified, sometimes pitting members within the same group against each other, and have contributed to the deterioration of the security situation. The growing insecurity and presence of armed groups in the region over the past decade led to a political crisis. The region experienced several coups d'état in Mali, Burkina Faso, and the Niger. In 2024, the three states announced their intention to secede from ECOWAS and form a new community, the Alliance of Sahel States (ASS).

This created uncertainty regarding the application of ECOWAS provisions on transboundary movements. Moreover, the existing laws and regulations governing pastoral land and the management of natural resources are largely unknown to key stakeholders, which weakens their practical application. This contributes to the marginalization of pastoralist communities and the weakening of their rights to access natural resources (Kiema *et al.*, 2014; OECD, 2022). In this context, FAO supported the establishment of national and regional transhumance committees in several Sahelian countries, including the Niger, Senegal, Mali, and Mauritania. These committees aim to play a role in conflict prevention by bringing together actors with diverse interests and building mutually beneficial solutions for the peaceful, shared use of natural resources.

The approach is based on the Voluntary Guidelines on the Responsible Governance of Tenure (VGGT) approved by the members of the Committee on World Food Security (FAO, 2012). The VGGT provide ten key principles to ensure equitable access to resources. These are human dignity, non-discrimination, equity and justice, gender equality, a holistic and sustainable approach, consultation and participation, the rule of law, transparency, accountability, and continuous improvement. Following these principles, a technical guide for implementing the VGGT in pastoral areas was developed (Davies *et al.*, 2016) and defines seven further action areas.

These are as follows:

1. develop accountable decision-making and effective representation;
2. ensure inclusive, equitable, and transparent participation in consultations and negotiations;
3. recognize local and indigenous knowledge to ensure cultural and ecological diversity for resilience;
4. recognize customary systems and strengthen synergies with statutory systems;
5. enhance the capability of local organizations, social networks, and the institutional space in which they operate;
6. avoid and manage conflict; and
7. foster collaborative learning.

## 2. The experience of establishing transhumance committees in the Niger

The approach was first tested and developed in the Niger, with the establishment of three regional transhumance committees (or *Comités régionaux de transhumance* – CRT in French) in Tahoua and Dosso in 2019. In 2020, a committee was established in Zinder, with the technical support of FAO. The CRT has a multi-stakeholder composition that includes government representatives, traditional leaders, local authorities, pastoralist and crop-farming organizations, opinion leaders, members of parliament from the region, traditional chiefs, village representatives, and women's and youth associations working in the livestock sector.

According to the President of the Network of Pastoral and Herder Organizations of the Niger (ROPEN – *Réseau des Organisations des Pasteurs et Éleveurs du Niger*), the establishment of transhumance committees has been important. ROPEN supported and facilitated the emergence of these committees, which managed to bring all the different stakeholders together. Additionally, various user groups were trained on the consultative and participatory approach, which is one of the key principles of the VGGT. The inclusive nature of the committees and the fact that they are presided over by the local governor give them strong legitimacy and authority in fulfilling their mandate, he said in an interview with the authors in January 2025.

The sub-national experiences in the country inspired the establishment of a transhumance committee at the national level. On 20 November 2019, the President of the Republic of Niger signed a decree establishing the national transhumance committee (or *Comité national de transhumance* – CNT, in French), which follows a similar multi-stakeholder composition.

## 3. Increased space for dialogue to address conflicts

The committees manage aspects related to transhumance, such as defining the crop calendar and dates for crop harvesting, as well as the moving dates for livestock. These measures ensure that animals do not trespass on land that is still cultivated. At the municipal level, they address land conflicts as they arise. They seek mutually agreeable solutions among stakeholders (for example, when livestock trespass on fields outside agreed-upon dates and damage crops). Although no official record existed for monitoring conflicts related to land access prior to 2019, stakeholders involved in the CRT in the Niger have reported reductions. The process has reduced not only the number of these disputes but also their level of violence. While those conflicts could lead to human losses when they escalated some years ago, no such extreme cases were recorded in the past year.

Stakeholders attribute this to active committee work in these regions, as explained by the President of the ROPEN, in the interview in January 2025:

*"Thanks to the transhumance committee, today herders, crop farmers, and fishermen, the latter facing challenges related to access to water, talk to each other. It has resulted in more effective involvement of all parties and made them more willing to resolve issues together. It has also led to increased trust. There have been fewer conflicts between farmers and herders."*

The CRT also disseminates and sensitizes its members to existing laws and regulations. This approach aligns with a key recommendation from an analysis of disputes over this practice conducted by FAO in the Diffa region in the Niger, alongside the establishment of multi-stakeholder transhumance committees (FAO, 2021f). Indeed, existing laws and agreements governing natural resources and pastoral areas are often unknown to those involved, including officials and extension services. For example, CRT members are regularly informed of key regulations, such as Ordinance 2010-029, which establishes mobility as a right, protects pastoral lands from privatization, and recognizes traditional communal use of land, among others.

## 4. Local agreements for a peaceful transhumance

As in other areas of the Sahel, insecurity in the transboundary region between Niger and Nigeria has grown in recent years. Examples include damage to cropland and woodcutting by transhumant populations on one side, as well as cattle rustling and general insecurity for pastoralists on the other side. Recognizing these challenges, the transhumance committees began to build mutual understanding of the need for common solutions. After several bilateral meetings organized between the CRT in the Niger and their counterparts in Nigeria, authorities from both sides agreed on the benefits of pastoralism and transhumance. They also acknowledged the need to secure this way of life and livelihood for future generations and to foster cross-border exchanges of an economic, social, and cultural nature.

The discussions between the countries led to the signing of two local bilateral agreements. The first agreement was signed in August 2022 between the governors of the Zinder region (Niger) and the neighbouring state of Jigawa (Nigeria) (FAO, 2022a). The second was signed in December 2022 between the region of Dosso (Niger) and the State of Kébbi (Nigeria) (FAO, 2022b). These agreements provide enhanced protection for transhumant herders against cattle rustling and insecurity, as well as joint investment programmes to support pastoralism and facilitate peaceful cross-border transhumance. They further protect host populations by prohibiting herders from grazing at night around crop fields and from cutting wood in host areas. They also establish a common consultation framework to raise stakeholders' awareness of the legislation in force in both countries, especially regarding the dates on which farmers must vacate their fields. The framework includes a database system to better monitor cross-border mobility.

The meetings enabled mutual understanding and enhanced cross-border investments in pastoral areas. Discussions raised awareness among Nigerian governors that the early descent of transhumant pastoralists from Niger – which usually leads to conflicts with indigenous crop farmers – often stems from a lack of water. In dry years, water points dry out earlier, forcing pastoralists to move south in search of water and feed for their animals to keep them healthy, even though crops have not yet been harvested. Once the challenge was understood, the States of Nigeria committed to funding several water wells along the border with Niger. The aim is to retain livestock in the north for longer during dry years. That measure will allow animals to be grazed after harvest when fields are free again, avoiding damage to crops.

## 5. Locally adapted training tools in support of solutions to address land-related conflicts

Due to the complexity and length of the VGGT and the associated technical guide on pastoral lands, as well as the high illiteracy rate among the rural population, a need emerged. Simpler, more adapted materials were developed for them, reflecting the concrete challenges faced by different user groups on the ground. During a series of participatory sessions facilitated by FAO and ROPEN, members of the committees and local stakeholders worked on contextualizing those materials. They identified key principles of the VGGT and action areas applicable to the Niger and provided concrete examples and actions that stakeholders could use. The result was a simple, illustrated, and comprehensive guide that was used as a tool to strengthen the capacities of the CRT based on concrete case studies (FAO, 2019a). This resource and VGGT-inspired training approach have since been used by other partners' programmes aiming to train local partners to address conflicts between natural resource users at the community level. Indeed, the establishment of CRT was later replicated in other regions (Diffa, Tillabéry, Agadez, and Maradi) of the Niger by other development partners and organizations. They all benefited from this resource.

## 6. Leveraging the approach to the region

The method of establishing transhumance committees in the Niger garnered interest from neighbouring countries facing similar challenges. Consequently, the experience was shared during the sixth high-level meeting on peaceful transhumance and livestock mobility in the Sahel and West African coastal countries, held in Ghana in October 2019, and during the high-level meeting on peaceful transhumance and livestock, organized in Chad in November 2019. Following these events, a delegation of national authorities and civil society

organizations from Burkina Faso visited the Niger in December 2019 to capitalize on and learn from the country's experience in establishing the CNT. During the various sessions, state and non-state actors from the Niger demonstrated how transhumance committees have become an essential tool for technical services, pastoral and farmers' organizations, traditional leaders, and women's organizations, among others.

This experience inspired a similar approach in other Sahelian countries. An illustrated guide, adapted from the VGGT and the technical guide on pastoral land, was similarly developed in Mali, Mauritania, and Senegal. As in the Niger, local pastoral organizations organized participatory sessions to identify principles and areas of the VGGT they considered key to their specific country and context and to develop their own illustrated guide. Such guides were developed and published for Mali (FAO, 2021c) with the National Coordination of Peasant Organisations of Mali (CNOP – *Coordination nationale des organisations paysannes du Mali*) and the Sahelian Centre of Service-Provision, Study, Eco-development and Applied Democracy (CSPEEDA – *Centre sahélien de prestation, d'études, d'écodéveloppement et de démocratie appliquée*); for Mauritania (FAO, 2021d and 2021e) with the National Grouping of Pastoral Associations (GNAP – *Groupement national des associations pastorales*); and for Senegal (FAO, 2023d) with the Billital Maroobé Network (RBM – *Réseau Billital Maroobé*).

In Mauritania, FAO supported the establishment of three CRTs in the boundary region with Mali, specifically in the wilayas (the largest sub-national administrative units) of Hodh el Gharbi, Hodh el Charqui, and Assaba. In Mali, FAO also established two CRTs in Kayes and Ségou, as well as eight transhumance committees at the local level in the bordering area with Mauritania. Following a similar approach to that in the Niger and Nigeria, members of these CRTs participated in the cross-border meeting held in Sélibabi, Mauritania, in 2023 initiated by the Permanent Inter-State Committee for Drought Control in the Sahel (CILSS – *Comité permanent inter-Etats de lutte contre la sécheresse dans le Sahel*) and funded by several regional projects and partners. The meeting resulted in the creation of a transboundary framework agreement between Mali, Senegal, and Mauritania (FAO, 2023b and 2023c). At the national level, FAO also backed the National Transhumance Committee (CNT – *Comité National de la Transhumance*) in both Mali and Mauritania.

In line with the principles of continuous improvement (the tenth principle of the VGGT) and collaborative learning (the seventh action area of the technical guide for pastoral land), several capitalisation workshops were organized. Participants exchanged experiences on responsible governance of tenure in pastoral areas across the region's countries. Participants exchanged examples, challenges encountered, factors for success, and errors to avoid, thereby disseminating good practices that others could replicate. A multi-country and multi-stakeholder virtual platform was also established with "agents of change" from nine countries, including both Sahelian and neighbouring coastal countries. These participants were identified with the support of the Permanent Interstate Committee for Drought Control in the Sahel (CILSS – *Comité inter-Etats de lutte contre la sécheresse au Sahel*). Participants were trained in the VGGT, formulated individual, national, and regional action plans, and continue to regularly organize virtual workshops to discuss topics related to the governance of pastoral land.

## 7. Lessons learnt

### 7.1 Inclusivity is a building block for sustainable solutions

One of the main lessons learned is the importance of consultation and participation. Indeed, the inclusion of all stakeholders, as described earlier, leverages collective intelligence not only to formulate better solutions but also to ensure they are acceptable and will be adopted by all. For example, the governors of Nigeria would not have invested in water holes at the borders if they had not understood the challenges faced by pastoralists in the Niger due to the lack of water. It is only by meeting them and discussing within the committees that mutual understanding can be built and a resolution found. On the other hand, participation also makes agreements more sustainable. If a party is excluded from decision-making, they are more likely to disregard the decisions. The different parties involved will be more likely to apply and respect those agreements. According to the members of the committees, it is important to ensure that no one is left out from these bodies. Everyone should communicate and understand each other, even though the process takes more time.

### 7.2 The need for adapted training materials

Another lesson learned is the importance of adapting training material to the local context. Comprehensive and straightforward guides explaining how to use the VGGT in the specific context of the countries were developed in response to a request from stakeholders. Given that Sahelian countries are among the world's most illiterate, the idea of comprehensive illustrated guides emerged. In the Niger, this resource was prepared following several workshops with the members of the transhumance committees. The different principles and action areas of the VGGT were presented to them.

They discussed which of those actions and priority areas they found most appropriate and relevant to help them address the challenges encountered at the grassroots level. They also shared examples of successful experiences using these concepts, which were incorporated into the guide as good practices. Although these resources include text, the images were designed to be as self-explanatory as possible. Soon after, a similar approach was followed in Mali, Mauritania, and Senegal. The texts were translated into Arabic in Mauritania and into Wolof, Pulaar, and Serere in Senegal. The preparation of locally adapted training materials in support of peaceful transhumance serves as an empowerment-building tool for pastoralist communities.

### 7.3 A bottom-up approach can help build political change beyond borders

Another lesson learned is that supporting pastoral organizations at the ground level can help influence policy at higher levels – both national and regional – through the facilitation of bilateral agreements. In the Niger, a key challenge in establishing the national committee (CNT) was administrative: national-level dynamics stalled until actors decided to begin at the sub-national level. The subsequent creation of CRTs enabled the formation of the national committee. One key success factor was close collaboration among the ministry of livestock, pastoralist civil-society actors, and partners, including FAO, which supported the initiative.

The multistakeholder nature of the committees also strengthens pastoral organizations' capacity to coordinate diverse stakeholders and to advocate for more pastoralist-friendly policy. In the Niger, Mali, Mauritania, and Senegal, pastoral organizations played a strong role in building political will and trust among different stakeholder groups and in establishing transhumance committees at the national level. These arrangements require continuous awareness-raising and trust-building to ensure sustained political commitment.

### 7.4 Scaling up the approach for better coordination and impact

The transhumance-committee approach to foster peaceful transhumance in the Sahel is attracting interest from partners seeking to replicate the model. In the Niger, several partners supported the establishment of additional CRTs following FAO support for the first three in 2019 and 2020. In Mauritania, the Regional Sahel Pastoralism Support Project (PRAPS), funded by the World Bank, aims to replicate CRTs already established in three wilayas (Hodh El Gharbi, Hodh el Chargui, and Assaba) in other wilayas, using the same VGGT - related training materials.

Once established, these committees attract interest from stakeholders who want to support peacebuilding, conflict management, and investment. For example, In the Niger, committee members reported being approached by private-sector actors, including agribusinesses such as milk firms, wishing to engage with pastoralists and explore collaboration. The European Union has also replicated the committees' approach at the municipal level. By identifying existing initiatives and programmes, formulating recommendations and action plans, and establishing transhumance committees In the Niger, the initiative has helped trigger synergies and coordination among partners and programmes. This dynamic enables partners to support activities relevant to the local context by building on recommendations emerging from the ground.

## 7.5 Challenges and perspectives

One of the main challenges faced by the CRT and by the rural population in general in the cited countries is the region's unstable political context. It is marked by *coups d'état* in Mali (2020 and 2021), in Burkina Faso (2022) and in the Niger (2023). The ever-changing rules and officials, together with tensions between those countries and their neighbours that remain in the ECOWAS area, add further difficulty, particularly in organizing transboundary meetings. Insecurity also adds complexity, with official authorizations from the ministry and military escorts now required for the safe travel of foreigners when such exchanges are organized.

In this complex political situation, one challenge is the rapid turnover of officials, which necessitates re-running training sessions and meetings to sensitize their successors to the VGGT approach and existing agreements. While involving officials as members of those platforms is key to ensuring continuity with the country's policy development and facilitating the implementation of activities, stakeholders also noted that including traditional authorities is crucial. Not only do they play a key role in decisions on tenure matters and act as guarantors of customary land rights, but they also provide stability while officials may change quickly. According to committee members, the involvement of traditional authorities ensures that committees maintain institutional memory.

Looking forward, building partnerships and sharing experiences and lessons learned among countries are essential to scaling up this approach and existing experiences. Coordination with international development partners and links to regional initiatives are also important for the sustainability of transhumance committees. They need funding to fulfil their mandates and should not depend too heavily on donors and partners. Building mechanisms and tools that foster peaceful transhumance should be a priority for both national and regional decision-makers in the Sahel. Cross-border transhumance is vital to rural livelihoods, peace and stability in the region. A recently validated strategy for livestock development and the securing of pastoral systems in West Africa and the Sahel could also serve as a relevant policy framework. It would help develop synergies and improve the regional integration of related processes.

## 8. Conclusion

The article presented how transhumance committees are promising mechanisms and tools to build common understanding among competing land user groups and find peaceful solutions to address land-related conflicts. These bodies – both at the national and local levels – are inclusive of all stakeholders. Likewise, local conventions, such as the agreements signed between the governors of the regions of Zinder and Dosso (the Niger) and the neighbouring states of Jigawa and Kébbi (Nigeria), can help protect transhumant pastoralists crossing borders. In the four countries – the Niger, Mali, Senegal, and Mauritania – the VGGT were used as empowerment-building tools for pastoralist communities. Local actors received training on resolving disputes related to access to and use of land.

Finally, it is encouraging to see the increasing number of partners willing to support and replicate this approach in other regions and contexts. Collaboration among development actors can help ensure the sustainability of transhumance committees, which often lack funding. The scaling up of the multi-stakeholder method and the strong willingness of all parties to join forces to address disputes across levels and boundaries provide a solid foundation. Such commitment maximizes the long-term impact of these bodies on the ground.

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