Food and Agriculture Organization of the United Nations

Collective tenure rights and climate action in sub-Saharan Africa

What are priority investments in rights to achieve long-term sustainability of forest areas?

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Collective tenure rights and climate action in sub-Saharan Africa

What are priority investments in rights to achieve long-term sustainability of forest areas?

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Contents

BOXES

FIGURES

TABLES

Abbreviations

ACHPR	African Commission on Human and Peoples' Rights
AFR100	African Forest Landscape Restoration Initiative
AMAN	*Aliansi Masyarakat Adat Nusantara* - Indigenous Peoples Alliance of the Archipelago
BRI	Belt and Road Initiative (China)
CAR	Central African Republic
CaVaTeCo	Community Land Value Chain (Mozambique)
CBFM	community-based forest management
CFCL	Local Community Forest Concessions - *Concession Forestière des Communautés Locales* (Democratic Republic of the Congo)
CGIAR	Consultative Group on International Agricultural Research (formerly)
CFE	community forestry enterprise
CFG	Community Forestry Group
CFI	Community Forest Institution
CFM	community forest management
CI	Conservation International
CIAT	International Center for Tropical Agriculture
CIFOR	Center for International Forestry Research
CLUA	Climate and Land Use Alliance
CoP	Conference of Parties
CREMA	Community Resource Management Area (Ghana)
CSO	civil society organization
CUG	community user group
DRC	Democratic Republic of the Congo
DUAT	*Direito de Uso e Aproveitamento da Terra* (Mozambique)
ER	emissions reduction rights
EU	European Union
FAO	Food and Agricultural Organization of the United Nations
FCPF	Forest Carbon Partnership Facility
FDI	foreign direct investment
FILAC	Fund for the Development of the Indigenous Peoples of Latin America and the Caribbean
FLEGT	Forest Law Enforcement, Governance and Trade
FNDS	National Sustainable Development Fund - *Fundo Nacional de Desenvolvimento Sustentável* (Mozambique)
FPIC	free, prior, informed consent
GLF	Global Landscapes Forum
GtC	gigatonnes of carbon
GIZ	*Gesellschaft fuer internationale Zusammenarbeit,* or German Development Cooperation
ha	hectare
HIA	Hotspot Intervention Areas (Ghana)
ICCA	Territories and areas conserved by Indigenous Peoples and local communities - 'territories of life'

IFL	intact forest landscape
IFRI	International Forestry Resources and Institutions
ILC	International Land Coalition
IL	Indigenous Lands
ILO	International Labour Organization
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for Conservation of Nature
IWGIA	International Work Group for Indigenous Affairs
JICA	Japan International Cooperation Agency
JFM	joint forest management
JFMA	Joint Forest Management agreement
LCE	Loita Council of Elders
LSLA	large-scale land acquisition
Mha	million hectares
MITADER	Ministry of Land, Environment and Rural Development
NGO	non-governmental organization
NRM	natural resource management
NTFP	non-timber forest product
OASL	Office of Administrator of Stool Lands (Ghana)
ORAM	Rural Association for Mutual Support - *Associação Rural de Ajuda Mútua* (Mozambique)
PA	protected area
PES	payment for ecosystem or environmental services
PIA	Protected Indigenous Areas
PFM	participatory forest management
PSB	*Socio Bosque Program* (Ecuador)
REDD+	Reducing Emissions from Deforestation and Forest Degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries
RFUK	Rainforest Foundation UK
RRI	Rights and Resources Initiative
TNC	The Nature Conservancy
UN	United Nations
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USA	United States of America
USD	United States dollars
VLFR	village land forest reserves
VGGT	Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security

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Executive summary

i.1 Context and objectives

In recent years, growing evidence has documented the contributions to climate change mitigation of lands and forests held under collective tenure by local communities and Indigenous Peoples, and more broadly their contributions to natural resource conservation and increased resilience (FAO-FILAC, 2021; IPCC, 2019, Stevens *et al*., 2014; FAO, 2021). Forest conservation is featured in virtually all proposed pathways towards a future in which global average temperature rise avoids going beyond an irreversible 1.5 °C (IPCC, 2018, 2019, 2022). Globally, lands held by local communities and Indigenous Peoples are playing a significant role in climate change mitigation (WWF *et al*., 2021; Martin and Watson, 2016), as almost one-quarter of carbon stored in above-ground biomass in tropical forests is contained in their collective lands (RRI *et al*., 2016). At the same time, mounting evidence demonstrates that insecure land and forest tenure rights affect the ability of communities to advance climate adaptation and mitigation solutions (IPCC, 2018). This evidence has led to a greater focus by the international community in support of the recognition of collective rights, and increased investments, as for example within the Government and Private Funders Pledge of USD 1.7 billion, announced during the United Nations Framework Convention on Climate Change (UNFCCC) Conference of Parties (CoP) 26 in support of securing tenure rights for Indigenous Peoples and local communities. These circumstances create new opportunities for the recognition of collective rights and climate actions in sub-Saharan Africa to reinforce each other in a 'virtuous cycle', leading to better outcomes for local people, sustainable forest use and the global climate transition.

Africa is an important region for the recognition of collective rights to forests. Taking collective tenure fully into account is critical for climate action and livelihoods because forms of collective tenure and use rights are the predominant basis for the ownership, control and use of most forests in Africa. Africa's forests exist within all countries and landscapes on the continent, covering about 20 percent of the landmass, or 637 million hectares (Mha) (FAO, 2020; Nair and Tieguhong, 2004).[1] Community lands – those held and managed under some form of customary tenure – in Africa are estimated at around 2 billion hectares (ha), or 78 percent of the continent, three-quarters of which are forest, wetland and rangeland commons. As much as 90 percent of Africa's rural population (Indigenous Peoples and local communities) access land through customary institutions; this means that the tenure, whether communal, lineage or individual, is collectively legitimized. These customary landholders number more than 630 million, and the figure is growing (Alden Wily, 2021a, 2021b).

[1] UN-REDD/FAO define forests as "An area of land spanning more than 0.05 hectares with tree crown cover (or equivalent stocking level) of more than 10 percent with trees with the potential to reach a minimum height of 2-5 meters at maturity in situ" (Global Canopy Foundation, November 2008). Definitions of what constitutes forests in Africa are diverse and differ across biomes. For the most part, 10 percent tree canopy cover represents a lower threshold. This is often termed 'woodland'. Given the shifting nature of tree cover in human-dominated landscapes in Africa, and the importance of agricultural landscapes increasingly 'loaded' with trees under management by farmers (such as areas across the Sahel), usage of 'forest' in this study is intended to include most treed landscapes, *sensu lato*.

While collective tenure has been increasingly recognized by governments and other actors over the past 20 years (Alden Wily, 2018; Alden Wily 2021a), **significant gaps remain in legal frameworks, implementation of rights' recognition and protections for collective forest rights in sub-Saharan Africa.** In these circumstances, there is a significant risk that gaps in the recognition of collective forest rights may be inhibiting climate mitigation actions and abetting negative changes. State assertions of forest ownership and control (the prevailing *de jure* tenure reality) are often at odds with local incentives for sustainable local forest management, in that they disempower local forest users and constrain the investment horizon for forest use by communities. The evidence based on collective forest tenure's contribution to forest conservation is also thinner in Africa than in other regions, contributing to less consensus and clarity on action agendas. This study, which focuses on sub-Saharan Africa, consolidates and analyses the state of current evidence of how collective forest tenure and governance impact forest condition outcomes, as well as the livelihood outcomes of forest-dependent communities.[2]

The main conclusion is that tenure security for local people inhabiting forest areas is the basis for the sustainable stewardship of forests. Reconciliation of the widespread contradiction between *de jure* state rights and *de facto* customary rights in many countries is a fundamental requirement for creating real tenure security as a basis for the sustainable stewardship of forests. Lack of resolution of this fundamental contradiction in forest tenure is preventing the incentives of long-term stewardship, which should be available to more communities, from emerging. This contradiction is actively contributing to both state-supported actors and communities being incentivized towards short-term extraction. However, tenure security must be understood as part of a package of enabling conditions required to foster the kind of sound local forest management needed for climate policy to achieve impact at scale.

i.2 Forest tenure in sub-Saharan Africa

Following a general pattern of centralization of forest ownership and administration during the colonial period (Larson and Springer, 2016),[3] **since the 1990s many sub-Saharan African countries have begun to devolve forest rights to communities under various juridical schemes combining collective, individual rights and secondary rights (such as the right to trees, right to use pasture).** Where rights to land and forests in sub-Saharan Africa are formally secured by communities, this has tended to take one of two forms: either formal recognition of customary land and resource rights, or devolution of specific forest use and management rights through community forestry initiatives.

[2] A key assumption of this assessment is that forest condition is a proxy indicator of measures more relevant to climate change mitigation, such as above-ground biomass or carbon stored in the landscape.

[3] Globally, fewer than 15 countries avoided colonial imposition/reconstruction of local tenure systems (Alden Wily, 2021a).

However, there remains a widespread discrepancy in sub-Saharan Africa between *de facto* customary tenure and *de jure* statutory tenure – one that generates significant tenure insecurity in practical terms. Under statutory law, rights to most of sub-Saharan Africa's forests and lands continue to be held by national governments (Barrow *et al*., 2016). According to Rights and Resources Initiative's tracking of land ownership and control in a sample of 11 sub-Saharan African nations (RRI, 2018),[4] governments administered 91.8 percent of those nations' forests (based on 2017 data). Yet despite state assertions of ownership over virtually all forests (Lawry *et al*., 2012a), communities claim, occupy and exercise day-to-day control over the majority of sub-Saharan African lands and forests through a combination of traditional and locally evolving norms and rules.

i.3 Factors influencing the outcomes of community forest governance

Research on community forest governance has identified several key factors that influence environmental outcomes (including climate change mitigation) and livelihood outcomes in collectively held forests. Secure rights to lands and forests (collective forest tenure) are certainly one necessary factor, but may not be sufficient to enable positive forest and livelihood outcomes in areas under community governance. Rather, collective tenure systems provide an institutional foundation that interacts with a range of other enabling and disabling factors to incentivize the behaviour of actors and affect outcomes. In turn, these enabling factors also contribute to supporting further clarification and recognition of rights.

Five key enabling factors – secure forest rights, supportive governments, community governance, material benefits for community members, and gender and socioeconomic equality – are supported by the evidence as generating the conditions for positive (environmental and/or livelihood) outcomes (Baynes *et al*., 2015). A sixth enabling factor – the physical and locational characteristics of the forest – is also highly relevant to outcomes. The main takeaways from the analysis of each of the five enabling factors include the following:

1. **Secure rights to trees, forests and land:**[5] There is a broad consensus in the global literature that secure rights to trees, forests and land contribute to positive outcomes from community tenure systems (both for standards of rights for communities and environmental outcomes). However, in many sub-Saharan African countries, the contradiction between *de jure* state rights and *de facto* customary rights prevents the incentives of long-term stewardship from emerging. State assertions of most

[4] Angola, Cameroon, Central African Republic, Democratic Republic of the Congo, Ethiopia, Gabon, Gambia, Republic of the Congo, Senegal, United Republic of Tanzania, Zambia.

[5] The authors are choosing to use the word 'tree' instead of 'forest' in this case to include trees that could fall outside the definition of forests (i.e. communities' rights to wooded areas that may or may not be legally or operationally defined as forests, but are still important to forest-dependent communities).

rights to forest resources frequently create situations in which incentives for long-term management are weak. The separation of tree tenure from land tenure in many contexts also complicates tenure arrangements at the community level, but could be an opportunity for some groups, for example women who are allowed to collectively harvest fruits or other non-timber forest products (NTFPs), such as bark and wood. However, the degree of devolution of forest rights to communities for community forest management (CFM) is often incomplete or limited in area. Programmes and investments aimed at improved forest management often work to obtain secure rights to forests for local communities.

2. **Supportive governments:** Government support to communities plays an important role in achieving positive environmental and livelihood outcomes. Unfortunately, there are many cases in the region where governments and communities are in conflict due to the unwillingness or inability of governments to cede power and resources to communities, and/or the imposition of other land uses. Related institutional challenges accompanying forest devolution are that authority must be clarified between central government and lower government/community levels; regulations may be outmoded and need significant revision; and gaps may remain in key local government capacities (Segura Warnholtz, 2022).

3. **Community governance:** Intra-community governance plays a significant role in both forest and livelihood outcomes via powers to make, implement and enforce decisions. Traditional authorities and institutions generally enjoy social support as a basis for community governance across many sub-Saharan African nations. At the same time, the degree to which customary authorities and other institutions (such as non-governmental organizations [NGOs]) are accountable to community members varies greatly (Ribot, 2004). In light of the widespread situation of legal pluralism in sub-Saharan African countries, local-level institutions must almost always negotiate management of resources with state institutions, such as forest agencies.

4. **Material benefits for community members:** When communities obtain material benefits (monetary and non-monetary) from well-managed forests, this can provide further incentives for investment in sustainable long-term forest and livelihood outcomes. Significant approaches to generating material benefits from forests in sub-Saharan Africa include CFM and payments for ecosystem services (PES), as well as other relevant incentive mechanisms, such as the Reducing Emissions from Deforestation and Forest Degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries (REDD+) policy approaches and results-based finance.Issues impacting material benefits to communities have included the productivity of forests devolved to them, regulations on commercial activities and access to markets, including carbon markets, which require clarifying emissions reduction rights (ERs) and the related distribution of benefits to the communities derived from their mitigation actions.

5. **Gender and socioeconomic equality within communities:** Equality/inequality based on gender or other socioeconomic differences is a major factor affecting community forest outcomes. High levels of buy-in from within communities, including from both women and men, are often needed for successful community-based forestry arrangements. Community-based forestry is more sustainable in a system perceived as fair (Ostrom, 1999) and when an inclusive set of community members has a chance of benefiting. Communities may rely on established systems of authority (such as patriarchal customary authorities) that can further entrench inequalities in decision-making and access to forests. Experience indicates that overcoming gender biases and socioeconomic inequality within communities requires focused and specific attention within governance arrangements on the condition, situation and needs of marginalized groups.

i.4 Forest conditions under community governance

A review of the literature on forest and livelihood outcomes in areas under community governance, focusing on lands where governments recognize the rights of communities to own and/or use and manage forests, shows that, overall, collective forest tenure arrangements have a positive effect on climate-related outcomes. Such arrangements serve as the institutional foundation to incentivize community members to manage forests sustainably and interact with state actors and markets. Voice and democratic representation of community members within the collective institutional structure appear to be important for generating this pathway of development. Democratic governance at the community-level, which reconciles livelihoods with long-term sustainable forest management objectives and sets the stage for PES and other instruments, benefits forest-dependent people, forests and the global climate.

i.5 Pathways for community and global benefits

Based on the above analysis, a framework for action and investment to strengthen collective forest rights and governance and their links to positive climate and community outcomes is proposed here and preliminary investment recommendations are made in a set of case study countries.

Creating the conditions necessary for positive environmental and social outcomes requires phased or layered investments, beginning with devolution of forest rights and proceeding to actions to strengthen forest governance and build sustainable livelihoods. This framework of investments includes the following three phases:

Phase 1: Investment in rights and community forest governance

The analysis recommends that strategies for supporting community forest governance begin by securing rights for communities, as a necessary foundation for successful forest and livelihood outcomes. Investment is needed to support communities in overcoming persistent challenges and constraints that impede

rights recognition and formalization, including those particular to sub-Saharan African contexts. Related activities focused on strengthening and empowering community forest institutions aim to enhance intra-community governance of forest resources, including a shift towards greater gender and socioeconomic equality, and to position community institutions to secure increased and appropriate government support.

Phase 2: Investment in resource management and technical capacities
This phase of investment focuses on building key management, technical and administrative capacities, including the development of forest management plans, implementation of community rules governing resource access and use, strengthening of partnership development and negotiation skills, and the development of financial management and business capacities. This phase aims to further strengthen intra-community governance and create the institutional foundations needed to generate sustainable material benefits from forest resources.

Phase 3: Investment in productive activities
Investments in productive activities that add value to forest-based products enable communities to generate material benefits from sustainably managed forests and strengthen factors that link collective forest tenure with positive environmental and livelihood outcomes in areas governed by communities. While material benefits can take a wide variety of forms, including local, non-market activities, the main emphasis is on activities to establish and support community forest enterprises (CFEs) and payments for environmental services schemes to generate income from forests.

Further research and learning are also needed to guide investments and action aimed at benefiting communities and mitigating climate change in sub-Saharan Africa's forests. Priority topics include a deeper understanding of the conditions and needs of local and Indigenous communities, cost-benefit analyses and impacts of interventions at national and subnational levels, and forest-tenure-livelihood linkages.

The emerging trend towards greater recognition of community rights in the past 30 years has generated practical experience and learning on community forest governance. Significant potential exists for expanded policy development, and implementation to secure community tenure rights and community-led climate action is evident across the region. Actions to support legal protection of collective rights, community-based land governance, forest management and improvement of livelihoods can provide a secure basis for climate action in sub-Saharan Africa.

Tata Somba, Benin.
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Okapi Wildlife Reserve, Democratic Republic of the Congo 2020.
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1. INTRODUCTION AND CONTEXT: FOREST TENURE AND CLIMATE IN SUB-SAHARAN AFRICA

1.1 Why does studying collective forest tenure in sub-Saharan Africa matter for climate action?

In recent years, growing evidence has documented the contributions to climate change mitigation of lands and forests held under collective tenure by local communities and Indigenous Peoples,

and more broadly their contributions to natural resource conservation, increased resilience to deforestation and the promotion of sustainable management (FAO-FILAC, 2021; IPCC, 2019; Stevens *et al.*, 2014; FAO, 2021). Forests and the climate interact with and influence one another (IPCC, 2019). Therefore, forest conservation is critical in nearly every proposed pathway towards a future where global average temperature rise avoids going beyond an irreversible 1.5 °C (IPCC, 2018, 2019, 2022). Globally, lands held by local communities and Indigenous Peoples are playing a significant role in

climate change mitigation (WWF *et al*., 2021; Martin and Watson, 2016), as almost one-quarter of carbon stored in above-ground biomass in tropical forests is contained in their collective lands (RRI *et al*., 2016). At the same time, mounting evidence demonstrates that insecure land and forest tenure rights affect the ability of communities to advance climate adaptation and mitigation solutions (IPCC, 2018). Land use, spatial planning and regulations that incorporate Indigenous and local knowledge have strong potential to contribute to mitigation of and adaptation to climate change (IPCC, 2019). This evidence has led to a greater focus by the international community in support of the recognition of collective rights, and increased investments, as for example, the Government and Private Funders Pledge of USD 1.7 billion, announced during the UNFCCC COP 26. These circumstances create new opportunities for the recognition of collective rights and climate actions in sub-Saharan Africa to reinforce each other in a 'virtuous cycle', leading to better outcomes for local people, sustainable forest use and the global climate transition.

Sub-Saharan Africa's forests are critical for global climate change mitigation and adaptation and for the well-being of local people. Sub-Saharan Africa's forests exist within all countries and landscapes on the continent, covering about 20 percent of Africa's landmass or 637 million hectares (FAO, 2020; Nair and Tieguhong, 2004) (see Box 1 for a description of forest types in Africa). Total biomass carbon stocks across forests in Africa are estimated at 62 gigatonnes of carbon (GtC) (Saatchi *et al*., 2011),[6] and act as important carbon sinks, averaging 0.66 tonnes of carbon per hectare per year over the past decades (Hubau *et al*., 2020; Valentini *et al*., 2014). Much of these stocks are in the Congo Basin region of humid rainforests and peatlands, which are estimated to hold 29 billion metric tonnes of carbon (Crezee *et al*., 2022; Dargie *et al*., 2017). Additionally, the montane forests of Africa, while more restricted in extent, hold similar carbon densities to lowland forests in Africa, and higher carbon densities than similar forests in the Neotropics (Cuni-Sanchez *et al*., 2021). More than two-thirds of Africa's people rely directly and indirectly on forests for their livelihoods, including more than 70 percent of households that utilize wood as their primary energy source (Somorin, 2010). As climate change contributes to reduced food security and increased malnutrition for communities, small-scale growers and the poor (IPCC, 2022), the role of forested ecosystems in climate change adaptation is projected to grow.

Collective tenure is the predominant basis for ownership, control and use of most forest landscapes in Africa. Community lands (i.e. those held and managed under some form of customary tenure) in Africa are estimated at around 2 billion ha, or 78 percent of the continent, three-quarters of which are forest, wetland and rangeland commons. As much as 90 percent of Africa's rural population (local communities and Indigenous Peoples) accesses land through customary institutions. These customary landholders number more than 630 million and the figure is growing (Alden Wily, 2021a, 2021b). The map in Figure 1 illustrates the high proportion of land in African countries held by local communities and Indigenous Peoples (whether or not this is formally recognized in national laws), where data are available. The darkest shade

[6] Utilizing >10 percent forest canopy cover threshold. See Saatchi *et al.*, 2011 for more details.

Box 1. Forested biomes of Africa

Congo Basin: World's second-largest tropical rainforest, accounting for over 89 percent of African tropical forests. High levels of intact forest, with a lower rate of deforestation, compared with Asian or Latin American tropical forests (FAO and ITTO, 2011). The relatively undisturbed Cuvette Centrale, the largest forested peatland in the world, contains vast amounts of carbon critical to global climate change mitigation efforts (Dargie *et al*. 2017). Currently, forests in the Congo Basin are some of the best preserved on of biodiversity (Sanderson *et al*., 2002, cited in Gillet *et al*., 2015). However, land-use conversion is threatening this biome. In the Democratic Republic of the Congo, which holds 126 Mha of forest (3 percent of the world's forests), deforestation levels have been among the highest in the world, behind Brazil (FAO, 2020).

West African rainforests: A mosaic of mostly secondary forests, logged forests, orchards/ agroforestry and primary forest fragments (Norris *et al*., 2010). Despite high population pressure, these forests have high value for conservation and biodiversity.

West African dry forests and woodlands: Stretching across the continent from the coastal fringes of tropical humid forests to the southern margins of the Sahara Desert, this progressively drier (going northward) region includes the Sahelian woodlands and savannahs (Mayaux *et al*., 2003). This highly modified region is extensively affected by fire and cultivation, and acts as a critical landscape for pastoralists (Chidumayo and Gumbo, 2010).

Dry forests and woodlands of East Africa: Semi-arid forests, bushlands and thickets with high local importance for NTFPs such as honey, plant exudates and hunting (Chidumayo and Gumbo, 2010).

Coastal forests of East Africa: Presently exist only as fragments (~10 percent of original extent). High in biodiversity, with importance for NTFPs and as sacred forests. Due to their relative isolation from other similar forests, these forests exhibit extremely high levels of endemism (Wilson, 2011).

Dry forests and woodlands of Southern Africa: Highly heterogeneous, including extensive semi-humid forests and regionally important miombo woodlands. In general, these low-productivity ecosystems support less commercial logging and are more important for NTFPs and rural energy production (charcoal) (Campbell *et al*., 2007).

Afromontane forests: Located on both wet and dry aspects of mountains throughout the continent. These are very biologically diverse forests with a high degree of endemism and extremely important sources of water and resources for communities (Wilson, 2011).

Mangrove forests: These intertidal forest communities cover much of coastal Africa (3.2 Mha of the African continent, 19 percent of total global coverage), including up to 1.0 Mha in the Niger delta region. These forests are very biodiverse, are critical to subsistence and commercial fisheries, as well as rural economies (Ajonina *et al*., 2008), and contain vast stocks of carbon in their soils (Kauffman and Bhomia, 2017).

Sources:

Chidumayo, E.N. and Gumbo, D.J. eds., 2010. The dry forests and woodlands of Africa. London and Washington DC: Earthscan.

Dargie, G.C., Lewis, S.L., Lawson, I.T., Mitchard, E.T., Page, S.E., Bocko, Y.E. and Ifo, S.A., 2017. Age, extent and carbon storage of the central Congo Basin peatland complex. Nature, 542(7639), pp.86-90.

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Mayaux, P., *et al.*, 2003. A land cover map of Africa. Carte de l'occupation du sol de l'Afrique. European Commission, Joint Research Center, EUR, 20665.

Norris, K., *et al.* 2010. Biodiversity in a forest-agriculture mosaic–The changing face of West African rainforests. Biological conservation, 143(10), pp.2341-2350.

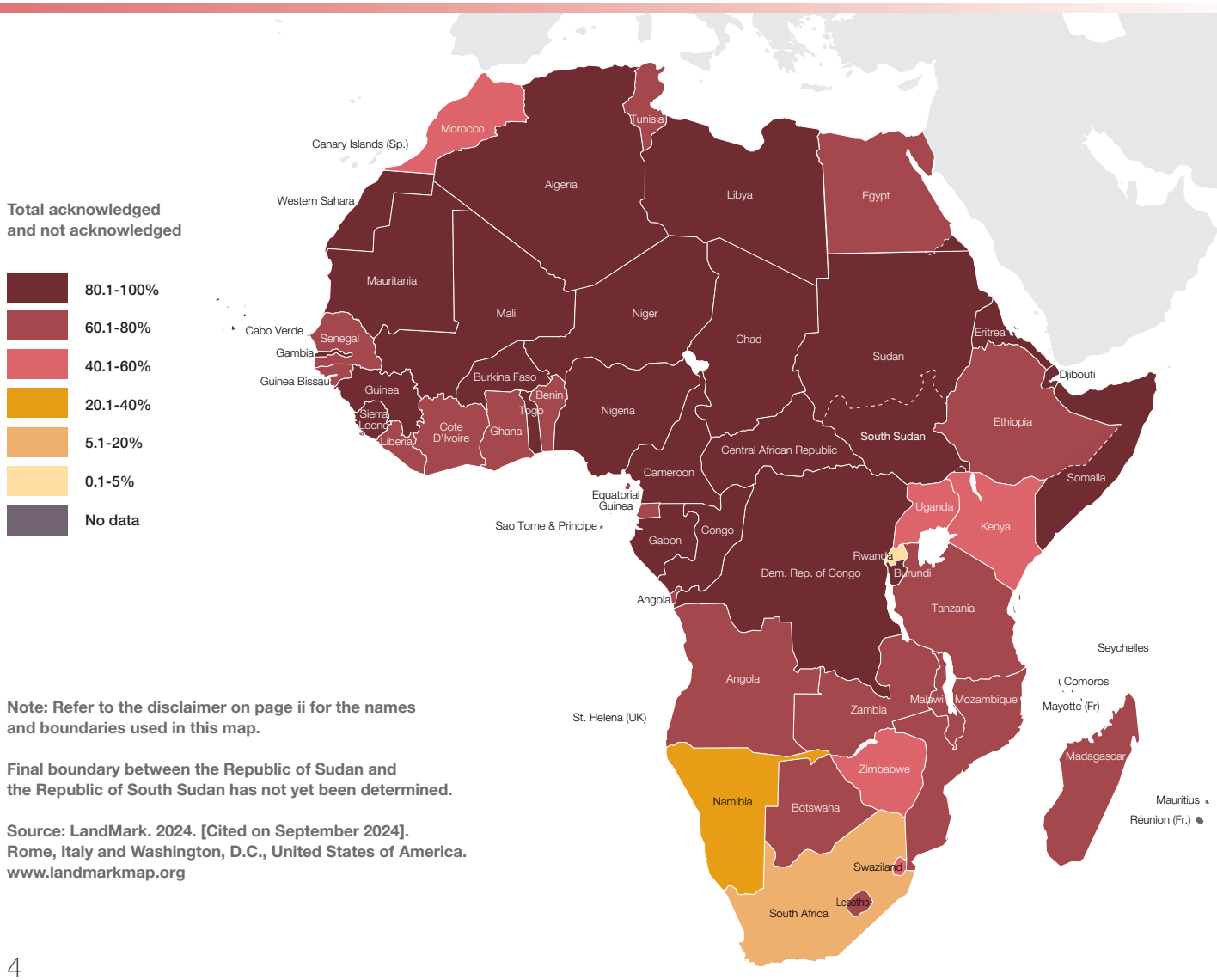
Wilson. 2011. Congo Basin - Facts. WWF Accessed at https://www.worldwildlife.org/places/congo-basin

on the map shows where community lands are estimated to constitute 80 percent or more of the country area.

However, there are significant gaps in the recognition of collective forest rights in Africa, with implications for climate change. The predominance of collective tenure has become increasingly recognized by governments and other forest actors during the past 20 years, especially in certain countries (Alden Wily, 2018, 2021a).[7] However, significant gaps remain in legal frameworks, and in the implementation of laws and protection for collective forest rights in Africa. Moreover, areas of insecure tenure overlap with many of the world's most carbon-rich forests, including in Africa. (See Figure 2 which shows the relatively large area of overlap between areas of low tenure security and high carbon biomass density in Africa). In these circumstances, there is a significant risk that legislative and implementation gaps in the recognition

[7] For example, Burkina Faso, Kenya, Liberia, Malawi, Mali, Mozambique, South Africa, South Sudan, Uganda and the United Republic of Tanzania.

Figure 1. The emerging picture of community lands
(percentage of community and Indigenous lands recognized and not recognized by governments)

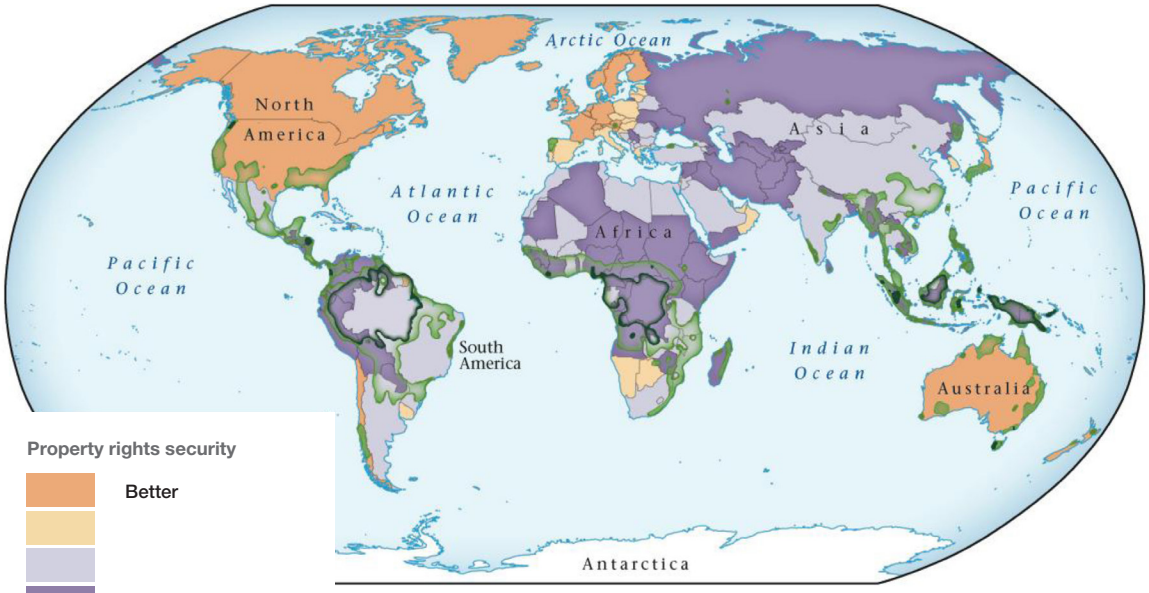


Note: Refer to the disclaimer on page ii for the names and boundaries used in this map.

Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined.

Source: LandMark. 2024. [Cited on September 2024]. Rome, Italy and Washington, D.C., United States of America. www.landmarkmap.org

Figure 2. Tenure security and carbon biomass density



Note: Refer to the disclaimer on page il for the names and boundaries used in this map.

Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined.

Source: Bruce, J. W., Wendland, K. J. & Naughton-Treves, L. 2010. *Whom to pay? Key concepts and terms regarding tenure and property rights in payment-based forest ecosystem conservation.* Land Tenure Center, Nelson Institute of Environmental Studies, University of Wisconsin, Madison, USA. https://biodiversitylinks.org/projects/completed-projects/translinks/translinks-2010/land-tenure-center/Paper_TenureConceptsandTerms.pdf/view.

of collective forest tenure rights may be inhibiting climate mitigation actions and abetting negative changes. Among factors that contribute to climate change, the IPCC identifies land tenure insecurity and insecure property rights as among the leading factors (IPCC, 2019). Climate investments aimed at improved forest management can themselves be crucial vehicles for securing rights.

The evidence base on collective forest tenure is also thinner in sub-Saharan Africa, contributing to less consensus and clarity on action agendas. While the evidence base supporting the linkage of collective tenure to improved forest outcomes has become increasingly robust and actionable globally (especially in Latin America, see FAO and FILAC, 2021), that on the relationships of tenure systems and forest outcomes – including the provision of biodiversity, environmental services and sustainable livelihoods in the African context – remains thinner, newer and less fully analysed. For these reasons, there is less consensus and clarity about the specific agendas for action in linking recognition of collective forest rights to climate action. This is largely because in the great heterogeneity of forest communities and tenure arrangements in sub-Saharan Africa, the prevalence of legal pluralism in the region, and the many ways that contingent factors shape incentives and behaviour for local actors, are greater than in other regions.[8]

[8] At the same time, scientific evidence shows that people in the sub-Saharan African region will be acutely vulnerable to climate-related extremes, including those impacting food security, nutrition and livelihoods (IPCC, 2022).

With the opportunity presented by increased international attention to the roles of community governance in combating climate change, it is urgent that the evidence base for tenure-forest relationships in sub-Saharan Africa be rapidly assessed and expanded. Assessments should include careful consideration of the roles of contingent factors, as well as agendas for strategic action in the short and medium term, based on this evidence. The costs of inaction are substantial: deforestation and land degradation are accelerating across the African continent, and many high-value forests that were stable in previous decades are now threatened. This trend highlights the need to focus support on the occupant communities who are the stewards of these globally important landscapes and can play a central role in on-the-ground forest conservation.[9]

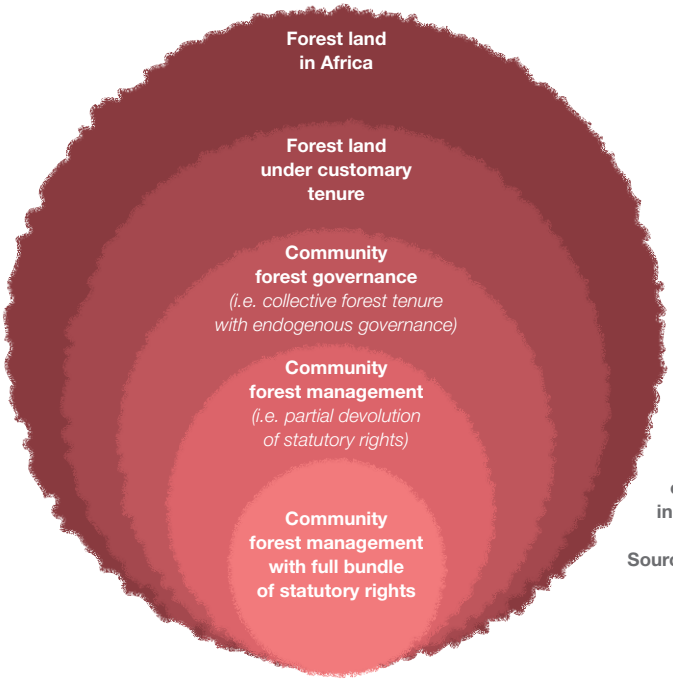
1.2 Aims and structure of this study

This study aims to consolidate and analyse the state of the evidence on how tenure arrangements –in particular collective ownership and management of forests operating in complex systems of contingent factors – impact forest condition outcomes,[10] as well as livelihood outcomes of forest dwellers in sub-Saharan Africa. Based on this evidence, it also presents guidance on actions that can improve these environmental

[9] WWF *et al.*, 2021 estimates that at least 32 percent or 43.5 million km² of global land and associated inland waters are owned or governed by Indigenous Peoples and communities, either through legal or customarily held means. RRI 2020 states that expert opinion and the leaders of Indigenous Peoples, community and Afro-descendant organizations estimate that >50 percent of global lands are held by communities exercising customary rights. As of May 2021, only 16.64 percent of land was within protected areas (UNEP-WCMC and IUCN, 2021a), although there is some overlap.

[10] A key assumption of this assessment is that forest condition is a proxy indicator of measures more relevant to climate change mitigation, such as above-ground biomass or carbon stored in the landscape.

Figure 3. Overlapping collective forest tenure categories



Note: The two most interior circles represent the categories of tenure most represented by analysis in Chapters 2 and 3 and in the literature on community forest management.

Source: Authors' own elaboration

and livelihood outcomes in forest areas. The study builds on the framework of the Food and Agricultural Organization of the United Nations' (FAO) Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT) and the approach and methodology of a recent study of community forest governance in Latin America and the Caribbean (FAO/FILAC, 2021), but with a **focus on sub-Saharan Africa.**

The scope of this study includes forests under customary tenure systems, customary forests that have been afforded recognition under statutory law, and forests recognized by governments under arrangements such as community forest management. The study is concerned primarily with collective forest rights (and collective land rights where these are the basis for securing collective agency over forest resources). The collective owners of these forests and lands may be Indigenous Peoples, rural communities and/or user groups within communities formed to govern and utilize forests. Additionally, many forests/trees on lands under customary law are managed by individual farmers, although they are collectively owned by the community. It is this diversity of overlapping categories and concepts (see Figure 3) that compels this study to draw on many different data sources and disciplines, so as to illustrate the influences of collective forest tenure across Africa and globally.

The following sections of this introductory chapter review the historical context (1.3) and current state of ownership (1.4) of sub-Saharan African forests, including forests held under customary law and under statutory law (the latter comprising formalized customary tenure, as well as new community forest management arrangements)**.**

Chapter 2 explores a set of five key factors that, based on relevant literature and experience, are associated with positive environmental and livelihood outcomes in forest areas owned, managed or used by local communities and Indigenous Peoples. One of these factors is secure collective rights to lands and trees, which provides an essential foundation for positive outcomes, but may not be sufficient. Other contingent factors explored in this chapter that interact with collective rights to generate positive forest and livelihoods outcomes include government support, community governance, material benefits and intra-community equity, including gender equity. While the specific focus of this study is climate change mitigation, livelihood outcomes are also taken into account, recognizing that, for long-term sustainability of carbon in the landscape, communities must also meet their own needs. The body of research evaluated in this chapter is mostly related to the outcomes of community forest management interventions (which may include the formalization of tenure rights, see Box 2), though these follow informal endogenous community forest management in many cases.[11] It is an assumption of this study that endogenous forest management practised under customary tenure systems would exhibit similar outcomes, in light of the apparent similarities of enabling conditions for community forest management globally.[12]

[11] Hajjar *et al.,* 2021a, report that 35 percent of global cases from Hajjar *et al.,* 2020, a major assessment of CFM interventions, revealed the presence of endogenous CFM prior to the policy intervention (e.g. formal CFM programme), meaning that in many cases communities had experience of forest governance and management before policy interventions began.

[12] Communal management of forest resources that originates within the community, not brought about by external institutions.

In Chapter 3, the study reviews current literature to assess the impacts of collective forest rights and management on the biophysical condition of forests and social outcomes, such as livelihoods and governance. In this review, the role of the interaction between collective tenure and a set of key contingent factors is highlighted. As in Chapter 2, this literature is mostly focused on forests under state-recognized community rights and management.

Based on the analysis presented in the previous chapters, the final Chapter 4 presents a framework for action and investment to strengthen collective forest rights and governance, and their links to positive climate and community outcomes. It also discusses preliminary investment recommendations for the case study countries, and concludes by outlining an urgent research agenda to support communities in achieving these beneficial outcomes.

The methodology used in this study involved reviewing evidence, examining strategies and identifying opportunities for strategic action, investment and further research. The analysis was conducted through a desktop literature review and virtual activities, including key informant interviews and consultations with international experts and academics. Specifically, there was a scoping review of published research and policy guidance from governments, FAO and other United Nations agencies, multilateral and bilateral cooperation, think-tanks and scientific actors. This process was followed by a targeted review of additional sources and material. Qualitative, semi-structured interviews were organized with selected informants and a review was conducted of research themes, programmatic activities and strategic directions of major international actors and donors. The next stage involved synthesizing the evidence and identifying agendas for strategic action and research, prior to a virtual validation workshop with experts and stakeholders and the subsequent drafting of the study. Key terms and concepts used in this study are described in Box 2.[13]

1.3 Historical context

Customary tenure of forests in Africa has deep historical roots, having evolved over millennia. Under customary tenure systems, functional rights to use, inherit and gift land and natural resources arose from the community itself, rather than from external legal recognition, and constantly evolved to meet the needs of the community. Communities managed and used land through a diversity of traditional management and governance regimes.

During the colonial period, forest ownership and administration were centralized across much of Africa (Larson and Springer, 2016), based on European models of state management and control of natural resources.[14] Colonial powers influenced customary tenure through the imposition of administrative management of rural

[13] Several of these definitions are adapted from Pearce, 2016.
[14] Globally, fewer than 15 countries avoided the colonial imposition/reconstruction of local tenure systems (Alden Wily, 2021a).

Box 2. Key terms and concepts

'Collective forest tenure' refers to forests owned by and designated for Indigenous Peoples and local communities. This term refers to the underlying rights to forests and trees that are the foundation for community forest governance. Collective forest tenure may be based on customary law and/or statutory law and, in some cases, may be perceived as secure by communities, even if not based on the latter. However, in most cases 'securing collective forest tenure' implies a degree of formal recognition by states. In some cases, securing rights to the underlying land will also provide tenure security for resources such as forests.

'Commons' and 'forest commons' are lands and forests that communities maintain as their shared property. Forests, wetlands and rangelands are often held and managed as commons by communities.

'Communities' refers broadly to a group of people defined by 1) spatial unit or strong connections to a particular place/area; 2) distinct social structure; and/or 3) distinct norms. Communities vary in size, identity, internal equity and land-use systems.

'Customary tenure' refers to the rights to land and resources derived from customary law and communities themselves to regulate how their lands are acquired, owned, used and transferred. Customary tenure systems comprise a set of (usually informal and unwritten) rules and norms that govern community allocation, use, access and transfer of land and other natural resources. Customary tenure is often associated with Indigenous- and local community-administered land (FAO, 2002).

'Customary law' refers to norms that have force within the community. When national legislation recognizes that customary law has force, the rules also become part of statutory law.

'Community forest governance' refers to how communities govern forests and is used in this study as an umbrella term that can include formal institutional arrangements, explicit statutory rights and informal customary norms exercised informally. Hajjar *et al.* (2021a) refer to the latter as 'endogenous community forest management', or "some form of communal management of forest resources that is home grown, not brought about by outside institutions".

'Community forest management' (CFM) is used in this study to refer to government initiatives that devolve a varying range of forest management and use rights to communities. Other terms for such initiatives (depending on the country context) include social forestry, community-based forest management, collaborative forest management, participatory forest management, joint forest management and co-management.

'Devolution' is used here to refer generally to the transfer of tenure rights from states to community institutions.

'Recognition' (of land and resource rights) is also used in some contexts involving customary lands and resources, to clarify that devolution is recognizing these existing rights.

'Forest stewardship' refers to the care and use of forest resources to ensure their long-term productivity and conservation.

'Indigenous Peoples' constitute a subset of community rights holders across Africa. While there is no universal definition of Indigenous Peoples, they often form non-dominant groups in their national society, characterized by strong links to traditional territories and natural resources, distinct social, economic or political systems and distinct languages, cultures and beliefs (ACHPR, 2006). A critically important factor in identifying Indigenous Peoples is self-identification as *Indigenous.*

'Legal pluralism' refers to the coexistence of both statutory and customary rights and law to govern how land is administered.

'Statutory rights' or 'statutory tenure' refers to rights or tenure that are recognized through a body of laws and regulations enacted by a legislative authority, such as a national or regional government, to govern the ownership, use and management of land.

Note: This box does not offer universal definitions for the terms described but shows how the authors use the terms in this specific study. Any content that is not cited was written by the authors.

Source: Authors' own elaboration

areas, adding an overlapping layer of central state control to the customary authority. Central control served the ambitions of colonial states to exploit resources for the benefit of the colonial powers, and effectively constrained rights to forests for many communities through the post-independence period (Blomley, 2013; Barrow *et al*., 2016). In general, the colonial perspective was that most of Africa was *terra nullius* until the colonial laws were established and rights were allocated to those chosen by the regimes to further their interests. In this way, most communities became tenants on their own lands (Alden Wily, 2011a).

In the constructed social order arising from colonial rule, customary authorities were allocated authority as a means of political and administrative control (Chimhowu and Woodhouse, 2006). Whichever the colonial regime, a primary purpose of the expropriation of land and forests from communities, and the forest administrations that followed, was to support extractive sectors such as commercial logging (Barrow *et al*., 2016), commercial plantations, oil exploration, and other forms of development (ACHPR, 2006). Where land alienation and dispossession occurred – and the dismissal of certain customary rights to land and other natural resources – the community-based systems of knowledge, values and practices that maintained healthy ecosystems were also undermined (ACHPR, 2006).

At independence,[15] many African states continued to follow colonial tenure systems, in which forests remained almost completely under public ownership (Lawry *et al*., 2012a), despite their continued occupation and use by local communities and the persistence of customary tenure. Some post-independence states moved to formally abolish traditional leadership, such as in Guinea, Uganda and the United Republic of Tanzania (Ubink, 2008). In other cases, modern constitutions (such as in Ghana) have recognized chiefs' authority over lands (Berry, 2017). Most African governments also continued their focus on commercial timber extraction and the general exclusion of many communities' needs and interests. Indeed, many colonial era laws and forest policies were only updated in the 1990s and later (Barrow *et al*., 2016), with the onset of the era of forest decentralization to communities.[16]

In the 1990s, democratization movements in many African countries included a trend towards statutory recognition of customary tenure, which has been gradually gaining momentum, though progress remains partial and limited. The period since the 1990s has also seen shifts towards administrative and political decentralization in the forest sector. Decentralization of forest governance took a wide variety of forms, including an increase in community forest management. However, decentralization did not uniformly result in the clear transfer of rights to decision-making and benefit flows to local communities, or necessarily confer power and legitimacy to local communities (German *et al*., 2014).

[15] For more on decolonization in sub-Saharan Africa, see Kenjio, 2020.

[16] Barrow *et al.*, 2016 highlights the Colonial Belgian Forestry Code of 1949 in the Democratic Republic of the Congo, which stood until 2002; Benin and Senegal's revision of their forest codes in 1993; Burkina Faso, Mali and Mauritania's forest code revisions in 1997; and Niger's new forest law introduced in 1998.

Figure 4. Regional trends across RRI case study countries by region

Source: RRI, 2018. *At a crossroads: Consequential trends in recognition of community-based forest tenure from 2002-2017*. Rights and Resources Initiative, Washington, DC. https://rightsandresources.org/wp-content/uploads/2019/03/At-A-Crossroads_RRI_Nov-2018.pdf

1.4. Land and forest rights in sub-Saharan Africa today

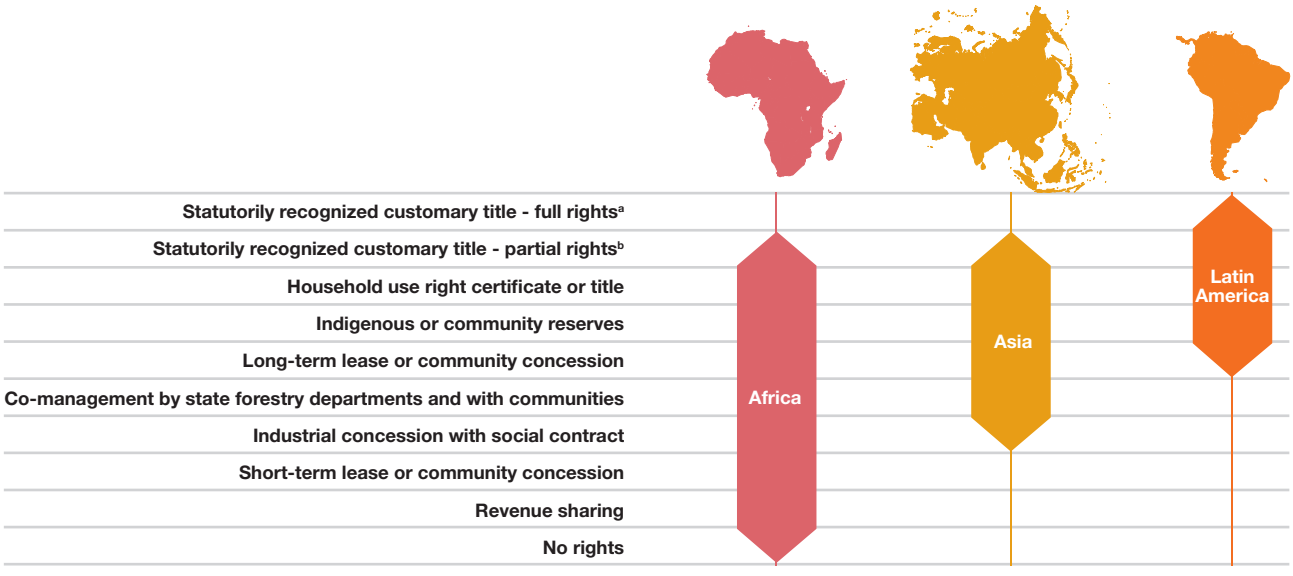
In statutory terms, legal rights to most of sub-Saharan Africa's forests and lands continue to be held by national governments (Barrow *et al.*, 2016). According to Rights and Resources Initiative's forest tenure data for 11 African nations (RRI, 2018), governments administered 91.8 percent of those nations' forests (as of 2017), a higher proportion than in other continents (see Figure 4).

This formal state ownership overlaps with the widespread persistence of customary tenure. Despite state assertions of ownership over virtually all forests (Lawry *et al*., 2012a), communities claim, occupy and exercise day-to-day control over the majority of sub-Saharan African lands and forests through traditional norms and rules. As previously noted, lands held and managed under customary tenure are

estimated at around 78 percent of the continent, and as much as 90 percent of Africa's rural population accesses land through customary institutions. *De facto* control of community lands includes both 'permissive occupancy' of state lands (Alden Wily, 2011b) and formalized customary tenure systems, such as those in Burkina Faso, Uganda and the United Republic of Tanzania. The situation of *de facto* community control of many forest areas arises from both the underlying customary rights and occupancy by communities and the limited capacity of the state to exercise day-to-day control over the entire forest estate.

Where rights to land and forests in sub-Saharan Africa are formally secured by communities from state authorities, this has tended to take one of two forms: (i) areas designated for communities; and (ii) areas owned by communities (RRI, 2018). The first category refers to areas where the state formally recognizes the access, withdrawal, management and exclusion rights of a community to certain natural resources within a designated forest area through the issuance of a permit that is valid for a limited period of time, and may contain conditions to be met to remain valid. The second category refers to areas for which communities have received ownership rights, often based on ancestral claims, and without a time limit. Moreover, communities are entitled to due process and compensation in the face of potential

Figure 5. Major approaches to governance devolution



Arrows indicate location approaches along the rights continuum. Gaps indicate approaches that are absent or infrequent.

[a] Full rights include use/access, management, exclusion, and within community rights of alienation. Occasionally includes rights of alienation outside the community.

[b] Partial rights include use/access, management, and (sometimes) exclusion rights.

Source: Lawry *et al.*, 2012a. *Devolution of forest rights and sustainable forest management, Vol. 1: A review of policies and programs in 16 developing countries and Vol. 2: Case studies*. United States Agency for International Development (USAID), Washington, DC.

extinguishment by the state of some or all of their rights (RRI, 2018). These two forms can be conceptualized as existing on a continuum with no community rights at one end, the devolution of specific forest use-rights to communities in an intermediate position, and formal recognition of a full set of customary land rights at the other end (see Figure 5).[17] In other words, formalization refers to either formal recognition of customary land rights,[18] or devolution of specific forest use-rights. Formalization usually includes several stages: creation of legal frameworks for collective tenure, titling and documentation/registration of titles (as demonstrated by Bruce, 2012, cited in Holland and Diop, 2022). However, in some countries, such as Mozambique, legal frameworks recognize community claims even without formal titling and registration, although this is required to exercise certain rights.

Legal frameworks for statutory tenure have advanced significantly across sub-Saharan Africa. Formal recognition of customary rights has proceeded in 30 out of 54 countries in Africa since 1990 (Alden Wily, 2021a). Legally, provisions for collective tenure are strongest in ten of these countries (Alden Wily, 2021a).[19] Burkina Faso, Kenya, Liberia, Malawi, Mali, Mozambique, South Africa, South Sudan, Uganda and the United Republic of Tanzania were found to have strong legal provision (Alden Wiley, 2021a). Weak legal provision was recorded in Angola, the Congo, Côte d'Ivoire, Ethiopia, Ghana, the Kingdom of Eswatini (formerly Swaziland), Lesotho, Namibia, Sierra Leone, Zambia and Zimbabwe. Especially weak provision was found in Botswana, Cameroon and Gabon. No provision was recorded in the Central African Republic, Chad, Eritrea and Rwanda.

In addition, community forest management (CFM) approaches and initiatives have been promoted in many African countries over the past three decades as a response to demand from communities. Community forest management approaches and initiatives prioritize community roles in forest management by devolving specific rights to communities. Often in Africa, this has included limited rights to use forest resources commercially. Where these initiatives already exist, they may be institutionalized based on locally legitimate customary institutions. In other cases, new community-level institutions are created. After early enthusiasm for community forest devolution in the Republic of the Gambia and the United Republic of Tanzania, more than 20 African countries have now adopted community-led formats to manage forest resources under various operational constructs (Alden Wily, 2021a). Community forest management programmes promulgated by states take different forms, depending on where rights and responsibilities are situated, and the degree of state-community collaboration designed into the model (see Figure 5 and Table 2). In joint forest management, governments typically have a stronger role in decision-making than communities; in many senses, these are more benefit-sharing mechanisms than true devolution of powers to communities.

[17] And potentially including resources such as forests/trees.
[18] And potentially including resources such as forests/trees.
[19] Benin, Burkina Faso, Kenya, Liberia, Malawi, Mali, Mozambique, South Sudan, Uganda and the United Republic of Tanzania.

Table 1. Community rights described within the 'bundle of rights' framework

Access rights	The right to enter a defined physical area and enjoy non-subtractive benefits
Withdrawal rights	The right to obtain resource units or products of a resource system (e.g. trees, NTFPs)
Management rights	The right to regulate internal use patterns and transform the resource by making improvements
Exclusion rights	The right to determine who will have access rights and withdrawal rights, and how those rights may be transferred
Alienation rights	The right to sell or lease management and exclusion rights
Duration	The length of time that the above rights are legally recognized to belong to communities (i.e. term of forest concession)
Rights to due process and compensation	The right to seek formal recourse through courts or legal procedures to seek compensation or redress in cases of expropriation

Sources:
Schlager, E. & Ostrom, E. 1992. Property-rights regimes and natural resources: A conceptual analysis. *Land Economics,* 68(3): 249–262.

Ostrom, E. & Hess, C. 2007. *Private and commons property rights.* Workshop in Political Theory and Policy Analysis. Indiana University, USA.

RRI. 2018. At a crossroads: *Consequential trends in recognition of community-based forest tenure from 2002-2017.* Rights and Resources Initiative, Washington, DC. https://rightsandresources.org/wp-content/uploads/2019/03/At-A-Crossroads_RRI_Nov-2018.pdf

Despite the increasing number of progressive legal frameworks, significant implementation challenges and gaps remain. One issue limiting the impact of positive laws is that most countries require onerous and complex procedures to register community lands held informally under customary tenure, potentially including requirements to obtain legal personality, multiple contacts with opaque or overlapping bureaucracies, and significant financial costs. Often, these requirements for communities surpass those for commercial entities to exploit the same land (Notess *et al*., 2018). The reluctance of governments and customary authorities to actually cede control of lands and forests to communities also slows the implementation of new laws. Limited implementation explains the relatively small proportion of forest area formally recognized as owned by or designated for communities (see Figure 5 and Table 2).[20]

Another issue concerns the types of rights that are formally recognized. The rights that communities have affect their incentives to manage resources sustainably (Katila *et al*., 2020). The *de jure* rights devolved to communities can be described as a 'bundle of rights' framework (see Table 1).

[20] However, it is important to recognize that 'no data' on community forest area are reported for several countries making up these analyses, including those such as Kenya and Mozambique, where customary community rights are recognized without need of titling and registration – probably increasing the total area.

In some cases, statutory legal frameworks may neglect to recognize adequate management, exclusion or withdrawal rights to incentivize conservation by communities seeking to utilize forest resources. In addition, governments typically only devolve rights to a subset of forest resources, which may include: non-timber forest products, fuelwood, trees and sawlogs, and increasingly, carbon (see Box 3). Withdrawal rights are often divided into categories of subsistence and commercial, with statutory regimes mostly recognizing rights to the former.[21]

1.4.1 Indigenous Peoples' lands in sub-Saharan Africa

Indigenous Peoples constitute a subset of customary land and resource rights holders across sub-Saharan Africa. While there is no universal definition of Indigenous Peoples, they often form non-dominant groups in their national society, characterized by strong links to traditional territories and natural resources, distinct social, economic or political systems, and distinct languages, cultures and beliefs (ACHPR, 2006). A critically important factor in identifying Indigenous Peoples is self-identification as *Indigenous*. In several places in the subcontinent, little is known about the characteristics of and extent of Indigenous Peoples, and their land and population estimates vary significantly (Republic of Congo at IWGIA, 2022).

[21] Larson *et al.*, 2010: "In all countries and all sites [included in study], heavy state regulation overrides local decision-making rights for high value resources, while regulation of subsistence uses is far less common."

Luki, Democratic Republic of the Congo.
©FAO/Giulio Napolitano

Box 3. Carbon rights

Currently, there is no one unanimous definition of carbon rights in the forestry sector, and few countries have adopted definitions in their national legal systems.

The term carbon rights comprises two fundamental concepts: 1) the property rights to sequester and store carbon, contained in land, trees, soil etc.; and 2) the right to benefits that arise from the transfer of these property rights (i.e. through emissions trading schemes).

Overall, forest carbon rights can be defined as intangible assets created by legislative and contractual arrangements that allow the recognition of separate benefits arising from the storage of carbon in the forests, or associated emission reductions and carbon removals. Interchangeable with carbon rights, we refer to emissions reduction rights. Such rights can be backed up by carbon credits. A carbon credit is a certified unit in a carbon registry that can be traded. It usually corresponds to 1 tonne of carbon dioxide equivalent. Emissions reduction rights can be transferred – either through public devolvement or through contracts. Such transfers can, but do not need to, occur through transactions recorded in dedicated registries.

Carbon markets can be part of the solution to protect natural resources, but only if the rights of those who depend on and live in forest areas are duly recognized and protected.

In the context of the voluntary carbon market, there is an attempt to standardize the common elements that determine the legal nature of a carbon credit and its characterization:

- It is an intangible property right/often associated with a bundle of rights linked to the land/forests.
- It entitles rights to the benefits derived, once sold.
- It is a transferable and tradable commodity, often serialized (in a registry).
- It is subject to a single use/cannot be accounted twice and it is enforceable.

Common terms and conditions to trade voluntary carbon credit are actually considered as a necessity.

* * * *

At COP 26 in November 2021, the Glasgow Leaders' Declaration on Forests and Land Use highlighted the importance of recognizing the rights of Indigenous Peoples and local communities in accordance with relevant national legislation and international instruments.

States have also agreed on a series of rules to govern market-based activities under Article 6 of the Paris Agreement, to improve environmental integrity, avoid the double counting of emission reductions, and provide enhanced transparency.

As private and public carbon markets develop, the potential benefits and risks of carbon trading for Indigenous Peoples and local communities must be carefully assessed.

Potential benefits may include increased financial flows for forest protection and conservation, better recognition of community rights, and improved livelihood opportunities, such as the sustainable production of non-timber forest products.

To maximize benefits and avoid harm, governments, public and private investors, among other actors in carbon finance, must adopt rights-based approaches to fully respect, protect and realize the rights of Indigenous Peoples, local communities and Afro-descendant peoples.

Source: Felicani-Robles, F. 2024. ***Comparative study of carbon rights in the context of jurisdictional REDD+ – Case studies from Africa, Asia and the Pacific, and Latin America and the Caribbean.*** Rome, FAO.

Table 2. Trends in statutory forest tenure across 19 countries in sub-Saharan Africa, 2002–2017 (Mha)[a]

Country	Government administered		Designated for Indigenous Peoples and local communities[b]		Owned by Indigenous Peoples and local communities[c]		Privately owned by individuals and firms	
	2002	2017	2002	2017	2002	2017	2002	2017
Angola	59.73	57.86	-	-	-	0.001	-	-
Cameroon	22.12	18.98	0.00	3.02	-	-	0.00	0.00
Central African Republic	22.4	22.17	-	0.00	-	-	0.00	0.002
Democratic Republic of the Congo	157.25	152.41	-	0.17	-	-	-	-
Ethiopia	13.7	12.29	0.01	0.21	-	-	-	-
Gabon	22.00	22.93	0.00	0.07	-	-	-	-
Gambia	0.44	0.44	0.02	0.05	-	-	0.001	0.001
Kenya	3.48	n.d.	-	0.38	-	n.d.	0.08	0.09
Liberia	n.d.	n.d.	-	n.d.	-	0.58	n.d.	n.d.
Mali	n.d.	n.d.	0.00	0.00	n.d.	n.d.	0.004	0.004
Mozambique	n.d.	n.d.	n.d.	0.07	n.d.	n.d.	-	-
Nigeria	12.97	-	0.16	n.d.	-	-	-	-
Congo	22.56	22.33	0.00	0.00	-	-	0.00	0.00
Senegal	8.89	8.26	0.004	-	-	-	0.002	0.01
South Sudan	-	n.d.	-	n.d.	-	n.d.	-	0.00
Sudan	n.d.	n.d.	0.04	0.20	n.d.	n.d.	n.d.	n.d.
United Republic of Tanzania	35.13	17.29	0.07	5.39	16.60	21.91[d]	0.12	3.51
Togo	0.13	0.06	-	-	-	n.d.	0.35	n.d.
Zambia	51.13	48.54	-	0.08	-	0.02	-	0.00

[a] Many countries only have partial data; Kenya, Mali and Mozambique broadly recognize customary forest ownership without requiring formal registration of these rights, but the data are not available.

[b] Designated for Indigenous Peoples and local communities is used to mean: National law recognizes Indigenous Peoples' and local communities' rights to access and withdrawal, as well as to participate in the management of forests or to exclude outsiders. Other tenure rights may also be recognized, but the bundle of legally recognized rights held by communities does not amount to 'forest ownership' (RRI, 2018).

[c] Owned by Indigenous Peoples and local communities: Forestlands are owned by Indigenous Peoples and local communities where their forest rights of access, withdrawal, management, exclusion and due process and compensation are legally recognized for an unlimited duration. Alienation rights (whether through sale, lease, or use as collateral) are not required for communities to be classified as forest owners under this framework (RRI, 2018).

[d] Note that all land in the United Republic of Tanzania is legally considered public land held by the State; user rights are then allocated (https://www.land-links.org/country-profile/tanzania/).

Source: RRI. 2018. *At a crossroads: Consequential trends in recognition of community-based forest tenure from 2002-2017.* Rights and Resources Initiative, Washington, DC. https://rightsandresources.org/wp-content/uploads/2019/03/At-A-Crossroads_RRI_Nov-2018.pdf

Table 3. Major African forest governance devolution approaches, highlighting case study countries

Country	Underlying land rights	Collective forest tenure approach	*De jure* rights					
			Access	Withdraw	Management	Exclusion	Duration	Alienation
United Republic of Tanzania	State	Community-Based Forest Management: Village Land Forest Reserve	Yes	Timber (with permit) and other forest products, in accordance with Village Forest Management Plan	Yes, must follow Village Forest Management Plan developed in consultation with forestry department and approved by District Council & Village Assembly	Yes, most non-village members can be excluded	Unlimited	-
United Republic of Tanzania	State	Joint Forest Management: protection forest	Yes, Joint Forest Management Agreement (JFMA) specifies	If JFMA specifies, commercial use with management plan + permits; benefit-sharing arrangements for timber sales	Yes, JFMA determines management rules	Yes	JFMA includes duration	-
Democratic Republic of the Congo	State	Local Community Forest Concession (CFCL, *Concession Forestière des Communautés Locales*)	Yes	Yes, subsistence rights, and commercial rights with approved Forest Management Plan and permits	Yes, with approved Forest Management Plan	Yes	Unlimited	Limited, third-parties can operate in CFCLs
Ghana	Customary owners (Allodial title)	Timber Resources Management Amendment Act (2002)	Yes	Trees planted by farmers on their individual holdings are owned by landowner; must register ownership of trees planted	Yes, as long as trees are registered	Yes	Unlimited	Farmers and small plantation owners have right to market mature trees to commercial forestry operations with appropriate permission
Mozambique	State (communities have perpetual right - Direito de Uso e Aproveitamento da Terra (DUAT))	Simple licence	Yes	Yes, commercial purposes allowed with simple licence	Yes	Third-parties must consult with community before accessing land under community DUAT	Unlimited	No, land and natural resources are property of the state
Mozambique	State	Forest concession to communities	Yes	Yes, with management plan	With approved management plan	Yes, but community members may hunt and exploit resources for subsistence	Up to 50 years (renewable for another 50)	Transfering for purposes of lease or sale is possible but requires authorization of Provincial Governor

Note: Other minor modalities for collective forest rights exist, but are not included as they are infrequently/never put into practice.

Source: Adapted from Rights and Resources Initiative (RRI). 2015. *Who owns the world's land? A global baseline of formally recognized indigenous and community land rights.* Washington, DC.

Democratic Republic of the Congo.
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In sub-Saharan Africa, Indigenous Peoples may own and manage forests communally and may practise livelihoods that differ from other societies or ethnic groups, such as hunting and gathering, pastoralism or agriculture (FAO-CIAT, 2021, ACHPR, 2006). These practices may be strongly connected to traditional knowledge and culture (see Box 4). Rights to lands and resources for Indigenous Peoples are often denied. They frequently face profound social and economic discrimination and there is a general legal bias against some of their lifeways (especially hunting and gathering and pastoralism). Discrimination against Indigenous Peoples globally has prompted the adoption of specific frameworks under international law, such as the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP, 2007) and the

International Labour Organization (ILO) Convention 169.[22] In a few African countries, such as the Democratic Republic of the Congo[23] and the Republic of Congo,[24] there are laws that specifically recognize and enable the rights of Indigenous Peoples, though these have yet to be implemented. These international legal instruments, national protections (at least in the Democratic Republic of the Congo and the Republic of Congo) and positive engagement of civil society and human rights organizations aim to ensure that high standards are followed where actions may potentially affect Indigenous Peoples and their lands, including securing free, prior, informed consent (FPIC) and the active involvement of Indigenous communities (FAO, Alliance of Biodiversity International and CIAT, 2021).

Terms and issues related to indigeneity in sub-Saharan Africa are complex and frequently contested.[25] Many governments and people hold that all Africans are Indigenous – a view enshrined in many legal frameworks, including Uganda's constitution.[26] However, this view ignores the internal disparities within countries and the historical prejudices and relative marginalization of certain populations. In other circumstances, state governments have chosen not to recognize communities' self-identification as 'Indigenous'. Such was the case for the Ogiek community, which was not recognized by the Government of Kenya until 2017. The African Court of Human and Peoples Rights judged in favour of the Ogiek community, which was acknowledged as Indigenous by the court and won both compensation from the Government of Kenya and the right to stay in the Mau forest (IWGIA, 2020).

1.4.2 Diverse forms of customary forest tenure and governance

As states increasingly recognize customary tenure in their legal frameworks, what exists today at the continental level is a complicated mosaic in which some countries are aligning statutory and customary rights, while others continue with overlaps and disconnections between the two types of rights. Increasingly, the modes of forest governance that communities employ are a hybrid of customary norms and rules within the constraints of statutory rights recognized by the state (Chimhowu, 2019), with most communities thus operating in a context of legal pluralism. Figure 6 illustrates the way that the continuum of customary rights to civil rights (statutory tenure) generates a large area of overlapping rights or legal pluralism, which can be seen as 'multiple modernities' (German, *et al*., 2009). Many community forest

[22] Under the ILO Convention 169 and the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), all interventions potentially affecting Indigenous lands and resources require free, prior and informed consent (FPIC). FPIC is not only a right that Indigenous Peoples have under UNDRIP; it is essential to ensure the success and performance of different government and social protection programmes (FAO, Alliance of Bioversity International and CIAT, 2021).

[23] See RRI blog regarding new law (June 10, 2022) on the Promotion and protection of the rights of the Indigenous Pygmy Peoples: https://rightsandresources.org/blog/drc-senate-adopts-new-law-on-the-promotion-and-protection-of-the-rights-of-the-indigenous-pygmy-peoples/.

[24] Law on the promotion and protection of the rights of Indigenous populations in the Republic of Congo (2011).

[25] For an example of the complexity and potentially conflictual nature of this mode of identification in the Democratic Republic of the Congo, see Huggins, 2010.

[26] Uganda's constitution holds that any group residing in Uganda before 1926 is considered Indigenous. Republic of Uganda (1995). Constitution of the Republic of Uganda, The Law Development Centre, Kampala.

Figure 6. Spectrum of forest governance in Africa

Source: Adapted from German, L., Mandondo, A., Paumgarten, F. & Mwitwa, J. 2014. Shifting rights, property and authority in the forest frontier: 'Stakes' for local land users and citizens. *Journal of Peasant Studies*, 41(1): 51–78.

institutions engaged in community forest management and community-based natural resource management exist in this space of overlapping tenure systems.

Customary lands are often controlled by customary authorities such as traditional chiefs, spiritual leaders,[27] or large families or clans (Chimhowu, 2019). The degree to which community leadership represents and is accountable to members of the community falls along a continuum. Even where local authorities are elected (versus hereditary), they may be sidelined and delegitimized by external actors such as project implementers, encroaching industries, government actors and others (Ece *et al*., 2017).

Customary authorities generally allocate both individual lands (usually for agricultural plots or household use) and common land (i.e. 'commons' or 'forest commons') that is governed under the authority of traditional leadership. Forests and woodlands are often, but not always, maintained as commons by communities; this implicitly recognizes the importance of access to these resources for community members. The exceptions are many and include farming plots that are at least partially wooded throughout the Sahel.

In this context of hybridization of authority and legal pluralism, community forest institutions today derive legitimacy from a continuum of authorities, ranging from customary systems with little or no governmental role to community forest management regimes recognized and promoted by governments, which may or may not be constituted from customary institutions. Much of what occurs on the ground is a patchwork of overlapping rights, and often contradictory rules.

[27] For example, in the Loita Maasai of *Entim e Naminie Enkiyio* (Forest of the Lost Child) in southern Kenya, the *Oloiboni* (the Seer) serves as a spiritual guardian of the forest.

Box 4. Traditional knowledge, cultures and natural resource management

The **traditional knowledge** of Indigenous Peoples and communities is an important link to conservation behaviours and forest management practices. Many communities who live near and directly interact with ecosystems have developed knowledge systems that are capable of responding to and managing processes and functions of these complex systems (Berkes *et al*., 2000). The value of Indigenous knowledge in climate change mitigation and adaptation strategies is well documented in sub-Saharan Africa (Ajani *et al*., 2013) and the Sahel, where it includes practices and skills such as soil carbon management, fallowing, mobility strategies, agroforestry, local weather prediction knowledge, pasture management approaches and herd management practices adapted to the severe and frequent droughts of the region (Nyong *et al*., 2007). In Kenya, Indigenous Mijikenda communities have communally managed sacred forests for generations using traditional knowledge systems that ensure sustainability (Mutta *et al*., 2009). Also important is how traditional knowledge is maintained in communities; for this, indigenous storytelling has demonstrated importance as a conservation practice (Fernández-Llamazares, 2018) "Indigenous knowledge and local knowledge, ecosystem-based adaptation and community-based adaptation are often found together in effective adaptation strategies and actions and together can generate transformative sustainable changes" (IPCC, 2022).

Cultural values and beliefs also play an important role in community-based governance of natural resources. For example, the traditional beliefs of the Ashanti in Ghana prohibit the overexploitation of their forests (Asante *et al*., 2017), and 'Church Forests' represent the green spots of the Ethiopian Highlands due to their relatively robust ecological condition (Mekonen *et al*., 2019). Sacred sites and forests, where communities intentionally place limits on certain activities and exploitation for cultural, historical, spiritual and religious values, may contribute to conservation and cultural expression in many contexts (Virtanen, 2002; Githitho, 2003; Metcalfe *et al*., 2010), though this is highly context-dependent, and the wide variation in practices may make them as a category challenging to include as a conservation practice (Fournier, 2011). In the Democratic Republic of the Congo, the proliferation of 'new' religions and the expansion of religious groups has led to a phenomenon where sacred forests are intentionally degraded (Majambu *et al*., 2019).

Ghana, for example, has relatively strong customary legal recognition and the majority of lands (78 percent) are vested in customary authorities. This strong customary tenure regime has allowed smallholder cocoa production to remain throughout Ghana (despite acute tenure insecurity for many farmers), versus a consolidation of holdings into larger commercial farms (Roth *et al*., 2017). However, while naturally occurring trees are nominally under the control of these same authorities, most management rights are held by the Forestry Commission. To harvest these trees on customary lands requires permissions from appropriate institutions that are challenging to obtain, at best, whereas the Forestry Commission can grant permits to commercial timber enterprises to commercially harvest timber on farms without the land-dweller's/farmer's permission. Alternatively, farmers can harvest these trees for 'non-economic reasons', a recognition of customary law that enables clearing for agricultural purposes, but a capacity that does not enable farmers to benefit economically (at least formally), and has perverse effects on climate-smart agroforestry and agroecology, and on climate change mitigation. Despite the relatively strong land protection afforded to customary holders under the national legal framework, the State's assertion of ownership of timber quality trees disadvantages community needs.

African customary tenure systems are living, dynamic social constructions, which continue to evolve under evolving conditions and circumstances (Chimhowu, 2019). Customary law is often now a blend of African traditional practices and colonial/post-colonial evolution. Debate around the 'authenticity' of these tenure systems is not entirely relevant, as they continue to be reproduced, embedded and legitimized by the communities to which they apply (Knight, 2010).

Women working with shea in Benin - April 14, 2018.
©Alvaro Fuente

Soni Village, the United Republic of Tanzania.
©Hailshadow

These tenure systems are 'living', in the sense that they are continually evolving to reflect the needs of the community (Freudenberger, 2013). In this sense, customary tenure systems are less rigid 'traditions' than a hybridization of practices to fit the needs of communities (Knight, 2010).

Customary governance systems are resilient and continue to evolve (Wakjira and Gole, 2007) in the face of population changes, economic shifts and legal bias towards formal governance institutions with overlapping claims to authority over natural resources. Boundaries of these tenure systems tend to be flexible, and secondary and seasonal rights to resources often overlap, making these tenure systems efficient

for allocating resources and access (Mwangi, 2016). The adaptability of customary tenure systems is apparent, for example, in the changing dynamics around shea trees in the Sahel. As shea trees became more valuable upon widespread commoditization and globalization, stricter rules have emerged in what was previously an open access regime in Burkina Faso. This has had implications for the authority of customary chiefs, as shea is increasingly controlled by individuals (Rousseau *et al.*, 2016).

Systems of collective forest tenure deriving from customary authority may be relatively more socially inclusive or exclusive (see Box 5 for an example from Ghana). Access to land within customary tenure systems is derived primarily from membership in the rural social order, be that a village, tribe, clan or other structure. Access tends to fall on a continuum from greater to lesser access, and may favour original inhabitants and their descendants (Freudenberger, 2013). Transaction and access costs are often far less (if not cost-free) than those of statutory land systems, and the system can be more responsive to the needs of the more vulnerable and marginalized (such as migrants, women and youth).

Security of tenure, specifically access and ability to pass land on to children, is typically a paramount concern for the majority of community members. This concern tends to support the persistence of collective over fully private rights (Platteau, 2008). As Platteau notes, "attachment to old forms of security is likely to persist as long as economic opportunities are scarce or perceived as unstable" (Platteau, 2008, citing Bruce, 1986). Under customary tenure, neither men nor women own land – all land is owned by the group (clan, community or other organization), even if much of it is managed by individuals (especially agricultural and house plots). However, there are differential claims of access to land by men and women, and women may face marked internal inequalities in use, management and other rights (Knight, 2010), and some users may find that, despite assurances for access, these regimes do not sufficiently meet their needs (Place and Hazel, 1993; Agyemang *et al*., 2020).

Despite their demonstrated adaptability, customary tenure systems have been diminished in terms of authority as government institutions have asserted rights over the same resources and land. Customary tenure has operated informally in the post-independence era, on top of statutory tenure systems legitimized by the state. With trends such as a growing 'land rush', and more recently, a 'carbon rush', as well as increased investment by outsiders, land-seeking urban elites, sweeping demographic shifts and communities increasingly in conflict with external actors, the consequences of this lack of legitimacy and state backing are becoming increasingly apparent. This topic is discussed further in Chapters 2 and 3.

Box 5. Gender, climate and community forest management in Ghana

Ghana has one of the highest deforestation rates in Africa. In rural and forested areas, cocoa farming and the farming of tree crops such as oil palm, rubber and citrus, and food crop farming are the main agricultural activities. Of the total area deforested for agriculture, 66 percent is attributable to food crop cultivation and 27 percent to cocoa expansion (Resource Equity, 2021).

With regards to gender, the statutory framework in Ghana is inclusive regarding women's land and user rights. The constitution stipulates that women have a right to legal equality, and that women will not be discriminated against on the basis of their gender (Constitution (1992, as amended through 1996) art. 17). However, women face frequent discrimination with regards to their rights (Resource Equity, 2021). Although women play an important role in using and cultivating forestland and resources, they are often limited in their ability to fully benefit from the livelihood potential of using and managing the forest, or are completely unable to do so.

In Ghana, there have been efforts to bridge the gender equity gap in community forest programmes, including activities that ensure equal access for women and men to engage with forest resources and benefits. The new 2020 Land Act, which also establishes Community Resource Management Areas (CREMAs), among other legal provisions for communities, engages with women's land and user rights, both in collective and individual arrangements. For example, "Article 11 renders void any customary practice relating to individually or communally held land that discriminates against women" (Resource Equity, 2021). However, many challenges remain to women's participation, engagement, livelihood improvements, land and resource rights, and community and institutional voice.

Customary land rights have played, and continue to play, a central role in Ghana's landholdings and relations. The stool/skin and family/clan governance structure is reflected institutionally through the National House of Chiefs, which provides a forum for customary leaders to convene and discuss matters linked to customary governance across Ghana. A 2006 commentary (Yiri, 2006) from the former Chair of the Stool/Skin Lands Committee, characterized the customary land rights hierarchy as follows:

- The Paramount Chief - Allodial owner
- The Divisional Chief - Customary freehold
- The Sub-Chief - Customary freehold
- The Indigenes (subjects) - Usufruct interest

Within the customary system of rights in Ghana, pathways to land and forest rights include 'lineage land' – land within the customary umbrella of an allodial interest holder and passed customarily to men or sons through patrilineal or matrilineal succession. "Ghana includes both patrilineal and matrilineal customary land and inheritance regimes that revolve around lineages. Within the patrilineal communities, land is passed from father to son. In matrilineal communities, land is passed from maternal uncles to their nephews. Under both regimes, land always vests with males" (Resource Equity, 2021). Under both patrilineal and matrilineal systems, women are disadvantaged and treated unequally in their land uses and rights. Women do not have rights to lineage land, and they lack institutional power and control in shaping its use (Resource Equity, 2021).

Customs are such that women are unlikely to be considered members of the community for the purposes of discussing needs and priorities linked to land or forest use. Under Ghana's customary land tenure systems, community-level decisions on land use and allocation are made by chiefs or family heads on behalf of the community. Under both matrilineal and patrilineal regimes, men preside over the allocation and use of family and community resources (FAO, 2010; USAID, 2013).

In a 2021 report by Resource Equity for the World Bank entitled *Forest Carbon Partnership Facility Ghana emissions reduction program gender deep dive case study* (Resource Equity, 2021), the following

programmes were identified as advancing land, climate and forest agenda in Ghana with gender-related design and delivery considerations:

- Dedicated Grant Mechanism (DGM) for Local Communities project;
- Ghana Forest Investment Programme's Enhancing Natural Forest and Agroforest Landscapes project
- Ghana Forest Investment Programme's Engaging Local Communities in REDD+/Enhancement of Carbon Stocks project
- Africa Palm Oil Initiative (APOI)
- The World Bank Land Administration Program

Sources:

FAO. 2010. *Gender and land rights database*. Rome. [Cited 17 May 2024]. http://www.fao.org/gender-landrights-database/en/

Resource Equity. 2021. *Forest Carbon Partnership Facility Ghana emissions reduction program gender deep dive case study.* Prepared for The World Bank.

United States Agency for International Development. 2013. *Land Links Country Profile: Ghana.* [Cited 17 May 2024]. https://land-links.org/country-profile/ghana/#land

Yiri, K. 2006. *Customary lands administration and good governance – The state and the traditional rulers interface – Promoting land administration and good governance* [Conference session]. 5th FIG Regional Conference, Accra.

Hamer tribe Ethiopia - November 21, 2021.
©Hadynyah

Ambanja, Madagascar, A Malagasy woman preparing cocoa before fermentation, November 11, 2016.
©Pierre Yves Babelon

2. FACTORS INFLUENCING THE OUTCOMES OF COMMUNITY FOREST GOVERNANCE IN SUB-SAHARAN AFRICAN FORESTS

This chapter uses the growing evidence base in the literature to describe *how* and *why* community forest governance is successful at achieving a set of objectives that include improving forest conditions and supporting livelihoods.[28]

After introducing the overall trend towards community forest governance, and in particular government initiatives of community forest management, the chapter reviews the evidence regarding six 'factors' that are generally associated with positive environmental and/or livelihood outcomes in community managed forests. This analysis considers livelihoods in addition to environmental outcomes, as many tenure recognition and CFM initiatives specifically identify this as an objective. While there is no reason to believe that

[28] For example, Le *et al.* (2012, 2014) in discussing factors affecting the success of reforestation projects in the tropics, identified more than 30 commonly used indicators of success.

livelihoods and forest conditions will necessarily always be correlated, the long-term ecological outcomes of community forest management are likely to be linked to the success of forest-dependent communities and users in their various livelihood strategies over long-term time frames.

Community forest management programmes have been a significant approach to generating benefits to communities through sustainable forest management in sub-Saharan Africa. Community forest management is used here to refer to government initiatives that devolve a varying range of forest management and use rights to communities. The general consensus in the literature is that CFM represents a significant route towards securing and sustaining forests. In other words, CFM plays a key role in creating the virtuous cycle of strengthening rights and contributing to the global effort on climate change mitigation. While countries vary in their approaches, broad commonalities are apparent among processes and paradigms. Figure 7 illustrates the continuum of arrangements in the CFM category. Forestry administrations themselves indicate that local participation becomes more meaningful and effective when local populations are fully involved, not just as cooperating forest users, but as owner-managers in their own right (Wily, 2004). Empowerment of local communities as owner-managers of emergent community forests is strongest when initiatives endow customary land interests with a bundle of statutory rights (in more cases these are partial, but increasingly there is a full set). However, CFM still tends to be less widespread in areas of high biological diversity or commercial value, such as those in which timber or wildlife are dominant products. Local licensing and revenue sharing still tend to define CFM in such areas, with limited local roles in overall decision-making as to the use and control of the resource (Anderson *et al*., 2015).

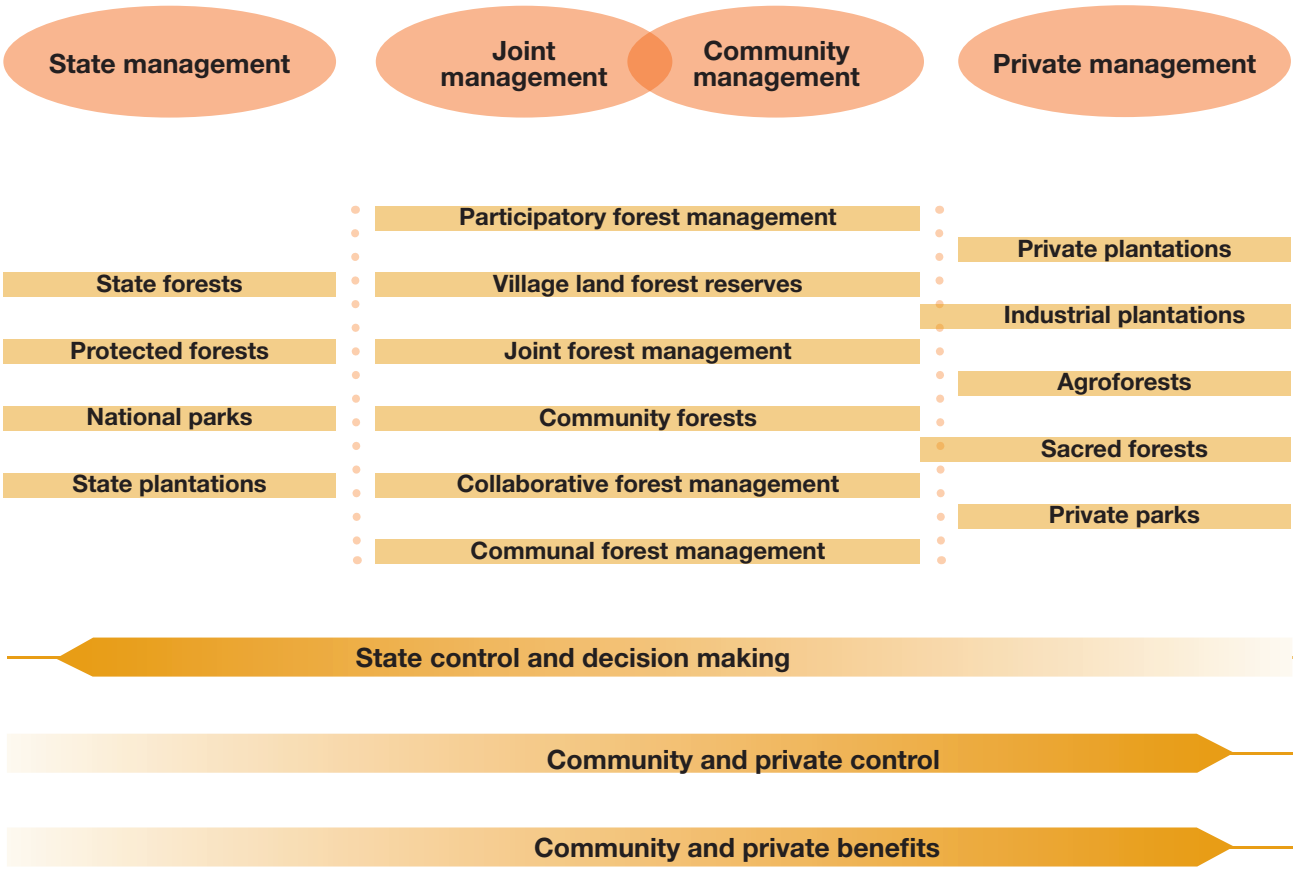
In relation to each of the six factors, this chapter introduces evidence supporting the relevance of that factor, discusses why and how that factor contributes to positive (environmental and/or livelihood) outcomes, and explores the situation and experience of African countries with regard to that factor. The focus is on experiences across sub-Saharan Africa, especially drawn from four case study countries (the Democratic Republic of the Congo, Ghana, Mozambique and the United Republic of Tanzania), and on what can be learned from global experiences. These include examples of how each factor can positively affect outcomes and, as is often the case, how their absence can constrain outcomes.

This study utilizes the five factors articulated by Baynes *et al*. (2015),[29] as well as the sixth factor on physical location and conditions supported by the wider literature (Busch and Ferretti-Gallon, 2023) and case studies from sub-Saharan Africa as associated with 'success'[30] – or positive environmental and/or livelihood outcomes

[29] Factor is defined by Meyfroidt, 2016 as: "any event, fact or variable mobilized in an explanation." In this usage, factors explain differences in forest condition and livelihood outcomes of community-based tenure systems.

[30] 'Success' in community forest management is multidimensional, which complicates comparisons between empirical datapoints. However, given research constraints, and just as with the case studies utilized by most meta-reviews, success is left defined by the authors whose body of work informed the conceptual model and analysis in Baynes *et al*. (2015).

Figure 7. Different forest management models and the position of various community forest management schemes



Source: Duguma *et al.* 2018. Community forestry frameworks in sub-Saharan Africa and the impact on sustainable development. *Ecology and Society*, 23(4).

– in forests under community forest management.[31] These six factors are:

1. Secure rights to trees and land (e.g. property rights)
2. Supportive governments
3. Material benefits for community members
4. Community governance
5. Gender and socioeconomic equality within communities
6. Physical location and conditions

[31] Many studies look specifically at community forest management programmes within legal frameworks established by governments. Whether the community-management modality originates externally or endogenously from the community itself, the factors detailed here may be supportive of positive outcomes ('success').

Interactions among these factors are complex and likely to vary among cases; it is beyond the scope of this study to disentangle and weigh the relative contribution of each factor to success. An important caveat is that most of the literature on factors in sub-Saharan Africa tends to focus on formally recognized community forest management arrangements, including recent interventions (see Box 2).

2.1 Secure community rights to land and trees

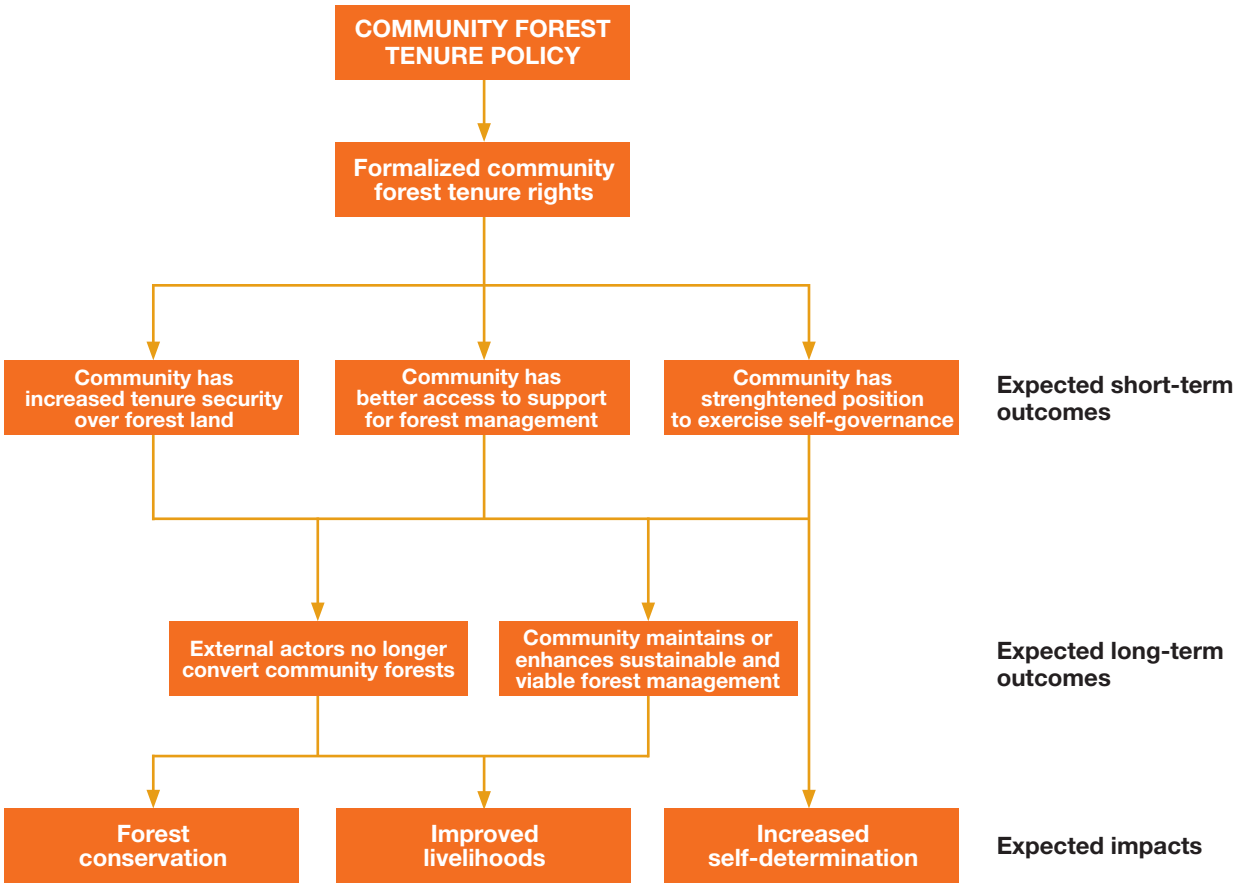
There is a broad consensus in the global literature that secure rights to land and natural resources contribute to positive (climate and livelihood) outcomes from community tenure systems (Pagdee *et al*., 2006; Blomley, 2013; Baynes *et al*., 2015; Gilmour, 2016; Donanue and Harvey, 2020; FAO-FILAC, 2021; Bradley and Fortuna, 2021, IPCC, 2022). A recent global assessment found that land tenure security interventions largely led to positive human well-being and environmental outcomes (Tseng *et al*., 2020). Conversely, there is consensus in the literature that tenure insecurity is a significant indirect driver of deforestation (Seymour *et al*., 2014). The IPCC concludes that securing rights can accelerate effective, robust climate-resilient development pathways (IPCC, 2022).

This evidence base indicates several reasons why forest tenure security is linked to positive forest and livelihood outcomes. Secure tenure can incentivize sustainable community management by providing a longer-term planning horizon and confidence that future benefits will be realized (Alden Wily, 2004). Tenure security also provides a foundation for communities to protect their forests against external threats and exercise the traditional knowledge and stewardship practices that maintain forests (Springer and Larson, 2012). Recognizing community rights, including relevant documentation, may assist communities with accessing donor and government funds for climate change mitigation (Byamugisha, 2013). These linkages can be conceptualized as a schematic theory of change (see Figure 8). Importantly, these linkages can also drive change in the reverse direction, with improved forest management outcomes inducing demand and resources for further strengthening of security of tenure (the 'virtuous cycle' of tenure and management outcomes.

In Benin, an experimental scale-up of the *Plans Fonciers Ruraux* programme serving to formalize and support traditional local land governance systems found that collective and individual tenure certification at the collective and individual levels reduced forest loss and fires in the areas containing participating villages, suggesting a reduction in tree cover loss of around 20 percent and a reduction in fires of 5 percent (Wren-Lewis *et al*., 2020).

As described in the previous section, **there are significant limitations to community tenure security across sub-Saharan Africa**. **One key issue is the widespread contradiction between *de jure* state rights and *de facto* customary rights, which prevents the incentives of long-term stewardship from emerging**.

Figure 8. Theory of change from secure forest tenure



Source: Kusters *et al*. 2022. "Formalizing community forest tenure rights: A theory of change and conditions for success", Forest Policy and Economics, Volume 141, August 2022, https://doi.org/10.1016/j.forpol.2022.102766

In state administered areas where customary tenure systems predominate, local communities often lack the *de jure* exclusion rights that would enable them to control access by interests outside the community. Indeed, given the government assertions of forest ownership across sub-Saharan Africa, it is often the governments themselves that invite concessionaires from many sectors (such as logging, mining, energy and agriculture) to exploit lands claimed by communities (German *et al.,* 2014), whether or not consent is formally required. In many cases, the tenure recognition provided to communities may be weaker than that of companies and smallholders (Aggarwal *et al*., 2021; Notess *et al*., 2018), or easily extinguishable by government agents. For example, Kenya's Forest Conservation and Management Act (2016) allows the Chief Conservator of Forests to terminate community forest agreements with 30 days' notice in the event of breach of terms of the agreement (Aggarwal *et al*., 2021).

The partial implementation of legal frameworks supporting community forest tenure remains a challenge in sub-Saharan Africa, with countries such as the Republic of Congo, Uganda and Zambia (among others) that possess relatively progressive legal frameworks establishing community rights to forests, but with little implementation to date (see RRI, 2018, where only 7.4 percent of forests are designated or owned by communities in sub-Saharan Africa in an 11 country sample; also Alden Wiley, 2021a). In other countries, such as Mozambique, legal frameworks establish community rights and procedures for recognizing these rights, but implementation can be costly and slow (Notess *et al*., 2018).[32]

State assertions of most rights to forest resources frequently create situations in which incentives for long-term management are weak. The direct regulation of forest use in state-owned and administered forests has tended to contribute to deforestation (Lawry *et al*., 2012a). The competing agencies or bureaucracies of state actors may cause overlapping jurisdictions, frequently favouring concessions of extractive industries over communities (Varney, 2022). Dependent on sustained political will, funding, equipment and human capacity, state resources are often too limited to manage for conservation and local livelihoods across their entire forest estate. Inhabitants of forests who are dispossessed are instead incentivized to exploit the resource. As Alden Wily notes, "denial of local tenure, evictions, and diminishment of access and use predictably disposes aggrieved communities to unlawfully enter and exploit forests lost to them" (Alden Wily, 2021b).

Another issue that complicates tenure security in many contexts in sub-Saharan Africa is that tree tenure is separated from land tenure. Tree tenure is perhaps the most complex factor in determining the success of community-based forestry (Baynes *et al*., 2015), with special significance in areas of sub-Saharan Africa where state ownership of forests extends to the ownership of trees occurring on individual farms (Lawry *et al*., 2012a). This includes state regulation of the uses of trees that farmers plant themselves – a complicating factor for climate change mitigation efforts that call for increased agroforestry or forest landscape restoration (such as the Great Green Wall; AFR100).

In Ghana, for example, common short-term tenure arrangements ('sharecropping' and leaseholding from customary authorities) do not promote long-term investments such as tree planting due to rules that specify that users of land lose access if the land is not continually cropped. The perception that tree planting is a form of land claim – a dynamic featured throughout the continent (Unruh, 2022) – also leads the owners of lands (such as customary authorities/stools in Ghana) to restrict the types of plants cultivated by tenant farmers (Damnyag *et al*., 2012). A further challenge in Ghana is that the Government's Forest Commission retains management rights to economic trees that are naturally occurring on farms, including trees that might be beneficial as shade trees on cocoa farms (World Bank,

[32] In Mozambique's case, community rights exist prior to implementation, although delineation and demarcation procedures crucially enable DUATs to be certified/formalized, making these rights visible to outside interests.

2021). This discourages farmers from maintaining and retaining trees that they have little stake in seeing through to commercial age.

In Niger, tree planting efforts in the 1970s and 1980s failed due to low tree survival rates and lack of local participation. Only when the Government began to encourage farmers to regenerate naturally occurring trees on their farms and removed management restrictions did the situation turn around, culminating in the 2020 Presidential Decree that awarded farmers formal ownership rights of these trees on private lands (Koffi and Worms, 2021; FAO, 2022a). Trees also serve many local functions, such as boundary markers or claims on ownership (Fenske, 2011), and as a means of establishing rights in statutory law (for example, in Liberia, Sierra Leone and Uganda).[33] Without clarified, strong rights to trees, the farmers who

[33] Conversation with Jon Unruh, May 2022.

Box 6. Relation between tenure rights, carbon rights and benefit-sharing arrangements in the context of jurisdictional REDD+

Article 5 of the Paris Agreement calls for action on REDD+, a vehicle for developing countries to contribute to forest-based climate action. In implementing the framework, the full and effective participation of Indigenous Peoples and local communities should be promoted and respected, which includes carbon rights.

Overall, forest carbon rights can be defined as intangible assets that allow the recognition of separate benefits arising from REDD+ activities. They can be linked to tenure ownership rights or some kind of control on the land and trees, or they can be considered as a separate interest on the land. In addition, customary legal systems are relevant for the interpretation of land and carbon rights, particularly in African countries. A carbon right can also be defined in terms of which parties have the right to sell, trade and purchase the carbon credit. Overall, carbon stock in the forestland should prove to be additional. Therefore, ownership of carbon rights also carries obligations and risks (such as the permanence of emission reductions, displacement of ERs).

If we look at the interactions between forest tenure rights, carbon rights and benefit-sharing, we can see that the tendency is to not strictly link REDD+ benefits to forestland ownership rights. Equity, transparency and solidarity are key principles in order to concretize the real interests of local beneficiaries. On the other hand, if secured, forest tenure rights can constitute a solid basis on which to allocate ER rights.

Source: Felicani-Robles, 2024. *Comparative study of carbon rights in the context of jurisdictional REDD+, case studies from Africa, Asia and Latin America and the Caribbean.* Rome.

Table 4. Forest tenure and ERs rights implications in the context of national or jurisdictional REDD+ programmes based on the analysis of ten countries

Basic setup of forest tenure	Linkages with ER titling	Linkages with benefit sharing of national or jurisdictional REDD+ programmes
State owned forests		
The state (including provinces, municipalities) owns forestry resources, including ecosystem services such as carbon.	The state primarily owns ERs rights and (i) is entitled to administer ERs or sell ERs internationally; (ii) devolves ERs to third parties (communities/project developers) potentially for selling in carbon markets.	The state implements a REDD+ programme and develops, in consultation with relevant parties, a benefit sharing plan (regional/ national level), establishing eligibility criteria for being a beneficiary/assigning rights to beneficiaries.
Mixed tenure regime		
State, communities, social tenure right holders, and private entities own forest resources, including ecosystem services, such as carbon.	ERs rights primarily linked to forest landowners and social tenure rights holders including private entities, communities and Indigenous Peoples. Forest landowners and social tenure right holders can devolve ER rights and titles to the State and jurisdictional entity to allow transactions with third parties. Although a rights based approach is necessary, certain countries that have enacted such devolution of carbon rights to the programme entity at the national scale by signing individual contracts with landowners face challanges due to the lack of human and financial capacities and high transaction costs, and have expressed concerns in this regard, such as Costa Rica.	The benefit sharing plan will often allocate an important share of benefits to forest resource owners; other potential beneficiaries can also be considered. Benefits generated by ERs performances are allocated to forestland owners, such as state-communities, and social legitimate tenure right holders. The state allocates benefits to relevant parties, such as communities and Indigenous Peoples or private entities involved in ER activities in state-owned forestlands, including vulnerable groups. Benefits sharing modalities to be decided between the parties, such as communities, private entities or government, if a REDD+ project developer is aming to participate in nesting.

Source: FAO & UNREDD. 2024. *Comparative study of carbon rights in the context of jurisdictional REDD+, case studies from Africa, Asia and Latin America and the Caribbean.* Rome.

directly manage so much of Africa are not in a position to benefit from programmes to mitigate and adapt to climate change.

With regards to CFM, in many sub-Saharan African countries the degree of delegation of forest rights to communities is incomplete and limited in area or in the quality/type of resources (Blomley, 2013). Several studies confirm that community forest management programmes promoted by governments can reduce access for members of communities who may have, prior to formalization, enjoyed a greater degree of *de facto* freedom in utilizing forest products. In many evaluated cases, access rights were reduced to allow areas to regenerate (Hajjar *et al*., 2021a).

While community forestry programmes often recognize a limited bundle of rights, they can still lead to improvements in forest conditions and livelihoods. Devolution of rights for co-management approaches (participatory forest management (PFM), joint forest management (JFM), co-management etc.), where rights and responsibilities are shared between communities/forest user groups and government, can have potentially positive outcomes, even if rights devolution is more limited than in other community forest management arrangements. In the case of Ethiopia, the co-management approach (for example PFM) introduced by NGOs, such as FARM Africa, SOS Sahel, GIZ and the Japan International Cooperation Agency, maintains government ownership of forests, delegating use rights to forest user groups. In some cases, there appears to be an improvement in forest condition over the preceding situation where the government was the *de jure* owner, though forests were *de facto* open access to exploitation (Alemayhu *et al*. 2019; Gobeze *et al*. 2009).

Strengthened and clarified rights can also lead to reduced conflicts between communities and between communities and external actors,[34] in part because the documentation of these rights makes community lands visible to outsiders. Forest conflict between communities and the state can also decrease with rights devolution (for example, the PFM case in Ethiopia in Cronkleton *et al*. 2017). On the other hand, many pastoralist/transhumant groups have the potential to lose rights when rights to community forests are granted, highlighting the critical importance of ensuring that all customary rights are recognized.

2.2 Government support

Most analyses recognize that government support to communities plays an important role in achieving positive environmental and livelihood outcomes (Blomley, 2013; Baynes *et al*., 2015; Gilmour, 2016; Bradley and Fortuna, 2021). Central governments and their forest administration agencies are perhaps the most powerful actors to interact with communities, although impacts of governments are often mediated, enhanced and/or deterred by a diversity of other actors, including local governments, NGOs and private actors (Nagendra and Ostrom, 2012).

Support from government agencies is crucial to the implementation of many dimensions of community forest governance (World Bank, 2019). For example, governments pass legislation that establishes the *de jure* basis for community ownership or management of forests, implement this legal framework via registering the rights of communities (with the exception of some countries, such as Gambia, Mozambique and the United Republic of Tanzania, where CFM may be granted via local government councils (Blomley, 2013)), and oversee the activities of these communities via rules and regulations concerning forest use. Governments also play

[34] Communal management of forest resources that originates within the community, not brought about by external institutions.

critical roles in safeguarding community forestlands against threats by enforcing tenure rights and regulating the activities of outside actors. Government technical and financial support can also be significant for the implementation of management and livelihood activities.

Unfortunately, there are many cases where governments and communities/user groups are in conflict, often due to the unwillingness or inability of governments to cede power and resources to communities. Community forest governance is often hindered by conflicts in reform laws that enable states to retain significant power to control the economic benefits of forest activity, as well as a failure of implementing agencies to realign their missions to support the devolution of rights to communities (Lawry *et al*., 2012a). Indeed, many government actions to devolve power downwards to communities have been met with other actions to curtail the rights of local governments and communities (Ribot *et al*., 2006). Even the more mundane challenges are significant: authority must be clarified between central

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government and lower government/community levels; regulations may be outmoded and need significant revision; and gaps may remain in key local government and community capacities (Segura Warnholtz, 2022). In some cases where governments do not sufficiently support communities, local projects can help to fill the void. However, when government institutions obstruct the devolution of power to communities, local action is also likely to be insufficient (Baynes *et al*., 2015).

Forest co-management approaches have also faced obstacles to government support. In countries where forest devolution has been limited to benefit-sharing schemes, such as joint forest management and participatory forest management, government forest agencies have typically prescribed how local participatory management groups are established (Lawry *et al*., 2012a). These co-management approaches are often administrative models that may not provide local-level actors with any real tenure security or decision-making autonomy, and benefits are provided at the discretion of the government. Despite these weaknesses, co-management approaches performed better in cases of joint environmental-income outcomes than all other types of tenure in one recent study (Hajjar *et al*., 2021a), potentially due to greater access to government support, such as financing and extension services. There are other cases where government interactions and support were associated with improved outcomes within these regimes when community participation was strong (Okuma and Muchapondwa, 2020), or where government support was invited by the community to sustain faltering community leadership (Mbuvi and Kungu, 2021).

2.3 Community governance

Intra-community governance plays a significant role in both forest and livelihood outcomes via powers to make, implement and enforce decisions. General research has highlighted the role of strong governance (Gilmour, 2016), including rule enforcement, monitoring, sanctioning and strong leadership (Pagdee *et al*., 2006), rule adherence (Hajjar *et al*., 2020 and 2021a), and non-technical skills, such as adaptive management and monitoring and evaluation (Blomley, 2013).

A significant body of research explores the role of community-level institutions in commons governance (Dietz *et al*., 2003; Ostrom and Nagendra, 2006). Communities around the world have successfully negotiated against threats to resource degradation by developing a diversity of self-governing institutions (Dietz *et al*., 2003). As discussed in Section 2.1, a key aspect of this sustainable governance is securing long-term community rights over forests; local stewardship can be expected when rights are legally clear and secure. Even with secure tenure over forests, however, collective forest governance arrangements may or may not have the characteristics necessary to secure the participation of and benefits to all community members, especially women or vulnerable groups (although women's land and natural resource rights outside the collective regimes may be even more compromised). Additionally, forests that suffer from weak collective management and benefits may be vulnerable to elite capture.

Traditional authorities and institutions generally enjoy social support as a basis for community governance across many sub-Saharan African nations, and rather than diminishing their authority, the process of state formation across Africa has in some ways strengthened their position (Tieleman and Uitermark, 2019). The selection of traditional authorities may be based on hereditary rules (such as Paramount Chiefs), social standing, or democratic means (Larcom *et al*., 2016), and their authority is based on customary and/or statutory law, depending on the context (Larson *et al*., 2012).

Access to customary lands by members of the social group ('sons of the soil') is typically granted, although it may involve payment to authorities for rights (Chimhowu and Woodhouse, 2006; Chauveau and Colin, 2010). People outside social groups may increasingly access land that has effectively been 'commoditized,' especially in peri-urban areas where demand for land from investors is high (Chimhowu and Woodhouse, 2006). Customary land institutions generally regulate access in rural areas, although access may be increasingly mediated by 'rural big shots', or wealthy politically connected individuals who use the extension of state power into rural land administration to act as power brokers (Chimhowu, 2019).

In some cases, the interests of customary authorities may not align with forest conservation, nor are they necessarily able to constrain influential users of forests (Majambu *et al*., 2019). The degree to which customary authorities and other institutions (such as NGOs) are accountable to community members varies greatly (Ribot, 2004) and has implications for elite capture and other transgressions against collective interests. The benefits of forest management (such as stumpage fees) may be controlled by these authorities at the expense of the community (Marfo, 2009).

Ideally, community governance institutions operate in such a way that collective action is inclusive, transparent and accountable (Segura Warnholtz, 2022). Inclusive institutions that involve all members of the community can help to avoid elite capture, and increased participation can lead to increased democracy, efficiency and equity, preventing the loss of livelihoods of marginalized groups (World Bank, 2019; Agrawal and Ribot, 1999; Ribot, 2002).[35] Community-level governance also has important implications for how the community relates to higher-order actors (such as district and state forest agencies, NGOs and corporations), and how it carries out benefit sharing from participation in programmes such as REDD+ and other PES schemes. The involvement of local stakeholders (particularly those most vulnerable to climate change, including Indigenous Peoples and local communities, women, and the poor and marginalized) enhances governance and decision-making effectiveness in the selection, evaluation, implementation and monitoring of policy instruments for land-based climate change adaptation and mitigation (IPCC, 2018).

In light of the widespread situation of legal pluralism in sub-Saharan African countries, local-level institutions almost always negotiate the management of

[35] In addition, inclusive governance is a positive good in itself.

resources with state institutions, such as forest agencies. There may be multiple political institutions with distinct or overlapping roles and responsibilities (and accompanying processes of negotiation and contestation), and the process of granting *de jure* tenure rights to communities may involve the creation of novel community forest institutions. In most countries, community forest management programmes with a statutory basis rely on existing user groups or community-based traditional institutions (such as customary authorities) (Blomley, 2013). In cases where this does not occur, the duplication of roles between novel institutional arrangements and existing local-level institutions can be problematic (Blomley, 2013), as exemplified by laws (such as in Cameroon) that reject traditional institutions as legal entities, creating options for elite capture through the creation of an extraneous body managing community forests (Beauchamp and Ingram, 2011; Tacconi, 2007). Existing local-level institutions, including customary authorities, may have more internal legitimacy,[36] and be less costly to rely on than creating entirely new institutions (for an argument relating to land administration, see Bruce and Knox, 2009), though they may come at the expense of local democratic governance (Ribot, 2004).

The choice of institutions, the particular powers they are assigned, and the ways in which they are held accountable all have consequences. The effectiveness and legitimacy of local authorities can be undermined through elite capture and upward accountability (and lack of downward accountability), as well as through failures of governments to fully empower local authorities in decision-making that serves local populations (for example, Ghana's district assemblies; in Ribot, 2004). Despite the possibilities of democratic decentralization (whole populations involved in decision-making based on representative authority (Wily, no date, cited in Ribot *et al*., 2010), this is rarely established in Africa (Ribot *et al*., 2010).[37] Even where local leaders are elected, they are often only upwardly accountable to political parties or forestry line ministries (Ribot *et al*., 2010), and institutions that better represent popular participation are often not selected as partners by governments, NGOs and donors (Ribot *et al*., 2008; Ece *et al*., 2017). More commonly, central governments choose upwardly accountable institutions via appointed administrators, committees, NGOs and customary authorities (Ribot, 2004).

2.4 Material benefits for community members

When communities obtain material benefits (monetary and non-monetary) from well-managed forests, this can provide incentives for investment in sustainable long-term forest and livelihood outcomes (Pagdee *et al*., 2006; Blomley, 2013; Baynes *et al*., 2015; Donahue and Harvey, 2020; Bradley and Fortuna, 2021; FAO-FILAC, 2021). The global literature points towards a need for

[36] Alternatively, in some cases customary authorities are not necessarily very locally legitimate, but instead derive their legitimacy externally from statutory law and government. See Ribot, 2004.

[37] See Ribot *et al*., 2010 for discussion of the United Republic of Tanzania and community-based forest management. Where the State has devolved powers to villages it has created an environment conducive to community conservation. For a succinct description of Tanzanian Village Land Forest Reserves, see Romano, 2007.

both short-term and longer-term material benefits for communities to manage forests sustainably (see Baynes *et al*., 2015). Ideally, many of these material incentives will come directly from rights devolution and the management and use of forest resources by communities.

One consideration relevant to monetary and non-monetary benefits is the productivity of the forests themselves. Communities with access to high-value forests and markets may be better able to sustain the long-term management costs of forest areas and provide benefits to community members (Segura Warnholtz, 2022). Conversely, in areas of low-value forest, or those more inaccessible to markets, commercial forestry operations may not be viable, and communities may face low opportunity costs to convert these forests to other uses (such as agriculture) (Segura Warnholtz, 2022). Unfortunately, governments frequently recognize community rights to lower- quality, degraded forests that require reforestation (see Larson, 2011 for examples from Cameroon and Ghana; Anderson *et al*., 2015), burdening communities with tree planting that may not provide income for many years (Barrow *et al*., 2016).

As an approach, community forest management programmes have generated significant benefits to communities through sustainable forest management in Africa. Key conditions for their success include access to productive resources, and regulations that enable communities to benefit from them. This can be illustrated by examining both positive and negative case studies, for example:

- The Gambia Forest Act of 2018 introduced new provisions that seek to promote more community involvement in the administration and management of forests. Subsequent to the Forest Act, the Local Government Act (2002) was introduced, which sought to give legal effect to the Government's policy on local government and decentralization. As a result, the Minister of Environment, Climate Change and Natural Resources, responsible for implementing the provisions of the Local Government Act, "may transfer the management functions of forests to the Local Councils".

- In a case in Cameroon, communities were technically able to access high-value forests, but the forests allocated to communities were degraded, with lower potential for timber harvesting. Moreover, the size of the forestland allocated to communities was smaller than that enjoyed customarily (Anderson *et al*., 2015).

- In some cases, again including Cameroon, community forests with statutory rights may be limited to lower-quality off-reserve forests, and the rights granted may be to smaller areas of forestland than would be claimed under customary rules (Oyono *et al*., 2009).

Securing collective tenure rights contributes to enhanced access to climate finance. Diverse types of climate finance schemes have been set up and, in some cases,

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clear tenure rights are a precondition for access. Tenure also plays an important role in the international voluntary carbon market. Some countries have stimulated investments in forest carbon projects by devolving rights to emission reductions to tenure rights holders (Bradley and Fortuna, 2021).

Another model, adopted in the Congo Basin, involves community concessions where commercial rights to forest exploitation are granted, via procedures and registration, to communities for a specific duration and defined spatial area. An even stronger condition are constructs where communities take on more independence, and underlying collective tenure is secured via formal ownership with associated management capacities. However, even in cases where communities notionally have ownership and rights to manage forests, burdensome technical requirements are often a major constraint on the ability of communities to generate benefits, or to fulfil the necessary condition for the sustainable management of forest and timber value chains.

Another approach is payment for environmental services (PES), where landowners/managers are financially compensated for managing land in such

a way that it provides ecosystem services, such as water management, carbon sequestration in soils and trees, biodiversity, or other services of value to society.

The global scale of PES is significant, with an estimated USD 36–42 billion in annual transactions (Salzman *et al*., 2018). The compensation, in these cases, is for the opportunity costs of forgoing short-term extractive practices such as industrial logging or mining, for benefits that, at least in part, are due to the efforts of communities and accrue at higher temporal and spatial scales (Ribot *et al*., 2010).

National experiences of providing incentives, derived through the design of PES schemes and targeting communities for their role in enhancing forest conservation, demonstrate considerable promise in the approach, though results are mixed overall and the literature on PES globally suggests that the effectiveness of the vast majority of programmes remains uncertain (Salzman, *et al*., 2018). Some of the most compelling results are in Mexico, where PES schemes have been implemented more widely. There, PES has reduced both forest cover loss and forest fragmentation (Ramirez-Reyes *et al*., 2018). In addition, PES has increased social capital by 8–9 percent and land management outcomes by 50 percent, though this was in a context of highly structured and capable institutions with formal support (Alix-Garcia *et al*., 2018), conditions that are relatively less common in Africa.

At the global level, the REDD+ framework under the UNFCCC and the Paris Agreement aims to create financial incentives to keep forests intact. The underlying premise is that governments will be rewarded for reducing deforestation through public and private results-based finance (RBF) for reducing emissions or removals that are fully measured, reported and verified. To date, only about USD 3 billion results-based finance has been disbursed or committed (for example through the Forest Carbon Partnership Facility (FCPF) Carbon Fund,[38] the Green Climate Fund (GCF) RBP REDD+ Pilot Programme),[39] through emission reduction purchase agreements to 22 countries over 15 years, more than half of which were through bilateral agreements (Zandker *et al*, 2023). Governments often play a significant role in developing benefit-sharing mechanisms with FCPF. Indigenous Peoples and local communities serve as both service providers and beneficiaries at the local level and their informed participation in developing benefit-sharing mechanisms is crucial for programme success. Frameworks for the development of benefit-sharing mechanisms that include Indigenous Peoples' and local communities' participation (such as those developed by the FCPF) can enhance the design process, although progress to date in following these frameworks has been slow (Bertzky *et al*., 2021).

[38] **The FCPF manages the Carbon Fund, which is a jurisdictional REDD+ results-based payment pilot programme.**

[39] **The Green Climate Fund, financial mechanism of the UNFCCC, launched a REDD+ results-based payment pilot programme in 2017 with USD 500 million, but was depleted in 2020 by eight countries.**

On the other hand, the voluntary carbon market permits the development of projects in the forestry sector. This was the largest and highest-value category in both 2021 and 2022, with the greatest number of unique projects reported for 2022 transactions. Credits from Forestry and Land Use projects are consistently in high demand because they represent nature-based solutions that can both reduce and remove carbon emissions. This category includes popular project types such as REDD+ (the most prevalent project type in Forestry and Land Use), Afforestation, Reforestation, and Revegetation (ARR), and Improved Forest Management (IFM). Other less well-known Forestry and Land Use project types include Mangrove Conservation, Wetland Restoration, and Urban Forestry. Projects in Latin America and the Caribbean were the largest source of Forestry and Land Use credits in 2022 (47 percent by transaction volume), followed by Asia (29 percent) and Africa (11 percent). Most of the Forestry and Land Use credits traded in 2022 were from Verifies Carbon Standard projects (73 percent) (Forest Trends' Ecosystem Marketplace, 2023).

REDD+ investments within sub-Saharan Africa are rapidly expanding. The REDD+ Projects Database shows more than 120 REDD+ initiatives in sub-Saharan African countries, with significant concentration in a few countries. Kenya has 29 initiatives, the Democratic Republic of the Congo has 21, Uganda has 20, and the United Republic of Tanzania has 14. Cameroon and Ethiopia each have 8 REDD+ initiatives, while Ghana and South Africa each have 7, and Mozambique has 6. In Côte d'Ivoire, local communities receive technical and financial support directly from the implementation of projects and programmes related to forestry, the environment and climate. As part of a REDD+ project in the region of La Mé, support has been given to secure land tenure for 3 000 ha and seven villages. However, the situation is complex, because the vast majority of rural communities that own forests have not yet fulfilled the obligations to become owners within the meaning of forest legislation and the Rural Land Code. Customary ownership recognized on the basis of affiliation to a certain group or local community, acquired in particular by inheritance, requires formal recognition in the form of a land certificate. (FAO-UNREDD, 2022b).

Recognition of forest rights features prominently in some carbon forest projects, but much less in others. A Center for International Forestry Research (CIFOR) review of early REDD+ projects found that in most cases, REDD+ provided new opportunities for securing local tenure rights, but that interventions at the local level require broader, national programmes for land tenure reform (CIFOR, 2013). REDD+ projects in Mai-Ndombe Province in the Democratic Republic of the Congo, for example, have been criticized for sidelining local communities and infringing on their rights to control their forests (RRI, 2018). Although the World Bank, FCPF and other organizations have undertaken pilot activities aimed at securing the rights of Indigenous Peoples in the Democratic Republic of the Congo, there are still many challenges to address on the ground, in terms of land rights and resources (FAO-UNREDD, 2022).

2.5 Physical location and conditions

The physical location and conditions of forests, such as access, have significant contextual bearings on forest outcomes and the results of community forest management (Busch and Ferretti-Gallon, 2023). Forests with limited physical access by vehicles or equipment (due to distance from settlements and roads, higher elevations, steep slopes and wetter biomes) are less likely to face deforestation or degradation, especially if the trees or land are of limited economic value. Global research highlights the role of roads in influencing deforestation (Angelsen, 2010), as well as the environmental costs of Africa's 'development corridors', proposed or under construction, including the large-scale expansion of roads, railroads, pipelines and other energy infrastructure and port facilities (Laurance *et al*., 2015). The potential moderating influence of strong community rights on the effects of roads has been noted (Erbaugh *et al*., 2020). The causative trend linking roads to deforestation can also go in the other direction, with deforestation leading to the expansion of roads (Angleson, 2010).

2.6 Gender and socioeconomic equality within communities

Equality/inequality based on gender or other socioeconomic differences is a major factor that affects community forest outcomes. High levels of cooperation are needed for community-based forestry, which must be sustained in a system perceived as fair (Ostrom, 1999). Women's participation and more equitable benefit-sharing among users can improve the success of community forest management programmes (Coulibaly-Lingani *et al*., 2011). Baynes *et al*. (2015) note that improved socioeconomic and gender-based equality can reduce CFM conflict and increase social cohesion, potentially improving outcomes.

Communities with devolved rights for managing forests often rely on established systems of authority and community institutions (such as traditional authorities) that can further entrench inequalities in decision-making and access to forests. Throughout sub-Saharan Africa, challenges to distributive equity in community forests include an absence or inequality of benefit-sharing mechanisms, elite capture, tenure insecurity for certain groups within communities, limited use rights, and the exclusion of vulnerable groups, especially women (Essougong *et al*., 2019; Marfo, 2009). Despite the important role that women play in forest management, community-based forestry approaches, as well many customary tenure systems, have not always taken these into account or prioritized their interests (Blomley, 2013). Indigenous Peoples with non-agricultural livelihoods may also face challenges within formal CFM regimes, as in Cameroon, where Bantu communities seeking forest rights have been reported to have excluded Indigenous forest peoples from community forest management (Oyono *et al*., 2009). In Hajjar *et al*.'s (2021a) analysis of income and access rights outcomes, many trade-off cases (income gains, rights declines) saw forest-based income benefiting local elites, while the poor and marginalized faced increased restrictions (see Vyamana, 2009, in the United Republic of Tanzania).

Overcoming gender biases and socioeconomic inequality within communities requires specific attention to the situation and needs of marginalized groups. A 2009 study that included Kenya and the United Republic of Tanzania (as well as Nepal and the United States of America), found that community-based forest management reduced social inequity and supported the poor and marginalized only when it explicitly targeted them. In such circumstances these groups were able to gain more benefits by actively participating in decision-making opportunities, and these same groups were more likely to share in benefits delivered to the community as a whole than to gain them individually (McDermott and Schreckenberg, 2009). Some communities will see the imposition of gender and socioeconomic equality by projects or external proponents as an intrusion on local autonomy (Jhaveri, 2020). Additionally, women are a highly differentiated group (Chigbu *et al*., 2019) and land administration responses will need to reflect this complexity. Despite the near ubiquity of these challenges and probable hesitation within communities to address them, there is ample experience of how to improve gender-based equality (Jhaveri, 2020; Boyer-Rechlin, 2010).

In summary, the major finding of this chapter is that the enabling conditions required to make community forest governance successful and enable the virtuous cycle of forest rights and forest outcomes are still emerging in many parts of sub-Saharan Africa. A wealth of experiences in CFM have been launched in the past 30 years, and accelerated in the past decade, showing the pathway that needs to be followed. Lessons learned from these experiences demonstrate the crucial linkage between local rights and positive outcomes for conservation and livelihoods.

Bapukeli, Democratic Republic of the Congo.
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3. FOREST OUTCOMES UNDER COMMUNITY GOVERNANCE IN SUB-SAHARAN AFRICA

In Chapter 2, this study examined factors associated with positive forest and social outcomes in community forest governance systems. The present chapter will broaden the view from the enabling factors for successful community forest governance to their aggregate outcomes across sub-Saharan Africa.

It synthesizes research on the forest and social outcomes of community forest governance (recognized through exogenous means, such as state recognition of the customary system, or through initiatives such as community forest management) in relation to other types of ownership – such as government administered or private lands – and with regards to other land uses, such as biodiversity conservation. Reviews and meta-analyses have been disaggregated, where possible, to report findings for African-specific cases.

As described in Chapter 2, even where community rights have some degree of formal recognition, communities across the continent mostly lack many of the conditions required to enable positive environmental and social outcomes. This is reflected in the mixed outcomes from research in Africa, and highlights the urgent need for further investment in the key enabling factors for communities to govern forests for environmental and local livelihoods.

The body of research evaluated in this chapter is mostly related to the outcomes of community forest management interventions, although these follow informal endogenous community forest management in many cases.[40] Most forest/environmental outcomes examined in the literature and summarized in this section are measured by indicators that include changes in forest cover,[41] forest condition and/or biodiversity.[42] These indicators are assumed to serve as proxy measures to estimate climate outcomes.[43] Livelihood outcomes are measured by indicators such as community or household income, assets, subsistence benefits or other measures of material wealth (sometimes termed 'well-being').

3.1 Forest condition, community well-being and community-based tenure

Regional reviews and meta-analyses suggest that collective forest tenure and management can improve forest condition and livelihoods in sub-Saharan Africa, yet the evidence base remains inconsistent. While most studies report, overall, either mixed or positive results, there are also significant numbers of cases with negative performance (see Table 5).[44] Modeling causality of tenure regimes and forest conditions is challenging due to the multitude of interconnected variables that drive forest changes (Yin *et al*., 2016). Moreover, the vast majority of communities in sub-Saharan Africa still hold somewhat contested, incomplete rights and often lack other factors that can be linked to success in community forest management (see Chapter 2).

[40] Hajjar *et al*. (2021a) report that 35 percent of global cases from Hajjar *et al*. (2020) a major assessment of CFM interventions, revealed the presence of endogenous CFM prior to the policy intervention (e.g. formal CFM programme), meaning that, in many cases, communities had experience with forest governance and management before policy interventions began.

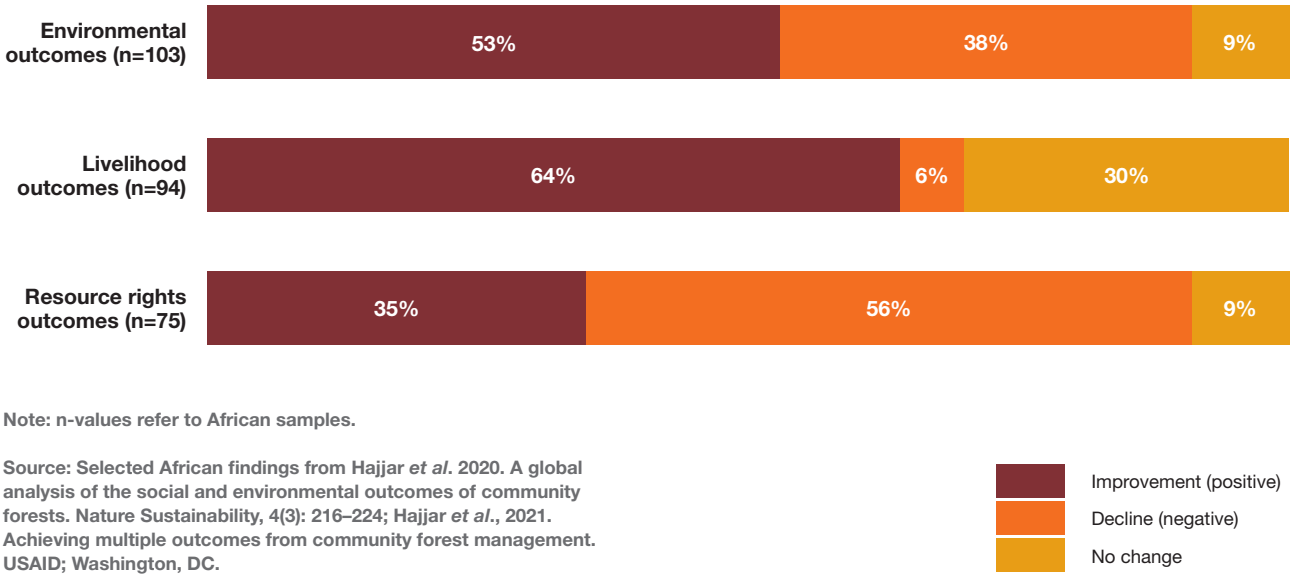
[41] Forest cover changes are themselves an indicator of deforestation.

[42] Forest condition and biodiversity are more likely to be proxy indicators of forest degradation.

[43] This assumption is fundamental to myriad voluntary and compliance carbon forestry projects that assume relationships between forest cover/quality and terrestrial carbon storage.

[44] There are several reasons for this ambiguity, as well as for a cautious interpretation of these findings. For this study, efforts were made to disaggregate findings relevant to Africa from global studies. However, the aggregated evidence based on the body of case study literature is highly variable in terms of methodology/approach, and limited in geographic scope (for example, focused on a few countries with early adoption of CFM frameworks), with significant gaps in terms of quantity and quality of evidence. Forest condition indicators may inadequately describe ecological condition; there may be a lack of proper counterfactual cases, and the variables used to understand causal relationships may need better definition and the identification of appropriate baselines for impact evaluation. Conceptual constructs such as forest commons and communities can vary considerably in real-world contexts, including in the degree to which management regimes behave like private entities, community organizations or formal corporations (Yin *et al*., 2016).
High-resolution spatial analysis of community lands and forest conditions are relatively uncommon (see Veit and Reytar (2021) as an example) and methodologies may be highly variable across studies, focusing at times on qualitative aspects of forest conditions that are challenging to compare. Countries with more recent uptake of forest reforms devolving rights to communities (i.e. in Sahelian Africa) have a more limited body of research (Yin *et al*., 2016).

Figure 9. African outcomes from community forest management



Note: n-values refer to African samples.

Source: Selected African findings from Hajjar *et al*. 2020. A global analysis of the social and environmental outcomes of community forests. Nature Sustainability, 4(3): 216–224; Hajjar *et al*., 2021. Achieving multiple outcomes from community forest management. USAID; Washington, DC.

As shown in Table 5, of eight major studies of multiple countries:

- three showed positive forest outcomes associated with community tenure, while five showed inconclusive results;
- four showed positive livelihood results, while one was inconclusive (and three did not assess livelihood outcomes).

The analysis provided in these studies highlights how limitations in the key factors for success in community-based forest management (as described in Chapter 2) limit positive environmental and livelihood outcomes. Key studies from this review are summarized below.

Duguma *et al.* (2018) highlight the several weaknesses in community forest management frameworks utilized in the literature – simply put, they do not actually grant communities adequate forest management rights. Although the study found mostly positive, if marginal, forest and livelihood outcomes, in general, implementation of legal frameworks is very weak and, in the cases of Ethiopia and Kenya, largely dependent on NGO support. Communities are left to manage low-value forests – 'the leftovers' (Anderson *et al*., 2015), yielding limited benefits and requiring high degrees of effort, in a context of limited control over revenues and decision-making. Additionally, in many contexts, elite capture (by both village leaders and external elites) saps what little benefit is generated by the community's efforts, a finding echoed in other reviews (Larson *et al*., 2010).

Coffee Plantation Karatu, United Repupblic of Tanzania - January 24, 2019.
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While stressing the importance of strong community rights in improving forest and livelihood outcomes, Aggarwal *et al.* (2021) also found mixed results across the ten African countries assessed. **Forest laws in the countries are not sufficiently specific about the nature of rights recognized; they emphasize conservation over livelihoods, and fail to recognize customary rights.** As a result, forest tenure reforms have not adequately benefited forests or communities in most countries.

A recent global review of the social and environmental outcomes of community forest management interventions (Hajjar *et al.*, 2020; Hajjar *et al.*, 2021a) included consideration of resource access rights, in addition to **environmental and livelihood outcomes.[45] It found that across African cases analysed in the study,[46] environmental[47] and livelihood[48] outcomes are more often than not**

[45] This is a follow-up brief of Hajjar *et al.* (2020) to further unpack the results of the study for USAID staff who design and work on CFM activities.
[46] Cases in Africa were concentrated in the United Republic of Tanzania (52), Cameroon (32) and Madagascar (11).
[47] Environmental indicators included forest cover, forest condition and biodiversity. In this context 'environmental conditions' is synonymous with 'forest conditions'.
[48] Livelihood indicators included community and household income.

Table 5. Africa-focused synthesis of collective tenure and forest outcomes

Study authors & year	**African studies n=x** (total global studies assessed)**; focal countries**	**Study focus** (methodology)	**Tenure regimes compared**	**Forest outcomes**	**Livelihood outcomes**	**Other relevant findings**
Veit and Reytar, 2021	Cameroon, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Liberia	Spatial analysis of forest cover change (2001-2019) (quantitative)	Community forests vs national & protected areas (PAs)	=	n.a.	Community forests had higher rates of forest loss than PAs in 5 countries and in 3 countries had higher rates of loss than national rate.
Aggarwal *et al.*, 2021	(10 & 20 assessments globally, 7 with both assessments; 23 countries overall); Cameroon, Gabon, Gambia, Kenya, Republic of the Congo, Senegal, Sierra Leone, Uganda, United Republic of Tanzania, Zambia.	2 different FAO tenure assessments; 7 countries had both assessments conducted (qualitative)	Community-based forestry (national level)	=	=	Many rights-based variables assessed; strong rights to communities can improve forests and livelihoods.
Hajjar *et al.*, 2020	n=103 reporting environmental outcomes in Africa (524); n=94 reporting income (316); n=75 reporting rights (249); (total 643 cases in 267 articles from 51 countries in Latin America, Africa & Asia-Pacific regions).	Global analysis of environmental, income and natural resource rights outcomes of CFM (quantitative)	Majority of cases looked at communities with *de jure* or *de facto* rights	+	+	While the majority of cases in Africa showed improvements in environmental and income indicators, 56% of 75 cases in Africa showed a decrease in resource rights.
Fa *et al.*, 2020	Spatial correlation analysis; Afrotropic biogeographic realm is disaggregated in WebTable3 (online).	Coincidence of Intact Forest Landscapes (IFL) and Indigenous Peoples' (IP) land (spatial analysis)	Indigenous Peoples' land	=	n.a.	26.5% of IFLs in Africa are on IP lands; a similar degree of IFL contraction occurred (2000-2016) on Indigenous Peoples' lands (13.5%) and other lands (12.5%).
Duguma *et al.*, 2018	n=44 (44); Cameroon, Ethiopia, Kenya, United Republic of Tanzania and Uganda	Impacts of CBFM schemes on SDGs: 1) community engagement; 2) reducing poverty; 3) forest conservation (qualitative)	Community-based forest management	+	+	Limitations of current CBFM frameworks may limit overall impacts.
Robinson *et al.*, 2014	n=24 (118 cases in 36 publications)	Land tenure conditions and land cover change (deforestation) (quantitative)	Public, protected, private, customary, communal	=	n.a.	Land tenure security (any form) associated with positive forest outcomes; African communal/customary systems have negative association (= when controlling for other variables).
Persha *et al.*, 2011	n=30 (84); Kenya, United Republic of Tanzania, Uganda [a]	Local rule-making (participation in forest governance), forest livelihoods and biodiversity conservation (forest tree spp. richness) (quantitative)	n.a.	+	+	Most cases globally (60%) are characterized by trade-off relationships between livelihoods and biodiversity. Jointly positive cases = 27% of the global sample. Large forest size, commercial dependence and participation of forest users in rule-making are positively associated with better outcomes. Improved outcomes associated with increased participation are especially important for the challenging cases of small forest fragments in human-dominated landscapes.
Larson *et al.*, 2010	n=12 (~37); Burkina Faso, Cameroon, Ghana	Forest condition and livelihoods (income) outcomes in response to tenure reforms (qualitative)	Some degree of *de jure* recognition of community rights	=	+	Mixed forest outcomes overall in Africa and apparent within each country; livelihood gains cannot be assumed to be necessarily overall improvements, as gains may go to local elites.

[a] International Forestry Resources and Institutions (IFRI) project dataset. Geographically tends to be restricted to more degraded, drier forests in East Africa and does not well represent more humid, less degraded, carbon-rich forest areas such as the Congo Basin (Seymour *et al.* 2014).

Notes: Includes recent studies of ecological and livelihood outcomes of land tenure regimes. Positive outcomes imply improved forest condition (as defined by authors, usually includes tree density, size, species diversity, regeneration, etc.) or livelihood outcomes. Findings from African samples are disaggregated, unless otherwise noted.

+ indicates positive relationship between outcome assessed by the study and collective tenure
– indicates negative relationship between outcome assessed by the study and collective tenure
= indicates no clear relationship, inconclusive results
n.a. indicates that the outcome or condition was not assessed by the study

Sources: See References.

Liberia - October 9, 2014.
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improved through community forest management. However, the study also found that a majority of African cases reporting on changes to resource access rights after CFM revealed decreased forest resource rights for some or all community members (see Figure 9).[49] This goes against one of the CFM goals (to increase community rights and responsibilities for forests). The present study highlights the importance of considering who benefits from CFM interventions and who is affected by changes to rights.

The scale of Indigenous Peoples' roles as forest custodians in Africa was highlighted by Fa *et al.* (2020), with Indigenous Peoples' lands coinciding with 26.5 percent of all intact forest landscapes (IFLs) on the continent.[50] Rates of forest loss were similar for Indigenous Peoples' lands and other areas (13.5 percent vs 12.5 percent), perhaps resulting from a context of limited legal protection and support for Indigenous Peoples' lands. Indeed, Kennedy *et al*. (2022 - preprint) find in their assessment of ecological condition of Indigenous lands with potential for future industrial development that Indigenous lands in West and Central Africa are at particularly high risk, due to both greater threats and greater obstacles for Indigenous Peoples to realize self-determined development outcomes.

[49] Resource access rights indicators included commercial and subsistence access to resources. Reductions in resource access rights occurred because some local people were excluded from the rights defined in the CFM intervention, or because all resource users saw reduced rights to commercial extraction, subsistence extraction, or both. In addition, distributional asymmetries within communities were prevalent.

[50] Geospatial data for IFLs were sourced from www.intactforests.org. Defined by Potapov *et al*., 2017, IFLs are seamless mosaics of forests and associated natural treeless ecosystems that exhibit no remotely detected signs of human activity or habitat fragmentation, and are large enough to maintain all native biological diversity, including viable populations of wide-ranging species.

Box 7. Case study of an Indigenous Peoples' community-based forest tenure regime: *Entim E Naimina Enkiyio*

Entim e Naimina Enkiyio (the Forest of the Lost Child) is one of the few non-gazetted and largely undisturbed Indigenous forests in Kenya. The forest has historically been owned and managed under the customary tenure of two Maasai pastoralist sections, namely the *Purko* and the *Loita Maasai* sections. The forest is located along the Kenyan-Tanzanian border, on the southern rangelands of the country, in the Maasai County of Narok. The forest is one of the richest ecosystems in the country, in terms of flora and fauna, providing habitat for larger mammals and more than 100 bird species, including internationally threatened species,[a] and has significant spiritual and cultural value for the local Indigenous Maasai pastoralists.

The forest is conserved under the customary regime of Maasai pastoralists. Grazing on the landscapes is regulated through customary law, in which livestock are grazed based on rainfall periodicity and spread. The forest serves as dry season grazing and a water reserve. In the wetter seasons, livestock are grazed in the lowland rangelands (*Olpurkel*). In addition to economic and livelihood-related support services, the forest is also central to the spiritual and cultural identity of the Maasai community.

Women play a central role in forest management practices, both as holders of Indigenous knowledge and as immediate victims of negative impacts of environmental changes. The rich biodiversity observed in the *Naimina Enkiyio* forest is attributed to the traditional norms and taboos practised and promoted by the community from time immemorial, which foster positive co-existence with nature.

The local Indigenous community has successfully protected and managed the forest for years under its customary tenure system. However, threats to the sustainable community conservation of the forest are mounting from population growth, increasing drought, income disparities among local communities, encroachment by crop farmers, and disputes between local residents and state authorities.

The role of the State in the conservation of *Entim e Naimina Enkiyio* has been peripheral. Prior to the present legal framework on communal land under the constitution of Kenya 2010, and the enabling legislation (Community Land Act, 2016) that provides for positive recognition of customary rights to lands and forests, the trusteeship of the local authorities was often breached by authorities. Local livelihoods were disrupted, and lives lost in the ensuing contestation on approaches to ownership and conservation of the forest. The issue was ultimately settled in court.

Disputes over ownership and control of the forest pitted the 'legal' institutions of the State against the traditional customary institutions. Since the customary institutions were not recognized in law (and were deemed illegitimate), the community had to seek a 'legal' entity under which it could channel its claims in a court of law. Consequently, the Loita Naimina Enkiyio Conservation Trust – a hybrid institution that brought together the traditional spiritual leader (*Oloboini*), traditional community elders, elected political representatives and local NGOs – was born. This became the 'legal' entity that took the County Council to court in May 1994. The most powerful institution in Loita is the Loita Council of Elders (LCE), which has come to play a key role the management of natural resources, including the Loita Forest. This hybrid institution is a result of strategic engagement by local Indigenous customary institutions with contemporary institutions to access broader social and political networks, so as to attain control over threatened resources. The LCE has resisted national policies on land tenure, which were geared towards containment of pastoralists within regional and state boundaries, and sought to transfer tenure from communal arrangements (founded on customary norms and rules) to individual and private property rights to land based on statutory law. For years the Loitan have resisted land fragmentation in and around the forest, asserting that the proposed land tenure arrangement will jeopardize their very survival strategies, as the forest and the open rangelands were utilized in a complementary/single integrated ecosystem. Leaders assert that security of tenure is the single most important factor in endeavours to promote sustainable livelihood production systems and management of natural resources, as it will dictate the rights and responsibilities of the various stakeholder groups.

[a] Red-throated Tit, the Jackson's Widowbird and the Hunter's Cisticola.

Source: Kimaren Riamit, S. 2010. Indigenous Peoples and the Naimina Enkiyio Forest in Southern Kenya: A case study. In: Tebtebba (ed.), *Indigenous Peoples, forests & REDD Plus. Sustaining & enhancing forests through traditional resource management*. Mainyoito Pastoralists Integrated Development.

Table 6. Selected studies and findings with relevance to community-based tenure and protected areas

Study (sample)	**Study focus** (methodology)	**Tenure regimes**	**Conservation outcomes** (+, -, =)	**Other findings**
Sze *et al*., 2022 (26 countries in Africa)	Comparison of effectiveness of Indigenous Lands (IL) and PAs,[a] pan-tropically in avoiding deforestation. (spatial analysis)	Indigenous Peoples' land, protected areas, Protected Indigenous Areas (PIAs), non-PAs.	+ African ILs reduce more deforestation than non-PAs, PAs, PIAs; degradation is reduced in ILs compared with non-PAs, comparable to PAs, PIAs.	PAs & PIAs in Africa avoid little deforestation/degradation. ILs avoid more deforestation than multi-use PAs (24.5% more avoided deforestation in Africa); matched data show that most deforestation in Africa is a result of shifting agriculture. Many PAs in Africa required displacement of communities; therefore it is not surprising that in these high-conflict areas, deforestation is higher than on ILs.
Dawson *et al*., 2021 (Africa n=60)	How different forms of governance influence conservation outcomes; compared community-controlled conservation outcomes versus externally-controlled conservation. Most cases were in forest ecosystems and protected or for conservation (not disaggregated) (systematic review).	Community-led conservation areas, externally-controlled conservation areas.	Community conservation: conservation +, well-being +; externally-controlled conservation: conservation = well-being -	Most studies of positive well-being and conservation outcomes come from cases where Indigenous Peoples and local community governance prevails. Africa sample: 25% positive outcomes, 20% negative outcomes, well-being and conservation. Only 28% of cases in Africa featured locally-led conservation.
Oldekop *et al*., 2016 (Africa n>48, depending on variable)	Relationship between positive and negative social impacts and conservation outcomes of PAs (n=165) (meta-analysis).	Sustainable use, strict protection.	Multi-use +	Multi-use protected areas.

[a] This study recognized the limitations imposed on being able to define indigeneity in Africa, and that knowing if Indigenous Peoples are actually present and able/willing to conserve biocultural heritage is empirically difficult.

Sources: See References.

Burera, Rwanda.
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3.2 Comparing community forest governance and protected areas

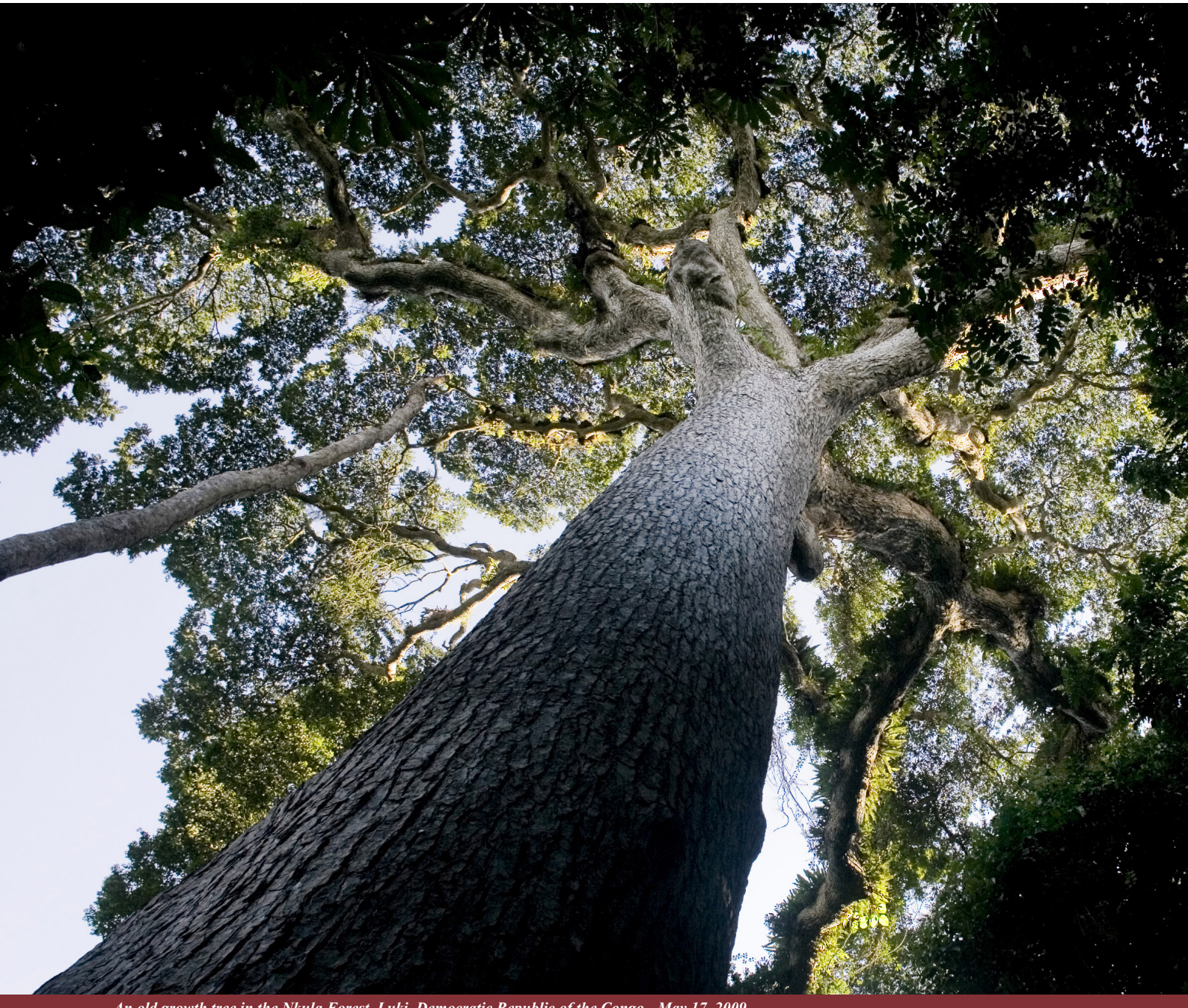
A further set of studies sought to compare conservation outcomes of different types of land tenure, examining in particular:

1) outcomes associated with multiple-use protected areas (PAs) versus strict protected areas; and,
2) outcomes in Indigenous and/or community lands versus protected areas.

Several challenges confront comparisons of the performance of protected areas and areas under community governance. Leakage, where reduced deforestation is displaced outside the borders of the studied area, means that head-to-head comparisons of PAs and other land areas may be missing a crucial degree of deforestation that is occurring as a result of the protected area. In a study (Ford *et al*., 2020), 46 percent of protected areas sampled had deforestation leakage, and in 78.2 percent of those cases, reduced deforestation in the protected areas was not sufficient

to offset the amount of deforestation in the buffer zones. Additionally, Yin *et al*. (2016) make the argument that comparing community-based forest management against government-managed PAs may not be analytically pertinent due to: a) the different legacies and starting points of these respective forests; and b) the different functions that PAs and community forests are intended to fulfil.

Despite such limitations, the results of these studies (Oldekop *et al*., 2016; Dawson *et al*., 2021; Sze *et al*., 2022) **provide evidence that securing community rights to lands and forests may generate conservation benefits, while also facilitating benefits for communities,** such as reduced conflicts and investment/ sustainable management motivations (see Table 6). Effectively securing rights to these lands for Indigenous Peoples and communities would relieve the resource and



An old growth tree in the Nkula Forest, Luki, Democratic Republic of the Congo - May 17, 2009.
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capacity constraints of governments to manage additional protected areas, while recognizing the contributions of these communities towards global conservation objectives. A case study (see Box 7) from Kenya describes how Indigenous community management, rooted in traditional values, knowledge and governance, is contributing to conservation of the *Entim e Naimina Enkiyio* forest area.

The focus of this study is on whether and how securing collective forest tenure can be a strategy for climate change mitigation. Chapter 2 addressed the 'how', illustrating the complex interplay between local conditions and enabling factors that can allow communities to contribute to positive forest and climate outcomes. This chapter's synthesis of relevant literature, assessing 'whether' community-based forest governance is associated with positive forest outcomes, suggests that it can be conducive to forest conservation, but that the evidence, taken as a whole, is inconsistent, reinforcing the interpretation that multiple factors, grounded in secure tenure, but also including other enabling and disabling conditions, jointly drive outcomes. The many cases drawn from the literature, where forest and livelihood conditions have demonstrably improved (a majority, in Hajjar *et al*.'s, 2020 analysis), constitute a strong argument that communities can and do manage forests for conservation and livelihoods, even when faced by uneven and challenging conditions across the continent.

Strategies for further working with communities to improve both climate/forest and livelihood outcomes are the subject of the next and final chapter.

Shea cultivation in Ouagadougou, Burkina Faso.
©Luca Prestia

4. COMMUNITY-BASED TENURE AND CLIMATE CHANGE IN SUB-SAHARAN AFRICA: pathways for community and global benefits

In light of the findings presented in the previous chapters, it is apparent that the achievement of positive outcomes from the management of sub-Saharan Africa's forests for climate change mitigation, adaptation and the sustenance of local livelihoods must address two key realities of forest tenure:

1. The majority of African forest areas have long been under customary tenure systems that collectively manage many forest areas for broadly shared access and benefits across rural communities. These are the locally prevailing *de facto* tenure systems across most of the continent.
2. State assertions of forest ownership and control (the prevailing *de jure* tenure reality) are often at odds with local incentives for sustainable local

forest management, in that they disempower local forest users and constrain the investment horizon for forest use by communities.

Resolving the tensions between these two realities has strong potential benefits for expanding rural opportunity, achieving sustainable forest management and use, and reducing conflict. In the past, state resources and capacities to exert control over forest areas to address deforestation have often been insufficient, especially given the vast human development needs in these same areas. The lessons learned from the past three decades of accumulating experience suggests that a higher level of state resources and an approach based on a partnership with communities can create a new reality that features the local knowledge and stewardship of community institutions and the resources of state institutions working in concert.

Policies to appropriately address both deforestation and rural livelihoods must recognize the rights and realities of the communities and Indigenous Peoples who live in forest areas and the urgency of protecting forests across sub-Saharan Africa from further deforestation and degradation. Heavy-handed state assertions of control over land and forest resources (including outright acquisitions of community lands) have contributed to violent conflicts, including civil war, in places such as Liberia, Sierra Leone and Sudan (Alden Wily, 2011b).[51] Additionally, large-scale land allocations (such as for agribusiness and extractive industries) have led to the displacement and impoverishment of local people. Major international frameworks, such as the VGGT, ILO 169 and UNDRIP, have set standards and provided guidance for the appropriate recognition of all tenure rights, including the customary, collective rights of Indigenous and tribal peoples. Successful local projects across the continent are showing a way forward.

Transitioning to more secure community tenure rights is challenging but achievable, as is creating durable, equitable local institutions for forest governance and increasing the benefits that communities produce and obtain from forests. Addressing challenges and capturing the opportunities they present are the subject of this final chapter.

4.1 Pathways forward: investments in communities and forests

Most strategies for supporting collective tenure and community-based forest governance begin with or come to encompass securing rights for communities. As demonstrated throughout this study, devolution of forest rights to communities, including secure tree and land rights, is a necessary condition for successful community forestry outcomes (Baynes *et al*., 2015). When rights are devolved, and supporting conditions are in place (see Chapter 2), communities may be incentivized to invest in and sustainably manage their forests (Baynes *et*

[51] In cases such as Mali, forest agencies had historically been established as paramilitary organizations, in an effort to enforce conservation of natural resources, engendering deep animosity towards state actors (Lawry, 1989; Benjaminsen & Ba, 2019).

al., 2015; Gilmour 2016). However, while necessary, secure tenure is often not in itself sufficient for positive forest and social outcomes (Barrow *et al*., 2016). As stated by Robinson *et al*. (2014): "when there are strong benefits to clearing forest, a landholder with secure rights will need very strong external incentives to keep her forest ecosystems intact".

Beyond tenure security, investments are needed to ensure that other enabling conditions are in place for communities to maintain forest ecosystems. Sustainable local livelihoods based on forest resources allow communities to continue to invest in forest stewardship, and the attendant climate change mitigation benefits. A diverse range of policies and investments are needed to support the advancement and strengthening of rights, as well as community forest institutions, community forest enterprises (informal or formalized), and local livelihoods. It is especially important that strong social demand and mobilization within communities drives investment by external partners.

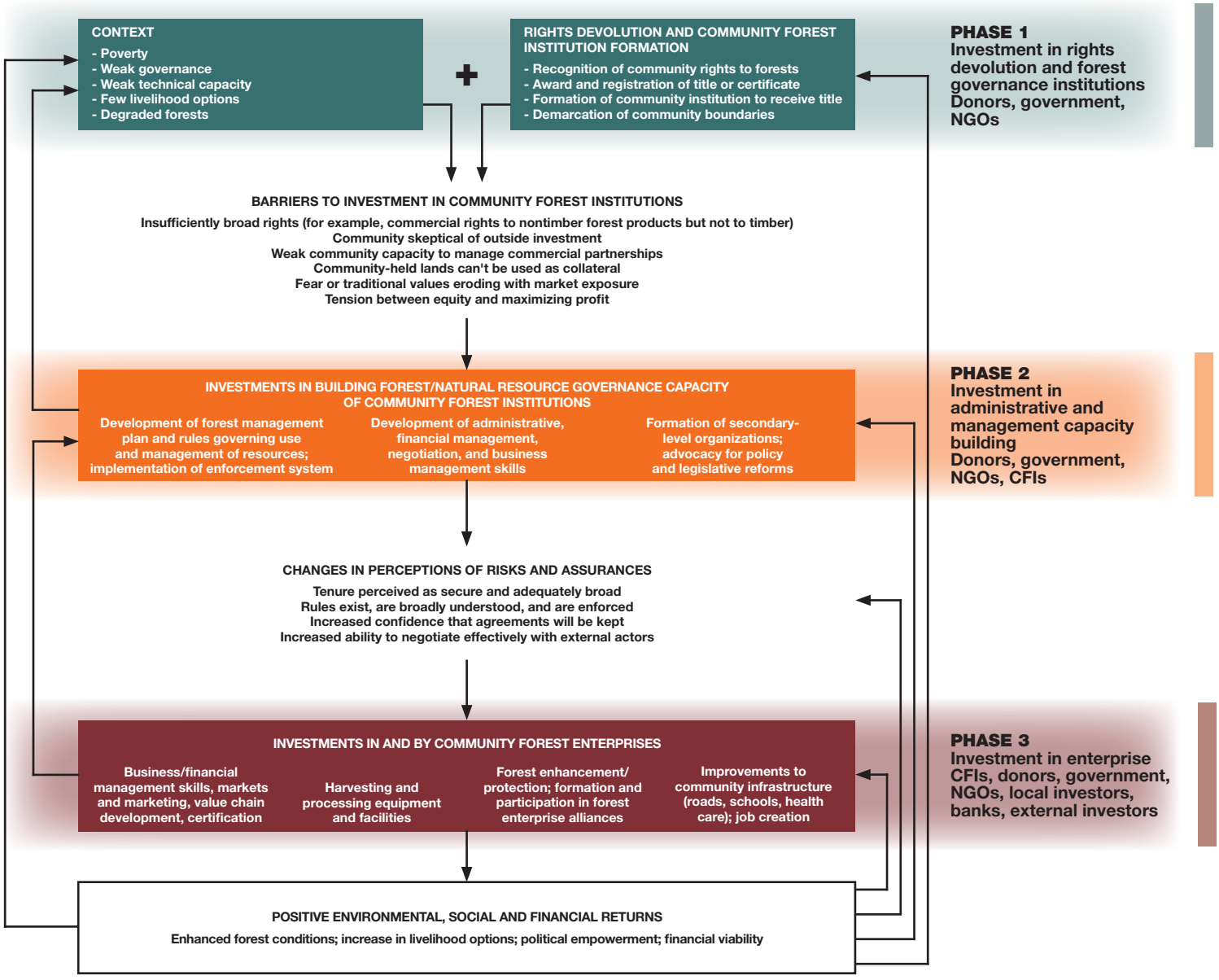
Creating the conditions necessary for positive environmental and social outcomes calls for phased or multi-layered investments, beginning with the devolution of forest rights and proceeding to actions to strengthen forest governance and build sustainable livelihoods. This study adapts a conceptual framework from Gnych *et al*. (2020), explaining the dynamics of innovation, constraints, investment and capacities within community forest institutions and community forest enterprises (see Figure 10). In this model, forest rights devolution triggers a system of social innovation in communities, whereby phased investments are adapted in type and source (by communities themselves and external actors such as governments and donors), based on the needs of community forest institutions (CFIs). While the conceptual framework in Figure 10 focuses on readiness for community forest enterprise development, the following sections adopt the overall approach of phased 'investment readiness', but consider a wider and more diverse range of capacities and potential livelihood activities. Major categories of investment activities are described and general considerations (including barriers) for their implementation are outlined.

4.1.1 Phase 1: Investment in rights devolution and forest governance institutions

Using the three-phase theory of change as a framework, this section discusses activities and investments to support community forest governance for climate action, and lessons learned from recent experiences that can help to guide these activities and investments towards the achievement of intended outcomes.

It is important to note that these phases are not necessarily consecutive. For example, Phase 3 activities to improve smallholder producer benefits can incentivize communities to engage in Phase 1 and 2 activities on resource rights and forest management.

Figure 10. Adapted theory of change linking rights devolution to financial investments and environmental and social outcomes



Source: Gnych *et al.*, 2020. Is community tenure facilitating investment in the commons for inclusive and sustainable development? *Forest Policy and Economics*, 111: 102088.

PHASE 1 Activities and investments: Rights devolution and forest governance institutions

Internal efforts at enhancing these elements and dimensions of collective tenure security and governance through strengthened community leadership and initiatives can be supported by external partners, ranging from local NGOs to international financial institutions and development agencies. Initial, foundational activities to secure tenure often include the development of legal frameworks supporting collective rights and key government and NGO capacities

to implement rights recognition, followed by other dimensions of tenure security. Key elements that need to be in place for forest tenure security are described in the following table, together with their associated dimensions of activity and investment to support them (see Table 7).

PHASE 1 Lessons learned for rights devolution and forest governance institutions

The following lessons learned are valuable for guiding new activities and investment towards effective outcomes for successful recognition of collective tenure (including customary tenure and community forest rights):

1) Make formalization a voluntary certification of what exists, not an act that extinguishes customary rights by replacement with received tenure norms, and that registration does not remove community jurisdiction. The most significant risk of formalizing rights is that the dynamism and adaptability in most customary tenure systems may be lost (Alden Wily, 2016). Additionally, it can be very costly and time consuming to formally secure rights to land and forests, so the focus should be on recognition of existing rights (Freudenberger, 2013).

2) Provide the opportunity for customary landowners to double-lock rights through formalization, such that the law protects the existing rights as a matter of principle, whether registered or not. This also takes account of the urgency often felt within communities facing threats to their lands for certification of their existing rights to be available and, as noted earlier, the absence of which may force the better-off and more knowledgeable to abandon the customary sector altogether.

3) Avoid unnecessary and unsought individuation of rights. Where formalization is justified and prioritized, a lesson learned is that changes to the customary tenure systems are best kept to a minimum. In some cases, formalizing rights under narrow legal constructions has led to a loss of the multiple overlapping rights associated with women, youth and seasonal users, in favour of simplified exclusive individual rights (Meinzen-Dick and Mwangi, 2009).

4) Support refocusing of forest agencies towards forest management support for communities (including extension services and implementing rights). Incorporating this lesson learned may require reforms of institutional mandates, structure, budgets and staffing, which can yield benefits for both forest agency and community objectives. Additionally, communities may be more likely to support government forest law enforcement activities to reduce illegal logging once community rights have been recognized (Lawry *et al*., 2012a).

5) Include land and resource rights jointly in formalization. Tree tenure may be especially challenging to recognize in contexts where it is legally separated from the underlying land tenure (World Bank, 2021; Damnyag *et al*., 2012). Providing rights to resources without the land may undermine rights devolution (Barrow *et al*., 2016). Recognizing carbon rights linked to forests and lands can accelerate accessing the benefits generated by carbon finance by Indigenous Peoples and local communities.

Table 7. Key elements and dimensions of forest tenure security

Key elements	Associated dimensions
Legal frameworks for tenure rights	• Recognition of all rights and rights holders, including women • Recognition of a robust bundle of rights • Recognition of a robust bundle of natural resources
Implementation of legal recognition	• Accessible, efficient procedures • Formal recognition of Indigenous and community lands
Appropriate regulations for land and resource management	• Regulations that are simple and appropriate to management objectives • Efficient implementation of permitting processes
Effective support from responsible government agencies	• Participatory and adaptive processes for decision-making • Political will and aligned incentives • Clear and mutually supportive mandates for responsible agencies • Capacities and financial resources for government implementation roles
Empowered and inclusive Indigenous and community governance	• Inclusive institutions and decision-making processes, with particular attention paid to the inclusion of women • Community-defined rules and/or plans for land governance • Capacities and financial resources for tenure security roles of community institutions • Multilevel links to advocacy and support organizations
Systems for recording community forest tenure rights	• Comprehensive and accurate information • Accessibility of the system – to record, maintain/update and share information on tenure rights
Enforcement of tenure rights	• Capacities and mutual support among institutions responsible for enforcement • Effective implementation of monitoring and enforcement systems
Protection of collective tenure rights in relation to other forms of tenure and land use	• Legal clarity and resolution • Mechanisms for rural policy coherence • Strong safeguards to avoid infringements on communal tenure rights – including free, prior and informed consent and environmental and social standards
Conflict and dispute resolution	• Accessible and competent mechanisms to resolve disputes over tenure rights • Effective resolution of disputes

Source: World Bank. 2019. *Securing forest tenure rights for rural development. An analytical framework*. Program on Forests (PROFOR). Washington, DC.

6) Simplify rules and procedures via setting a minimum-environmental-standards approach and transference of adequate discretionary power to local communities, to allow more flexibility and reduce non-implementation and elite capture.

4.1.2 Phase 2: Investment in administrative and capacity building for community forest institutions

In the early stages of CFI emergence and development, external assistance may be required to support communities in building their own internal capacities for governance and fulfilling administrative requirements. Key activities and investment may involve supporting communities in becoming familiar with the legal framework and relevant regulations; education about the nature of their rights, responsibilities and relationships vis-a-vis state and private actors; support for the organization of community members into socially legitimated legal entities with democratic governance structures and the capacity for well-informed decision-making about land use; and the mapping and registration of community collective land and other land tenure types into nationally recognized information systems, with appropriate standards of accuracy and fidelity. Activities at this stage may also involve education and support for discussions about potential land uses requiring free, prior and informed consent.

For example, in the case of certification of community DelCOM (Community Land Delimitation and Certification) and DUATs (individual or collective land certification) in Mozambique, local service providers employ a process (termed CaVaTeCo) aimed at helping the community to establish its own legal entity to represent it, and to later delimit the community lands and family parcels within those lands. Specific roles of external partners and responsibilities by communities in these early stages of CFI governance may differ by national context. In the formation of Local Community Forest Concessions in the Democratic Republic of the Congo, communities form a committee of the elders, a community assembly, management committee and a monitoring and control committee (Lescuyer *et al*., 2019).

This phase of activity and investment includes many governance, management and administrative tasks for CFIs, which may also be supported by external partners. Key objectives that are illustrative dimensions of activity and investments are described in the following table.

PHASE 2 Lessons learned for administrative and capacity building for CFIs
The most salient lesson learned from the literature about strengthening and empowering forest institutions concerns supporting democratic organization at the local level. Democracy helps community forest management to respond to local needs and can have many benefits (Ribot, 2016). Many of the elements of local democracy – responsiveness, representation, democracy, accountability and others (Ribot, 2016) – are often called for in development, donor and government discourses related to forest devolution. Implementation in practice is frequently less successful than expected, due to acquiescence to pre-existing power dynamics, and expedience in choosing local partners. Non-representative institutions continue to be involved in forest management in many places, and donors, governments and development actors do not always have the skills to

Table 8. Activities and investments for administrative and capacity building of CFIs

Objective	Illustrative actions and investments
Development of governance and administrative capacities, financial management skills, business management skills and negotiation capacities.	• Support NGOs and civil society organizations (CSOs) to act as bridges for communities interacting and negotiating with external actors (such as private investors or companies). • Train community representatives regarding FPIC and other safeguards. • Support community networks to influence public discourse, increase legitimacy and influence policy.
Strengthen community relationships and capacity to engage with external actors,[a] such as government agencies, local and international NGOs and CSOs, community forestry federations, producer organizations and alliances and knowledge networks (e.g. CIFOR-CGIAR, Environmental Leadership Training Institute), as well as with private enterprises.	• Provide legal and technical information to communities about forest rights and management. • Support operating costs of community organizations. • Train community leaders.
Development of forest management plans and licences, establishment of concessions, establishment of rules governing resource access and use, and implementation of enforcement systems for forest use.	• Prepare forest resources inventory. • Generate topographical maps of forests and community infrastructure. • Document evidence of technical and industrial capacity to process timber. • Prepare community land-use plans. • Establish and maintain a community cadaster. • Prepare forest licence applications. • Prepare concession proposals and draft agreements/ contracts.

[a] Termed 'extra-CFG governance', i.e. "the ability of the organization to deal with external agencies" by Baynes *et al*., 2015.

Source: Author's own elaboration

support the development of more participatory and accountable institutions (Ribot, 2016). Indeed, Baynes *et al*. (2015) acknowledge that non-democratic governance may be accepted by many community forest groups, possibly because in some places community forest institutions are instituted through established systems of authority.

Although there is a contradiction between respecting customary and traditional decision-making systems and values and the demands for more democratic and equitable governance institutions, customary tenure systems are not alone in

their inequities and, as referenced earlier in this study, these tenure systems are highly flexible and adaptive by nature. As noted by Freudenberger (2013), most advocates for customary tenure insist that its future depends on transparent and participatory decision-making systems.

In order for donors, governments and practitioners to be able to integrate these democratic practices into their programmes, a guide has been developed to educate policymakers and practitioners in democracy in forest governance, with principles for responsive forest governance: Ribot, J., 2016. *Responsive forest governance initiative handbook I - Leveraging democracy through forestry,* RFGI Working Paper No. 34.

A key lesson learned to date is that when rights are devolved to a community or user group, an existing institution may be empowered, or new institutions created, to govern and manage the forest resources. Specific concepts related to community governance institutions (such as authority, legitimacy) and their impacts on environmental and social outcomes have been described in more detail in Chapter 2, with a strong emphasis on inclusivity and democratic governance as enabling conditions for success. In this early phase, much depends on requirements for initiating the community forest within the legal framework, and how the laws select the representatives.

For example, the case of forest devolution in Cameroon (the basis of which were the 1994 Forest Law 09/01 and 1995 Decree of Application 94/436) includes several lessons learned for future initiatives about the creation of CFIs and the development of their administrative and governance capacities (described by Brown and Lassoie, 2010):

- Make the process of forming a community forest short and simple, typically with NGOs helping communities through the process.

- Make the definition of a 'community' in legislation inclusive and broad (not only based on proximity to forests, a characteristic that excludes many important users).

- Specify in the legal framework the management agreements between the state forestry administration and a wide set of stakeholders from the community.

- Include in the legal set of stakeholders not only the legal group from the community (association, common initiative groups, economic interest groups or cooperatives), but also traditional authorities (elders, lineage leaders and village chiefs) who, in humid forest zones, typically have power and legitimacy over forests. This approach can avoid the conflict of traditional authorities being replaced under the legal framework by community forest management committees. The latter tends to be more upwardly accountable to the central government (state agents and forest administration).

4.1.3 Phase 3: Activities and investments: Developing enterprise CFIs for income-generating activities

As discussed in Chapter 2, generating material benefits from well-managed forests is another key factor linking collective forest tenure with positive environmental and livelihood outcomes in community governed areas. While these material benefits can take a wide variety of forms, including local, non-market activities, this section focuses in particular on the development of enterprise CFIs and payments for environmental services, as well as other relevant incentive mechanisms, such as the REDD+ policy approaches and results-based finance, as some of the most prominent approaches to income generation from community forests.

PHASE 3 Activities and investments: Developing enterprise CFIs for income-generating activities

By generating material benefits, enterprise CFIs can create incentives within the community to manage forest resources sustainably (Segura-Warnholtz, 2022). Enterprise CFIs are institutions through which communities commercialize goods and services derived from the community's forest. These institutions are, at their core, social enterprises that combine the social and economic goals of capturing value from local forests and redistributing the benefits to the community. Social enterprises differ from for-profit enterprises in that profits are typically redistributed to the community, ownership of the enterprise is by the community, and governance is by members of the community (often local authorities), regardless of specific skills or ability (Foundjem-Tita *et al*., 2018; Gnych *et al*., 2020). Enterprise CFIs help to solve social, economic and governance issues that neither government nor the market have been able to address, including providing some degree of employment opportunity widely (if not universally) in the community and distributing profits from the enterprise to community members (Gnych *et al*., 2020).

Enterprise CFIs include a range of informal and formally incorporated legal entities that commercialize products such as non-timber forest products, fuelwood, charcoal, timber and handicrafts, and services such as PES and ecotourism. The structure and complexity of enterprise CFIs is highly variable. In some contexts, such as Ghana, the majority of enterprise CFIs are sole proprietors led by men and women (Osei-Tutu *et al*., 2012), while in other contexts more complex, representative customary institutions manage the enterprise CFI. Enterprise CFIs may range from being completely informal to being registered and licensed by the relevant government authorities. In many cases, the same institution performs both governance and enterprise functions in a community forest (Gnych *et al*., 2020).

As a Phase 3 investment, enterprise CFIs build on the foundations of tenure security, community governance and forest management established through Phase 1 and 2 investments. Activities and investments typically involve a wider range of actors, including CFIs themselves, NGOs, governments and external

investors (such as local investors, banks or other private sector investors). Key focal areas for investment are described in Table 9 (typical sources in parentheses).

PHASE 3 Lessons learned: Developing enterprise CFIs for income-generating activities

The central lesson learned from experience in developing enterprise CFIs is that the longer-term success of such enterprises depends on governments supporting community resource governance and development. Across Africa (and the world), one of the most relevant constraints to the full development of enterprise CFIs is that rights devolution to communities is often more limited than it appears, due to the burden of state rules and regulations (Larson and Dahal, 2012). CFI have too frequently become stuck in a mode of low profitability, where commercial rights are not clearly transferred by the state to communities (a case in point is Mozambique and the requirement for special licensing for commercial extraction on community lands; Macqueen, 2012). In addition, governments play a key role in capacity building in areas such as marketing, silviculture/reforestation and other technical and administrative fields (see examples from the Gambia, Tomaselli *et al*., 2012).

The predominantly public, *de jure* ownership of forests across sub-Saharan Africa has enabled governments to control commercial timber extraction for export and receive a substantial share of the revenues (Lawry *et al*., 2012a). However, the trend towards community forest devolution (even if incomplete) and the development of CFIs, coupled with specific policies to regionally integrate trade, could guide forest and rural development to better benefit communities and support domestic needs for forest products across the continent. Currently, only small volumes of forest products are formally traded between African nations. However, unrecorded flows are likely to be far higher (Chipeta and Kowero, 2015). Although it would take prioritization by governments, this profitable informal trade can be formalized, shifting focus from policing 'illegal' (but often socially legitimate) trade to: (adapted from Chipeta and Kowero, 2015):

- investing in inclusive value chains (both government and private roles);
- capturing a larger share of the processed products market (as opposed to relying on imports from non-African sources) (government, CFE and private sector roles);
- increasing the sustainable production, harvesting and processing of woods, especially charcoal, to anticipate growing urbanization and demand (CFEs); and
- recognizing the role of small- to medium-scale wood processing enterprises that may operate informally (yet supply more wood products for local

Table 9. Activities and investments for developing CFI enterprises for income-generating activities

Objective	Activities and investments
Improved commercial, managerial and fiduciary performance from community forestry activities.	• Training in advanced business and financial management skills (via CFIs, NGOs) • Marketing and market knowledge (NGOs, private sector, governments)
Higher diversity, value and quality of forest products; more efficient and sustainable production.	• Value chain development (CFIs, NGOs) • Timber processing capacity, community infrastructure development (CFIs, governments, private sector, donors)
Ability to sell to formal, premium and export markets.	• Certification (e.g. Forest Stewardship Council) (NGOs, governments, donors)
Reduction of transaction costs, achievement of economies of scale, policy influence, development of new products, standards and markets, including specialized technical, administrative and marketing abilities.	• Development of producer alliances, associations and other secondary level community forestry institutions (e.g. community networks) help to mitigate challenges of small scale that community forestry enterprises face as they look to commercialize forest products and increase level of sophistication.

Source: Authors' own elaboration

construction and furniture than larger formal industries), by prioritizing formalization, technical assistance and financial incentives for responsible behaviour (government, CFE and private sector roles).

Besides the obvious financial benefits to governments of formalization (such as reliable tax revenues, decreases in 'illegality'), CFEs would benefit from vastly improved market conditions and a relationship with the state built on mutual vision versus avoidance and animosity. For example, the Ghana Federation of Forest and Farm Producers, launched in 2020 with support from FAO's Forest and Farm Facility, supports more than 1 million smallholders as a voice at national and international levels (FAO, 2022a).

The second main area of potential benefits identified for Phase 3 activities and investments is in the area of payments of environmental services and other relevant incentive mechanisms, such as the REDD+ policy approaches and results-based finance.

PHASE 3 Activities and investments: Developing CFI enterprises for payments for environmental services, including REDD+

Compensating communities to maintain and improve forest conditions is a major pathway and focus of new investment to achieve multiple global and local objectives. The pathway for investment at scale in PES is still in its early stages, but an increasing number and variety of projects and programmes are showing the way to align incentives for community forest management and stewardship with broader goals of environmental policy and climate action.

Payments for environmental services are likely to be most successful (for example, with more desirable outcomes) and hold the fewest risks during Phase 3 investments. Several conditions of successful PES are features of these investments, including tenure rights, strong community governance institutions and relevant technical and political capacities, such as community capacity to negotiate effectively with external investors.

Payments for environmental services occur when the recipients and beneficiaries of a service pay the providers of that service (Fripp, 2014). PES compensation to communities may take the form of cash, materials and/or other forms of development assistance (from governments, NGOs, funders or businesses) for the provision of environmental services such as avoided deforestation, afforestation/reforestation and a range of other services. Communities may also be compensated for carrying out responsibilities related to government and international programmes, such as monitoring and enforcement leading to conservation benefits. Some of the evidence supporting PES as a factor relevant to forest and livelihood outcomes is presented in Chapter 3. These incentive-based schemes are typically market-based and are aimed at addressing both conservation and poverty alleviation objectives.

PHASE 3 Lessons learned: Payments for environmental services (PES) and other relevant incentive mechanisms, such as the REDD+ policy approaches and results-based finance: Compensating communities for environmental services in sub-Saharan Africa

- **Implement legal reforms related to benefit-sharing arrangements and the definition and assignment of carbon rights.** In many countries, carbon rights (often a novel right) have been developed in parallel to REDD+ readiness activities under the UNFCCC. These bundles of rights (see section 1.4) have implications, but are not strictly related to the attempt to codify/clarify how funds received by governments make their way to communities and landowners who actually implement REDD+ activities. Beneficiaries might include categories of actors who are not landowners, but who have contributed to REDD+ through their actions, although the implementation of REDD+ is to be considered as an incentive to foster and formalize community and collective tenure rights. Existing legal and policy frameworks may prioritize the economic exploitation of forests or other drivers of deforestation and may include incentive structures that reward actors who have only a minimal role in providing services. Experience to

date suggests that meaningful legal reforms must create incentives for farmers and communities to maintain trees and forests and resolve conflicts between roles in timber production and avoided deforestation/sustainable forest management through the intervention of institutional actors (specifically, forest agencies) (Asare, 2010). Caution is needed to ensure that reforms do not reproduce or exacerbate the power differentials between government, private interests and community stakeholders.

- **Look beyond forest carbon in PES and forest mitigation projects.** Climate justice requires that community-related forest investments in Africa focus first and foremost on climate change adaptation and support to local livelihoods that are being damaged by the carbon emissions from rich countries – while recognizing that these investments can also generate important climate change mitigation co-benefits. Indigenous experts globally indicate a reluctance to support programmes aimed primarily at forest carbon and highlight a need to develop more holistic approaches to compensating communities for values such as water regulation, biodiversity and a range of other services important to local communities, as well as to the planet. Some researchers suggest that a primary focus should be on the climate-regulating effects of trees, with carbon, timber and NTFPs as important but secondary co-benefits (Ellison *et al*., 2017). Practical experience suggests that a focus on direct support to local livelihoods, through sustainable production of forest and tree produce, will also reinforce the sustainability of investments made.

- **Consider land-use trade-offs.** Impacts on local ecology and people are important to consider, even if projects are 'successful'. Trade-offs in land use are ubiquitous, and most land already delivers some benefits. Prioritizing a single benefit (for example, that derived from timber harvesting) to the exclusion of others (for example, smallholder agriculture, agricultural fallows) would severely constrain other needs (Meyfroidt *et al*., 2022). Large-scale expansion of forest areas from 'loading' trees onto agricultural landscapes as a result of local choices implies an optimization of uses by the direct managers of land, who also possess the most knowledge of that land and their own specific needs. Expansion of forest areas from afforestation/reforestation projects tends to require relatively simple tenurial arrangements and also that communities and landowners forgo other opportunities and uses that may have co-evolved with local tenurial realities. The introduction of novel plants, such as those on single-species plantations, may be useful for sequestering carbon, but have profound negative implications for other ecosystem services, such as stream flow, salinization, acidification and reductions in biodiversity due to the introduction of exotics (Jindal *et al*., 2008). Carbon forestry modalities can centralize power with the state or private investors at project level, while furthering agrarian displacement (and food security challenges) by displacing smallholder farmers via state 'ownership' claims to areas for plantation investment that conflict with smallholder understandings of customary tenure (Kansanga and Luginaah, 2018).

- **Use multiple policy tools.** Market-based solutions are not always able to match the required scale of forest conservation called for by climate goals, and thus cannot be the sole focus of efforts to combat climate change through forest conservation. Besides the market-based, financialized approach inherent in PES, forest governance that includes the direct regulation of activities that exacerbate climate change (industrial logging, conversion of forests to agriculture, mining) is needed, though often neglected. Market approaches to conservation are highly technical and bureaucratic, rely on new private actors, and may mask the political nature of deforestation drivers and potential solutions (Delabre *et al*., 2020; Reyniers, 2021). Additionally, as of 2018 data, supply for voluntary forest carbon offsets vastly exceeds available demand (Salzman *et al*., 2018).

- **Mitigate power asymmetries in market-based approaches:** Market-based approaches create risks due to existing power asymmetries between communities (sellers) and corporates (buyers) because they bypass some deficiencies of states (corruption, mismanagement, weak institutions, limited capacity for enforcement) (Reyniers, 2021). However, financial incentives must be accompanied by local institutional capacity to plant trees, monitor the results and distribute benefits (Reynolds, 2012). One issue is the limited negotiating capacity of small communities (if included in the process at all), and even that of government officials charged with negotiating investment contracts for foreign direct investment in carbon trading, of which they may have limited experience. Forest carbon investment contracts may pose threats to communities if they are often unable to participate in their negotiation. A recent study highlights heightened conflict risk from community contention of forest carbon projects (Schmid, 2022).

- **In the context of Jurisdictional REDD+, it is paramount to duly respect and comply with the set of Cancun Safeguards** and encourage the adoption of legislation that duly and effectively recognizes Indigenous Peoples and local communities' carbon trading rights and FPIC when Indigenous Peoples are engaged in REDD+ results-based payment transactions and implementation (Tienharra, 2012).

Payments for environmental services and REDD+ create opportunities for a virtuous cycle of investment in rights and forest outcomes. There are several cross-cutting rationales and opportunities for PES and REDD+ to be included in investments in forest conservation in Africa.

- **REDD+ programme development can support clarifying and strengthening land, carbon and forest rights.** In agroforestry projects in Kenya and Niger, carbon finance transactions increased land tenure security for landholders and communities by encouraging the involvement of national land agencies in implementation and supporting local organizations of landholders (Aquino *et al*., 2011).

- **Benefit-sharing from PES and REDD+ can benefit communities and actors on the ground, but the financial flows need to be sufficient and reach local target actors, and the supporting legal framework must be adjusted accordingly.** More than 20 countries in Africa, Asia-Pacific and Latin America developed reforms and mechanisms to distribute REDD+ and other carbon results-based payments fairly. However, resources such as emission reductions pose both conceptual and practical challenges for traditional property law systems in many countries. To prevent situations where potential ambiguities could be exploited at the expense of local communities, it is essential to clearly define emission reductions' rights and benefit structures for distributing benefits in the implementation of REDD+ (Felicani-Robles, 2024). **Incentives more diverse than finance are likely to convey wider benefits.** Smallholder farmers potentially receiving PES in Zambia valued in-kind agricultural inputs more highly than cash payments (Vorlaufer *et al*., 2017).

- **Building capacity can increase benefits:** Where communities can be trained to carry out monitoring tasks related to PES, they can do so at much lower cost than professional foresters (Skutsch and Ba, 2009). Given the high transaction costs of carbon projects, community-oriented projects can also be developed where local organizations can act as intermediaries that can manage projects (Jindal *et al*., 2008).

In general, costs and benefits of PES and other relevant incentive mechanisms, such as the REDD+ policy approaches and results-based finance or Voluntary Carbon Market, should be evaluated on a case-by-case basis, with a contextual approach that takes into consideration the roles, capacities, interests and underlying rights (customary and statutory)/tenure security of communities.

4.1.4 Summary of opportunities for investment in case study countries

The background research for this study looked at several case study countries, including the Democratic Republic of the Congo, Ghana, Mozambique and the United Republic of Tanzania, to represent various contexts of the region, and also where there has been significant literature to contribute to a picture of the collective tenure and forest in these contexts. For each case study country, the study summarizes potential opportunities, using Gnych *et al*.'s conceptual framework of phases of investment to situate the specific opportunities, recognizing the significant heterogeneity of communities present within these country contexts.

The Democratic Republic of the Congo *(mostly Phase 1 & 2 investments and external actors):* The Democratic Republic of the Congo continues to attract significant external support, especially in provinces at the centre of REDD+ efforts, such as Mai-Ndombe. Governance capacities and institutions are especially dependent on NGO/CSO support in this country, and the deep operational capacities of non-governmental actors make these critical players in virtually all forest contexts.

Opportunities to expand the area statutorily recognized for communities and to support key actors include:

- development and adoption of key implementing rules and guidelines for the 2022 law adopted on the Promotion and Protection of the Rights of the Indigenous Pygmy Peoples;

- supporting regulatory reforms to reduce the formal costs and complexity of developing and managing Local Community Forest Concessions (CFCLs); and

- continued support for communities to register rights to forests under CFCLs. The obstacles to creating CFCLs are high for communities, and continued NGO support is needed.

Opportunities to develop institutional capacities include:

- supporting investments at community level to grow local capacity for natural resource governance and to sustainably manage forests in the context of CFCLs;

- where appropriate, supporting the development of CFEs in order to build inclusive value chains and benefit communities from small-scale logging in CFCLs. Investments may include start-up capital, training and technical assistance (including complying with bureaucratic requirements), and business development skills (including business finance and market analysis to identify profitable activities); and

- investments in government capacities and resources at provincial and local levels, in order to support the formation of CFCLs and facilitate effective community forest management.

Ghana *(mostly Phase 2 and 3 investments and actors):* Rights of the customary owners of most lands (~78 percent) in Ghana are secure. However, tree and forest rights are generally weak, especially for naturally occurring trees. The rights to planted trees are stronger, though complicated by rights (such as management and rights to benefits) of state and customary authorities, disincentivizing investment in agroforestry (for example, cacao) and sustainable forest management. The Community Resource Management Areas (CREMAs) model aims to increase community participation in forest decision-making and REDD+ emission reductions, and successes can be further built on. Opportunities for investment and support in Ghana (from government, NGOs, donors and private sector actors) include:

- parliamentary approval of the Wildlife Resources Management Bill. Passed in March 2024, this gives legal backing to local community formation of CREMAs;

- long-term support for CREMAs, including for CREMA formation and management, land-use planning and facilitation/development of benefit-sharing arrangements around forest resources. Support from NGOs and the private sector is potentially most relevant for empowering CREMAs; and

- support for CFEs via efficient tree titling and land rights documentation (especially the development and implementation of rapid procedures) and the pro-poor review and amendment of regulations (especially related to chainsaw milling and small-medium forest enterprises).

Mozambique *(Phase 1–3 investments and actors):* As the primary means of securing rights for communities, formalization of the *Direito de Uso e Aproveitamento da Terra* (DUAT) system via delimitations are the focus of efforts to 'double-lock' community lands (as the rights exist before certification via the legal framework). Beyond certification, communities need support from government partners and external actors (donors and implementing organizations, such as local service providers) to benefit from their forests and incentivize sustainable management. Obstacles to increasing benefits from community forest management are significant, given the operational and technical constraints of communities and government. The CaVaTeCo (Community Land Value Chain) process,[52] carried out by service providers ORAM and Terra Firma, has a proven track record of supporting communities to formalize collective DUATs and further secure their tenure. Opportunities include:

[52] The CaVaTeCo process includes the following steps (from the ORAM and Terra Firma Technical Guide 1, available at https://landportal.org/sites/landportal.org/files/CaVaTeCo_Guide_1%20overview%20of%20CaVaTeCo%20stages%2C%20July%201%202018%20Eng.pdf):
1. Establishing legal entity to represent the community
2. Delimit community
3. Develop cadastral block
4. Delimit family parcels within community
5. Develop community land-use plan
6. Establish and maintain community cadaster
7. Negotiate with investors

Box 8. The Central African Forest Initiative: Investment at scale across all three phases

The Central African Forest Initiative (CAFI) is a large regional programme combining capital from multiple donors and making investments that span all three phases of the forest rights recognition and management framework. CAFI can be viewed as a model for the design of large-scale investment operations by bilateral and multilateral partners. Supported by seven European countries, as well as by the Republic of Korea and the European Union, CAFI is a policy dialogue platform and trust fund (administered by the United National Development Programme's Multi-Partner Trust Fund Office) that aims to support Central African countries **in pursuing a low-emission development pathway that ensures economic growth and poverty reduction**, while protecting the forests and natural resources on which people depend. Total contributions to the trust fund were approximately USD 650 million as of 2022 (CAFI Annual report).

Source: CAFI Annual report 2022: *Central African Forest Initiative (CAFI) Trust Fund 2022 Consolidated Report September 2023 V3 – Approved by the CAFI Executive Board.* https://faolex.fao.org/docs/pdf/gha226232.pdf

Box 9. Example of a project in Mozambique

The multinational forestry company Green Resources is divesting its rights to over 230 000 ha, including some areas that are high-value tree plantations. Under USAID's Land and Resource Governance programme, with the support of local CSOs (iTC-F, ANAM Niassa, Terra Nossa), USAID has helped 86 communities to apply for certificates of delimitation (to formalize DUATs) for over 466 000 ha, benefiting more than 200 000 people and reducing conflict related to land boundaries. Green Resources is providing communities with technical support to manage forest resources and run CFEs.

Source: Lowery, S. Putting community land rights first: Responsible private-sector divestment in Mozambique. *The Land Portal,* 11 August, 2022. [Cited 30 May 2024]. https://landportal.org/blog-post/2022/08/putting-community-land-rights-first-responsible-private-sector-divestment

- providing investment in expanding the reach of technical service providers to implement DUAT certification for communities;
- as part of formalization of DUATs, supporting community legal incorporation (community associations) and delimitations, strategically focusing this where conflicts are likely, or where requested by communities;
- providing capacity building in communities related to governance (formation of community-level representative institutions, consultations, organizational/administrative skills) and business and financial skills; and
- ensuring capacity building for government institutions to improve technical support for communities (such as technical forest management and agricultural extension services).

United Republic of Tanzania *(mostly Phase 2 and 3 investments and external actors):* the United Republic of Tanzania's legal framework for collective forest rights (especially regarding community-based forest management) and its long experience with devolving rights, represents significant potential for expanding on collective tenure benefits and positive outcomes.[53] Learning over the past three decades has shown that forest condition outcomes are often positive. However, monetary outcomes are mixed and inequality within communities is problematic. Where possible, the expansion of areas under village land forest reserves (VLFR) can continue to support forest conditions. For livelihoods and inclusive benefits within communities, the bureaucratic and technical obstacles for communities can be minimized through the following policy changes:

[53] In the late 1990s, forest governance was partially decentralized, with the 1998 Tanzanian Forest Policy and Forest Act No. 14 (2002) establishing two types of participatory forest ownership/management for communities:

- Community-based forest management (participatory forest management – PFM, or CBFM), where villages establish a village land forest reserve (VLFR) on village land (i.e. where there is no pre-existing forest reserve; 24.6 Mha total extent). In this mode, communities retain proceeds from forest management and are not obliged to share management responsibilities with external actors. Forests are managed in accordance with a Village Forest Management Plan.
- Joint forest management, which, similar to other countries, involves village governments co-managing government forest reserves (central or local government; 19.6 Mha) in conjunction with central or district government offices. In this arrangement (made via a Joint Forest Management Agreement) communities retain more limited control and benefits and outcomes are mixed (Persha and Meshack, 2016;118 Blomley *et al*., 2008; Vyamana, 2009).

By 2020, approximately 2 046 villages and 5.9 Mha of forests (12.23 percent of total forest area) were managed under these two systems (URT, 2020), but the reality is that the vast majority of forests remain *de facto* under the control of state authorities. As a result, outside interests have contributed to most of the country's deforestation by obtaining permits from districts to harvest village lands.

- simplify rules and procedures by setting a minimum-environmental-standards approach and through transference of adequate discretionary powers to local communities, to allow more flexibility and reduce non-implementation and elite capture; and

- reduce uncertainties around carbon finance opportunities by adopting specific regulations regarding carbon and other relevant rights.

Other opportunities to reduce barriers to inclusive community benefits from CFEs include:

- awareness-raising and capacity building/training targeting all residents for implementation of participatory forest management and effective governance, including support for the inclusion of villagers in decision-making;

- reducing other regulatory barriers (such as licensing requirements for transporting goods) that constrain CFEs;

- expanding markets for community forest products via support for market analysis, marketing, value addition, business partnerships and support for local social enterprises; and

- integrating different resource uses and forest products (such as charcoal + sustainable timber harvesting, carbon) and supporting new business models.

4.2 Outlining a research and learning agenda

Despite a growing body of studies on the outcomes of collective forest tenure and management in sub-Saharan Africa, many of these studies are concentrated in a few contexts (Cameroon, Ethiopia and the United Republic of Tanzania). There are many opportunities to gain deeper insights needed for policymakers' and donors' investment and actions to benefit communities and climate change mitigation objectives. Some needs for further research and learning identified through this study include:

- **Further research on the prevalence and needs of Indigenous Peoples,** given their distinct ways of life and high levels of discrimination (see World Bank, 2021, DRC Country Profile). Studies assessing impacts of property regimes and interventions may need to differentiate indigeneity characteristics in order to adequately understand impacts (Holland *et al*., 2017).

- **Cost-benefit analyses of interventions:** Studies such as that by Ding *et al*. (2016) assess the benefits and costs of titling lands, in terms of deforestation. To our knowledge, this has not been conducted in the context of sub-Saharan African countries with regard to titling/rights or PES and national programmes. The financial projections from this approach are powerful metrics for

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policymakers and donors to provide an economic rationale for securing land and forest rights.

- **National-scale studies that measure impacts of policy interventions:** These national-scale analyses show the net impacts of community forest management on forests and livelihoods and can help to explain the effects of interventions and how factors shape outcomes (Hajjar and Oldekop, 2018). Examples include those in Rasolofoson *et al.*, 2015 and 2017; Pailler *et al*., 2015; Veit and Reytar, 2021). No approach (large-scale or smaller-scale) is inherently more valid – validity is determined by how the study is carried out. Different types of study complement each other.

- **Assessments to address gaps in the evidence base for sub-Saharan Africa:** Beyond the vast differences in study quality and methodological rigour, some contexts simply have very few studies. Studies on the impacts of forests on poverty alleviation are concentrated in East African countries. In contrast, several countries in Southern and West Africa have few or no studies (Cheng *et al*., 2019). In addition, studies of forest-livelihood linkages are limited in Central and West Africa, as well as in non-tropical forest ecosystems (such as dry forests

and woodlands) (Hajjar *et al*., 2021b). Furthermore, compared with studies based in the Amazon Basin, the roles of communities in abating deforestation have not been examined to an adequate degree for the Congo Basin (Yin *et al*., 2016). In particular, evidence from the Democratic Republic of the Congo, a country of exceptional importance in terms of forests and social outcomes, has relatively few articles assessing community forestry and the linkages of forests, poverty alleviation and prosperity (Miller and Hajjar, 2020; Cheng *et al*., 2019; Hajjar *et al*., 2106).

4.3 Conclusion

The main takeaway from an analysis of the literature and listening to key informants is the need to reconcile the widespread contradiction between *de jure* state rights and *de facto* customary rights, to create real tenure security as a basis for sustainable stewardship of forests. The lack of resolution of this fundamental contradiction in forest tenure is preventing the incentives of long-term stewardship from emerging; these should be available to more communities. In addition, this contradiction is actively contributing to both state-supported actors and communities being incentivized towards short-term extraction.

Resolving these incentive-distorting contradictions will help to enable locally legitimized community structures to achieve their full potential as the institutional foundation for long-term stewardship. With these institutional foundations strengthened, the full set of enabling factors – including democratically governed management systems, sustainable market opportunities, payments for environmental services, and the reconciliation of livelihoods and cultural identities with long-term sustainable forest management – can be more readily achieved, and trends leading towards increased deforestation and degradation reduced.

The pathway for achieving these outcomes is highly context-dependent in the widely varying forests and societies of sub-Saharan Africa. The emergent trend towards greater recognition of community rights in a number of countries in the past 30 years and increasing practical experience of managing forests by communities offer opportunities for new investment and research to build effective climate action on socially legitimated forest rights. Investments in territorial governance, such as land-use management, and support for decentralized land governance, with legal protection for communities of forest users, can open the way for a virtuous cycle of climate action and improved livelihoods in Africa's forests.

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