

# Multilevel governance, carbon management and land-use decisions in Tanzania

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# Abbreviations

CBFM	Community-based forest management
CARE	Cooperative for Assistance and Relief Everywhere
CBO	Community-based organization
CCB	Climate, Community and Biodiversity
CIFOR	Center for International Forestry Research
CRP-FTA	CGIAR Research Program on Forests, Trees and Agroforestry
CoFMA	Community forest management agreement
DFM	District Forest Manager
DFNR	Department of Forestry and Non-Renewable Resources
DFO	District Forest Officer
EU	European Union
FBD	Forestry and Beekeeping Division
FPIC	Free, prior and informed consent
FRA	Forest Resource Assessment
FSC	Forest Stewardship Council
GCS REDD+	Global Comparative Study on REDD+
GDP	Gross domestic product
HASHI	Hifadhi Ardhi Shinyanga Land Conservation Project
HIMA	CARE Tanzania Hifadhi ya Misitu ya Asili
HTSL	Hunting Technical Services Ltd.
JFM	Joint Forest Management
JGI	Jane Goodall Institute
JUMIJAZA	Zanzibar community forestry network (Jumuiya ya Uhifadhi Misitu ya Jamii Zanzibar)
JUWAMMA	Jumuiya ya Watunza Msitu wa Masito (Jumuiya ya Watunza Msitu wa Masito)
LEAT	Lawyers' Environmental Action Team
LGA	Local Government Authority
LULC	Land use land cover
MLG	Multilevel governance
MCDI	Mpingo Conservation and Development Initiative
MJUMITA	Network for Community Forest Associations (Mtandao Wa Jamii Wa Usimamizi Wa Misitu Tanzania)
MLHHS	Ministry of Lands, Housing and Human Settlement
MNRT	Ministry of Natural Resources and Tourism
MRV	Monitoring, reporting and verification
NAFORMA	National Forestry Resources Monitoring and Assessment
NCAA	Ngorongoro Conservation Area Authority
NCCSC	National Climate Change Steering Committee
NCCTC	National Climate Change Technical Committee
NGO	Non-governmental organization

Norad	Norwegian Agency for Development Cooperation
NRTF	National REDD Task Force
PFM	Participatory forest management
PKFR	Pugu-Kazimzumbwi Forest Reserves
PMO	Prime Minister's Office
RALG	Ministry of Regional Administration and Local Government
REDD+	Reducing emissions from deforestation and forest degradation
SADC	Southern African Development Community
TANAPA	Tanzania National Parks Authority
TaTEDO	Tanzania Traditional Energy Development Organization
TFCG	Tanzania Forest Conservation Group
TFS	Tanzania Forest Service
TNC	The Nature Conservancy
TZS	Tanzania Shilling
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
USDA	United States Department of Agriculture
VCS	Verified Carbon Standard
VLFR	Village Land Forest Reserve
VLUP	Village Land Use Plan
WWF-EARPO	WWF Eastern African Coastal Forests Programme



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# Executive summary

International strategies to reduce deforestation and forest degradation have emerged with the aim of transforming land-use decisions and incentivizing options that lower carbon emissions. REDD+ refers to 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. Nine REDD+ pilot projects have been implemented in Tanzania to demonstrate its readiness to implement REDD+ within the United Nations Framework Convention on Climate Change (UNFCCC) framework. REDD+ effectiveness will require permanent national to subnational institutions that can integrate and coordinate local (subnational) needs with national and supranational REDD+ objectives within a complex multilevel governance system. How these new global initiatives like REDD+ alter or are mediated by existing institutions at multiple levels, and especially how they interact with the politics of land use, remains poorly understood. The purpose of this study is to characterize these multilevel governance institutions and explore how they mediate decision making around land use and interact with new low-emissions development initiatives, such as REDD+.

This report presents an analysis of a comparative case study of two eco-regions of Tanzania: the coastal forests and interior miombo woodlands. The study involved 122 interviews with actors from the national, regional, district and sub-district levels of government, as well as non-governmental organizations (NGOs) and private firms, associated with 12 distinct land-use change case study sites. These 12 case study sites included sites with important efforts to reduce deforestation and forest degradation, as well as sites without such efforts. The former include REDD+ and other initiatives aiming to conserve forests, promote sustainable forest management and reduce carbon emissions from deforestation. The latter include sites with ongoing deforestation and degradation.

For these case study sites, we ask who makes land-use decisions and how those decisions are made. How do actors from multiple levels and sectors interact in a decentralized regime to make decisions? Who is driving deforestation and forest degradation, and who is driving conservation and sustainable management?

After presenting the introduction and methods, in Chapter 3, we discuss the drivers of deforestation and forest degradation and key informants' perceptions on these. We find that the drivers involve the complex interaction of proximate causes, including local human activities, such as agricultural expansion, charcoal burning and salt mining, that directly impact forest cover, as well as underlying forces related to social and economic processes. On the one hand, there are needs for agricultural produce and forest products, including demand for charcoal and timber in urban centers and overseas, coupled with poorly regulated forest trade. On the other, there is pressure to generate revenues; rent-seeking tendencies of officials; inadequate resources (human, financial and equipment), which hinder the enforcement of national policies; and the lack of political will to protect forests.

In Chapter 4 we discuss relevant land-use categories and how they define multilevel roles and relationships of different government authorities. We explain how these create incentives for deforestation and forest degradation or for conservation and sustainable management. Research evidence underscores the centrality of land-use classification as a contested process that can have a profound influence on who holds power over land use, and what land-use outcomes are likely. The legal interpretation of village lands versus general public lands has been a source of conflict between laws and state agencies. Village lands subject to the general land category are at risk for allocation to other uses. Reclassifying the latter as village land has been a central part of REDD+ proponents' project strategies and is expected to have benefits both in terms of forests and livelihoods.

Many land-use categories are fraught with management problems related to capacity and corruption, as well as a strong incentive to raise revenues. There is also competition for revenues based on land categories, and perverse incentives result in support for activities that lead to deforestation and degradation. In general, revenues appear to be insufficient to invest in forest management and conservation.

Chapter 5 focuses on REDD+. We present specific successes (including the benefits) and limitations of REDD+ initiatives and an assessment of actor participation, representation and equity in REDD+ pilots, including who was engaged and/or empowered and who was not. We also examine factors contributing to the legitimacy of REDD+ pilot projects.

NGOs interested in REDD+ have brought far more funding into subnational conservation efforts, especially to district governments, but it is unclear if and how these priorities can be institutionalized. Several REDD+ pilot projects have identified and tested participatory/community-based forest management (CBFM) as one possible solution for enhancing forest governance capacity. Villagers also benefited from financial and in-kind incentives and the formalization of their communal legal rights to forests and land. However, while an important development objective, the focus of REDD+ on land degradation caused by the rural poor overlooks the other major interests/actors underlying deforestation and degradation. We note, however, that some of the REDD+ projects did strategically conduct parallel interventions that address other governance problems.

REDD+ projects sought consent, and some villages declined to participate. The acceptance of REDD+ was influenced by historical relationships between local communities and the state; for example, communities affected by exclusive conservation areas in the past feared REDD+ would bring more of the same. Overall, people appeared to be happy with payments but worried what would happen after the trial period ended. In addition, not all projects targeted the poorest rural populations (e.g. pastoralists) and, in some cases, projects led to border conflicts with neighboring villages.

The comparison between the mainland and Zanzibar demonstrates some of the multilevel challenges. In the former, NGOs engaged mostly with district authorities and, in the latter, with national authorities. In both cases, there was greater ownership and satisfaction among these authorities, whereas the authority that played the lesser role (the national government in Tanzania and the districts in Zanzibar) was characterized by frustration, lack of ownership and tension with the primary authority. Reconciling the balance of power is a critical governance challenge for better forest and land governance in general and REDD+ implementation in particular.

Chapter 6 examines the potential to change land-use behavior, exploring issues such as REDD+ site selection, the incentives provided and whether projects and incentives are addressing the underlying deforestation and degradation drivers. It examines who is involved and who is not through actor networks of articulation. The analysis reveals some of the missing links with the key actors who drive business as usual.

In summary, REDD+ pilot projects in Tanzania are built on a fairly developed, though poorly enforced, multilevel governance policy and institutional framework for forest management. The question remains as to how these initiatives can contribute to a broader transition to a self-sustaining national strategy to reduce emissions that integrates villages and all levels of government. There is a need to strengthen the sense of national *and* local ownership of REDD+ to create significant change.

- Pro-poor solutions such as those that aim to alter land-use decisions of rural villagers alone are unlikely to be effective at reducing carbon emissions without addressing the underlying drivers of deforestation. These include broad commercial interests as well as perverse incentives for government revenues.
- Community perceptions were strongly affected by distrust generated by past experiences, particularly the history of fortress conservation and land grabbing, thus requiring even greater efforts in building trust.

- The participation of women, pastoralists and other vulnerable groups is a crucial factor to ensure just benefit and burden sharing for all poor, rural people.
- Increasing village rights to and control over local forests improves local participation in meaningful ways, through land tenure security.
- Improved understanding of multiple networks of articulation among land-use actors by the intervening agencies could lead to more equitable and sustainable land-use decisions.
- Financial capabilities of local authorities need to be anchored in self-sustaining sources of funding and state accountability structures rather than transient projects.
- Solutions depend on reconciliation and coordination between central and district officials on land-use planning and decision making, building national ownership while maintaining a certain degree of local autonomy and discretion.

# 1 Introduction

International strategies to reduce deforestation and forest degradation have emerged with the aim of transforming land-use decisions and incentivizing options that lower carbon emissions. REDD+ refers to 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.

Various non-government organizations (NGOs) funded by the Royal Norwegian Embassy in Tanzania have implemented nine REDD+ pilot projects following the United Nations Framework Convention on Climate Change (UNFCCC) standards. REDD+ effectiveness will require permanent national to subnational institutions that can integrate and coordinate local (subnational) needs with national and supranational REDD+ objectives within a complex multilevel governance system.

Multilevel governance (MLG) refers to the many interacting authority and decision structures at work within a given system of governance. It emphasizes the complexity of decision making from a local to global level, i.e. how supranational, national and subnational governments are enmeshed in territorially overarching policy networks (Forsyth 2009; Kern and Bulkeley 2009). REDD+ involves supranational organizations and institutions (e.g. multilateral and bilateral donors and NGOs), national governments and subnational (e.g. regional, district) governments. In this context, REDD+ is inherently a multilevel process, and issues of scale and multiple institutions crosscut both land-use decision making and benefit sharing at the landscape level. At the same time, it is through multilevel coordination that legitimate political processes are constructed (Forsyth 2009).

This report stems from primary and secondary data that was collected for a study of multilevel governance, carbon management and land-use decisions. This study is part of the Center for International Forestry Research (CIFOR) Global Comparative Study on REDD+ (GCS REDD+). The multilevel research is positioned between two other CIFOR studies within the GCS REDD+: one focusing on actors, policies and institutions relevant to REDD+ at the national level, and another on livelihoods and household-level impacts of REDD+ projects. The goal of this study is to explore multilevel governance arrangements between these levels in order to understand how decisions are made by different actors across levels and sectors regarding land use and benefit sharing at the landscape scale, including who influences whom, how powers and responsibilities are distributed, the extent to which decision processes are participatory and whether processes and outcomes are legitimate. We elucidate perspectives on REDD+ and other low-carbon emission land-use options by looking at what features of multilevel governance arrangements (institutions and policies) are relevant for decision making on land use, and to what extent they support the effective and equitable adoption of low-carbon emissions land-use options.

The study examined an array of land uses and land-use changes to examine multilevel land-use politics more broadly, and whether or not REDD+, REDD+ discourse or REDD+ proponents are influencing change, or appear to have the potential to do so in the future.

Data was mainly collected from May to December 2014, with some follow-up studies during the first half of 2015. The data was collected from representative case study sites within the coastal forests eco-region of Tanzania and the interior miombo woodlands eco-region. Although the focus of the research is on specific districts, some sections of this report consider the national context of REDD+ and land-use decisions, as well as Tanzania's decentralization process and how it has affected land-use decisions and planning at district and village levels.

Donors and NGOs have given Tanzania's forests particular conservation attention. This is partly due to the fact that with over 30% of its landmass protected, Tanzania has the largest protected area in Africa: both absolutely and relative to its landmass and large concentration of mammals (Brockington *et al.* 2008), as well as having high plant and animal species diversity and endemism (WWF Tanzania 2012).<sup>1</sup> However, there are many forests that are not under clear management and governance regimes because they are in neglected government reserves, or have historically been considered to be in the so-called 'general public lands' with no legal protection for conservation.<sup>2</sup> Such forests are the most prone to drivers of deforestation related to illegal activities such as illegal logging and charcoaling, encroachment for permanent or shifting cultivation, and artisanal quarrying and mining (WWF Tanzania 2012). The 'general public lands' classification has recently been contested, as the historical descriptions of the extent of this category are being challenged. Historically, the Forestry and Beekeeping Division (FBD) of the Ministry of Natural Resources and Tourism (MNRT) considered that 54% of forests were on general lands. Correspondingly, the National REDD Strategy<sup>3</sup> considers 17 M ha of forests to be on general lands (Veit *et al.* 2012; URT 2013). Yet, according to the Village Land Act (URT 1999), the Ministry of Lands, Housing and Human Settlement (MLHHS) recognizes up to 70% of all land in Tanzania as village land, and only 2% as general land.

This means that part of what the FBD/MNRT and the National REDD Strategy consider to be general lands, also supported by the existing Forest Policy (URT 1998), is village land according to the MLHHS definition. Some REDD+ projects contested the FBD/MNRT definition, and used the MLHHS definition instead, allowing many villages to have their forests classified as village forests and, therefore, be eligible for REDD+ as Village Land Forest Reserves (VLFs; this is further elaborated in subsequent sections). There has recently been a notable shift even within the MNRT. Section 2.1.1 of the strategic plan of the Tanzania Forest Service (TFS), an agency under the MNRT, defines the distribution of forests in terms of "ownership/management", attempting to resolve the conflict between MNRT and MLHHS' interpretation of village land. This has now largely been resolved, with MNRT recognizing the full extent of village land.<sup>4</sup> However, as we observe in subsequent analysis, this will only be fully resolved if the National Forest Policy (URT 1998) and the National REDD Strategy (URT 2013) also fully acknowledge the extent of village lands and forests prescribed in the Village Land Act.

Some REDD+ pilot projects worked on the landscapes adjoining existing government forest reserves, while the others created new forest reserves in village lands. In the case of the latter, REDD+ implementers attempted to promote the conservation of such forests using participatory forest management approaches. Thus, some engaged villagers to establish village land-use plans (VLUPs) and VLFs. Others did not establish VLUPs and VLFs *per se*, but used variants of these governance tools depending on the legal framework pertaining to the land category used.

The rest of this report is organized as follows: Chapter 2 presents the methods. In Chapter 3, we discuss the drivers of deforestation and forest degradation as identified in literature and through key informant interviews for this research. In Chapter 4, we discuss the relevant land-use categories and

1 See Brockington *et al.* (2008) for a detailed account of this.

2 General public land is land that is neither reserved by the central government for a specific use or for conservation nor under a village authority.

3 The National REDD Strategy and National REDD Task Force (NRTF) are both written as REDD and not REDD+. However, other Tanzanian documents refer to REDD+. Hence we use the official title when referring to the Strategy and the Task Force, but use REDD+ elsewhere.

4 The contention that the REDD+ pilot projects have resulted in a shift in the interpretation of general vs. village land is an interesting theme within some projects, particularly the MJUMITA and TFCG REDD+ project. There is now a clear historical shift in perception, since even TFS has come to accept that in the current TFS strategic plan the full extent of village land is recognised, which is consistent with the Village Land Act 1999, and a reversal of the previous position of TFS and MNRT. It is also important to note that NGOs were aligned with MLHHS' interpretation of the village vs. general land, meaning that the issue was not a difference of opinion between the interpretations of NGOs and MNRT; there was an inter-ministerial difference.

how they define the multilevel roles and relationships between different government authorities. We explain how the land categories and such roles and relationships create incentives for deforestation and forest degradation or conservation. This chapter also highlights where particular actors and incentives play a role. Chapter 5 focuses on REDD+ at other sites. We present specific successes (including the benefits) of REDD+ pilot projects, limitations of the REDD+ pilot interventions and an assessment of actor participation, representation and equity in REDD+ pilots, including who was engaged and/or empowered and who was not. We then examine how the legitimacy and accountability of REDD+ pilot projects has been shaped by historical relationships with both local land users and governing institutions. Chapter 6 examines the potential to change land-use behavior, exploring issues such as REDD+ site selection, incentives and underlying deforestation and degradation drivers, through actor networks of articulation. This is followed by the overall conclusions in Chapter 7.

## 2 Methods

To understand the role of actors, policies and institutions relevant to REDD+ in multilevel governance, CIFOR's Global Comparative Study on REDD+ employed a nested comparative<sup>5</sup> case study approach in Indonesia, Peru, Mexico, Vietnam and Tanzania. Two regions were selected per country, with approximately five case study sites per region. In the other four study countries, the regions reflected state, provincial or regional government jurisdictions, with multiple REDD+ sites and contrasting governance conditions. The case study sites were selected to reflect REDD+ projects and sites with other initiatives for lowering deforestation or degradation, as well as important sites of ongoing deforestation or degradation, as identified by key informants.

In Tanzania, the project selected two eco-regions,<sup>6</sup> rather than regional administrative jurisdictions, because the regions are simply decentralized authorities of the central government with limited power over forest decisions. The selected eco-regions, the coastal and miombo woodlands, both have an array of REDD+ projects and sites where other interventions were addressing deforestation, including relevant benefit-sharing interventions, as well as important land-use changes representing some of the most important deforestation drivers in the country. In Tanzania, districts were chosen as entry points, because the district is the administrative unit in which forestry, land and some other natural resource management responsibilities are managed, decentralized from the central government. They have both politically decentralized authorities (district councils) and administratively decentralized authorities, such as district forest officers (DFOs) and district land officers that work for the district council. Districts also link to higher-level (regional secretariats and central government, and supranational in case of international donor direct funding of district-level projects) line ministries and to lower (ward and village) levels.<sup>7</sup> Thus, in terms of multilevel governance, the district provides a more distinct level for analysis, yet one that is linked both to the national and other subnational levels (including regions above the district and wards, and villages and hamlets below the district) both administratively and politically.

Within the coastal forests eco-region, interviews were conducted in six administrative districts: Kisarawe, Kilosa, Kilwa, Lindi, Rufiji and Kusini Unguja. In the interior miombo woodland eco-region, interviews were conducted in seven districts: Shinyanga, Kahama, Geita, Uvinza, Urambo, Mpanda and Kigoma. Some sites of interest overlapped with more than one district but it was not possible to conduct interviews in all of them.<sup>8</sup>

This study includes distinct analyses for sites where both deforestation and forest degradation occur and are largely unaddressed by government or non-government actors (referred to in this report as "low deforestation and degradation reduction efforts"), and where these are being addressed by

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5 A nested approach first involves the choice of the case study countries, after which distinct regions within each country are chosen. Each region is then further compartmentalized into distinct case study sites. The study also applies a comparative case study analysis, in which data from each case study site within each region, across the different regions and eventually across case countries are compared.

6 'Regional' is defined biogeographically: the Tanzanian coastal forests biogeographic region and interior miombo woodlands biogeographic region.

7 Sub-district ward authorities and village authorities are connected to the district politically and administratively: elected ward councillors are members of the district council, whereas appointed ward executive officers report to the appointed district executive director. Similarly, elected district officials (chairperson and councilors) and appointed officials (executive officers) are answerable to the district councils and executives and are administratively linked to district officials on forestry and land issues.

8 For example, the interviews for deforestation drivers were conducted in Kahama district regarding the interconnected Lake Victoria Goldfields, which include several districts and regions around Kahama.



government and/or non-government actors (“high deforestation and degradation reduction efforts”).<sup>9</sup> Case study sites were selected through national and regional scoping and district-level key informant interviews. These identified major actors, drivers of deforestation and degradation and areas that had experienced significant land-use change in the last 20 years, as well as important sites with initiatives aiming to stop deforestation, such as REDD+ project sites. Twelve key sites<sup>10</sup> (within 11 cases/interventions<sup>11</sup>) were identified. They consisted of seven case study sites with high deforestation and forest degradation reduction efforts: five pilot REDD+ projects and two non-REDD+ conservation and sustainable management sites; and five sites associated with deforestation and forest degradation. The former were project sites of key NGOs: Tanzania Forest Conservation Group (TFCG); Network for Community Forest Associations (Mtandao Wa Jamii Wa Usimamizi Wa Misitu Tanzania [MJUMITA], in Kiswahili); Mpingo Conservation and Development Initiative (MCDI); Tanzania Traditional Energy Development Organization (TaTEDO); Jane Goodall Institute (JGI) on the Tanzania mainland; and Cooperative for Assistance and Relief Everywhere (CARE)-Zanzibar in Zanzibar. Of the latter, two were mining sites; one was a tobacco-growing and curing site; and the remaining two were sites of extensive commercial forest exploitation for timber and charcoal. The approximate location of the case study sites in their corresponding administrative regions and districts is presented in Figure 1. Profiles of all these case study sites are summarized in Annex 1.

The study used a set of common semi-structured interview instruments across the countries. Key informant interviews targeted regional and district-level government officials. In Tanzania, in addition to district and sub-district interviews, other interviews were conducted at the (administrative) regional level for each of the districts and/or at the national level, including key ministries in Dar es Salaam and Zanzibar, with higher-level actors identified by key informants interviewed during district- and sub-district-level surveys. Some national-level interviews were also conducted in relevant sectors (forestry, environment, land and energy) to follow up on issues that emerged during subnational interviews.

Case study site interviews focused on:

- the history and description of the specific land-use practice, and
- benefit-sharing structures and processes.

The instruments developed gave an understanding of the actors involved in land-use decision making, the relationships among actors, the processes leading up to land-use changes, agreements to distribute benefits and the results of land-use change decisions.

The sites with high efforts to reduce deforestation and forest degradation were chosen based on the existence of benefit-sharing arrangements, such as those characteristic of REDD+ and other low emissions or deforestation and forest degradation reduction initiatives. Due to the recent emergence of REDD+ and low-emissions development programs, the research team included initiatives with an already established benefit-sharing arrangement, as well as those in early development stages. Semi-structured interviews were conducted at each site with the aim of assessing the procedural legitimacy of the decision-making process around the development of benefit-sharing arrangements.

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9 Note that our distinction is, therefore, based on the observed efforts to address deforestation and degradation (or lack thereof) in terms of investment in finances, personnel and other resources rather than any empirically enumerated effectiveness of such efforts.

10 ‘Site’ refers to an area where an intervention (e.g. REDD+, logging, mining) is being implemented. It could be one contiguous area, or a network of areas where the intervention is taking place in a broader landscape. What is defined as a REDD+ site may therefore mean one forest reserve where the project is being implemented or a network of several reserves related to a single project/intervention in a given landscape. A chosen intervention for this study (herein defined as ‘case’) may therefore be at multiple sites, one site within a single locality, or one site within multiple localities interconnected to a single intervention that may even occur across districts (e.g. the JGE REDD+ project is one intervention consisting of forest reserves in one landscape, namely Masito-Ugala ecosystem, that spans both Kigoma and Mpanda districts).

11 One of the cases/interventions (MJUMITA and TFCG REDD+ project) had two sites (distinct landscapes) in two different districts (Lindi and Kilosa).

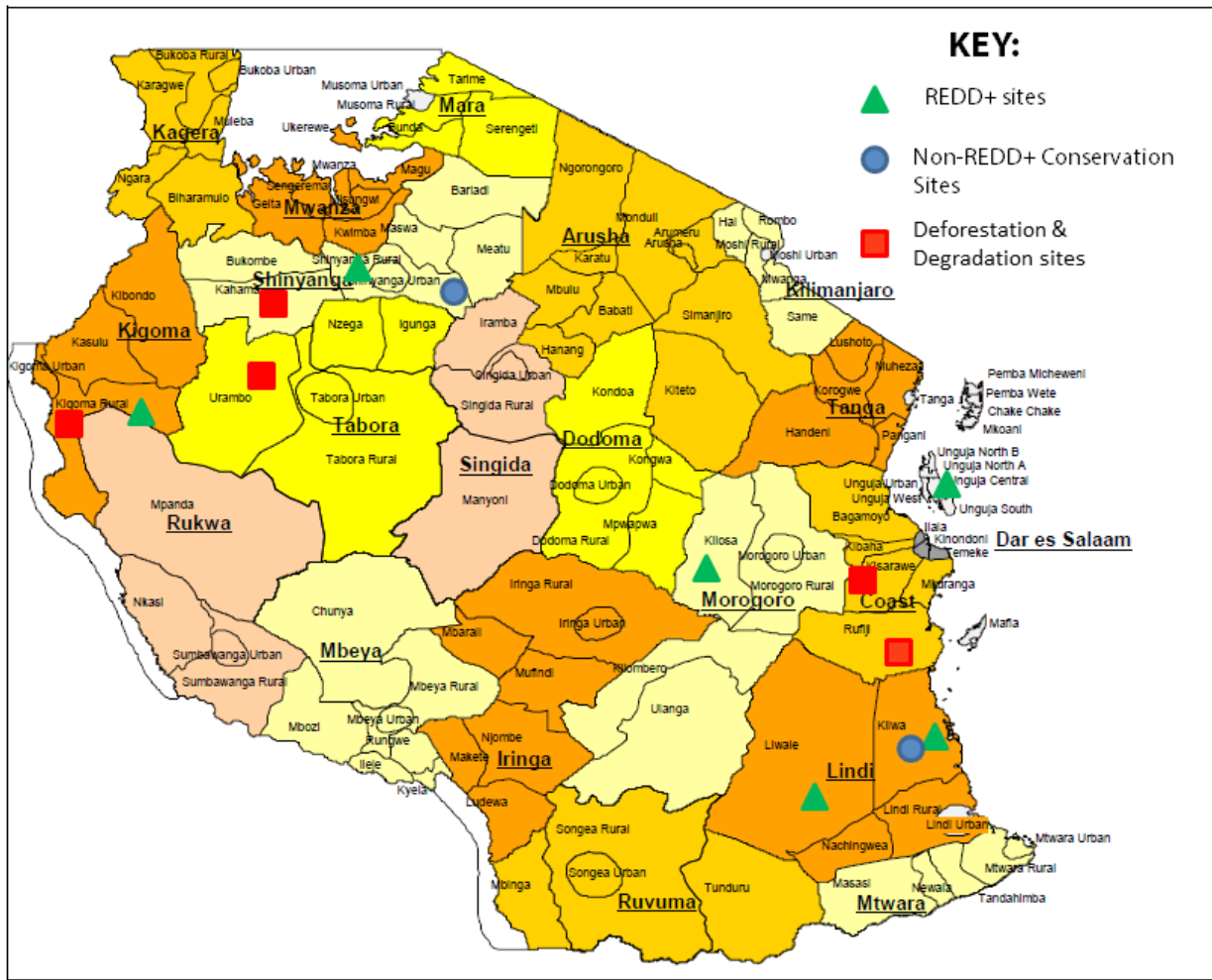


Figure 1. Map of Tanzania showing the approximate locations of the study sites within the administrative districts and regions in which they occur

Note: Districts and regions in which they occur are underlined.

In sites with little effort to reduce deforestation and forest degradation, open-ended interviews were conducted to understand the land-use change process in the last 30 years, with particular focus on the key actors involved in decision-making processes and in the land-use change itself, and on the legitimacy of the outcomes of land-use change. Key informants from district-level governments in both types of sites were also interviewed to explore their involvement in decision making on land use, coordination with other levels of government and knowledge of REDD+ and other low-emissions development initiatives.

From 1 March 2014 to 20 December 2014, 95 individuals were interviewed during 103 interview sessions in 122 interviews.<sup>12</sup> Some informants participated in more than one type of interview (i.e. survey instrument) namely key informant interview, and/or benefit-sharing survey and/or ethnography of land-use survey. Some of these individuals completed their interviews during one interview session, while others took more than one. Table 1 summarizes the total number of respondents (interviewees) and total number of interviews completed in each study site. Table 2 shows a summary of cases/interventions and study sites by selected criteria. Table 3 shows a summary of the districts, sites, projects and other activities in each site.

<sup>12</sup> Eight interviews were also conducted with some key informants during scoping trips prior to the start of field work but they are not presented in this analysis as they were only used to aid the researchers in study site selection.

**Table 1. Numbers of respondents and interviews by study sites and totals**

No.	Site name	Respondents	Interviews
1	1-MJUMITA and TFCG REDD+ in Lindi	9	13
2	2-MJUMITA and TFCG REDD+ Kilosa	12	14
3	CARE REDD+ in Kusini Unguja, Zanzibar	8	12
4	JGI REDD+ in Kigoma and Mpanda	9	10
5	TaTEDO REDD+ in Shinyanga	6	9
6	Conservation (HASHI) indigenous silvi-pastoral project, Shinyanga	6	8
7	Sustainable (Forest Stewardship Council (FSC) certified) logging - MCDI in Kilwa	8	11
8	DD Charcoal Kisarawe	7	9
9	DD Logging-Rufiji	7	8
10	DD Mining Lake Victoria Goldfields	5	6
11	DD Industrial salt mining in Uvinza	5	7
12	DD Industrial Tobacco production in Urambo	6	7
	National-level studying-up	7	8
	<b>Total</b>	<b>95</b>	<b>122</b>

Note: DD refers to “deforestation and degradation”.

**Table 2. Summary of case study sites by selected criteria**

Bio-geographic region	Coastal forests	Interior miombo woodlands
Criteria		
High DD Reduction Efforts (REDD+)	3	2
High DD Reduction Efforts (non-REDD+)	1	1
Low DD Reduction Efforts	2	3

Note: DD refers to “deforestation and degradation”.

Interview notes were compiled in qualitative data analysis software (NVIVO) and coded using a heuristic node tree based on an initial literature review. Coding was specified within a coding guide and spot verified by a single coder, who oversaw the global study. Regional reports written by two researchers together with NVIVO data were used as the primary data sources for analysis. The NVIVO database was used to make a range of queries to examine issues of authorities, conflicts and legitimacy within certain types of benefit-sharing arrangements and land-use changes. Data collection and analysis methods are available in the Global Comparative Study Research Methods document (Ravikumar et al. 2015). Secondary data was also used, such as project documents on benefit-sharing arrangements and other relevant reports on land-use changes by site and region. Secondary data on decentralization was also pulled from a legal review completed as part of the project (Mbwambo 2015).

Table 3. Districts, sites and projects studied

Bio-geographic region	District	Sites/landscapes under each criteria			Projects /case	Activities
		High DD reduction efforts (REDD+)	High DD reduction efforts (non-REDD+)	Low DD reduction efforts		
Coastal	Lindi	Noto and Chitooa plateaux landscape			MJUMITA and TFCG REDD+	Conservation, REDD+ via VLFRs
	Kilosa	Kilosa Plateau and highlands landscape REDD+ sites			MJUMITA and TFCG REDD+	Conservation, REDD+ via VLFRs
	Kusini Unguja	Jozani-Chwaka bay landscape			CARE-Zanzibar REDD+	Conservation, REDD via community forest management agreements (CoFMAs)
	Kilwa		Kilwa landscape VLFRs network		MCDI	Conservation, VLFRs, forest certification
Interior	Rufiji			Matumbi Kichi Hills landscape	DD in Matumbi Kichi Hills landscape	Timber and charcoal trade
	Kisarawe			Pugu-Kazimzumbwi Forest Reserves	DD in Pugu-Kazimzumbwi Forest Reserves	Forest encroachment, charcoal trade, kaolin mining
	Shinyanga				HASHI	Traditional fodder banks (Ngitili) land rehabilitation and conservation
	Shinyanga	Shinyanga REDD+ sites	Shinyanga HASHI-sites		TaTEDO REDD+ project	Conservation; REDD+, energy efficiency
	Kigoma and Mpanda	Masito Ugalla Ecosystem REDD+ sites <sup>a</sup>			JGI-TZ REDD+ project	Conservation and carbon sequestration via inter-village community-based organizations
	Uvinza			Uvinza woodlands landscape	DD due to salt mining in Uvinza	Wood clearing for salt pans and wood energy for salt mining
	Urambo			Urambo woodlands landscape	DD due to tobacco production in Urambo	Land clearing for tobacco cultivation and wood energy for tobacco curing
	Kahama			Kahama woodlands landscape	DD due to gold mining in Lake Victoria Goldfields	Gold mining sites and off-site vegetation clearing for mining space, construction and energy

Note: DD refers to “deforestation and degradation”.

<sup>a</sup> In 2014, Kigoma district was sub-divided. While the district itself still exists, the area where the Masito Ugalla Ecosystem REDD+ pilot project was implemented is now located within the Uvinza district.

# 3 Drivers of deforestation and forest degradation

According to land-use change assessment data from the National Forestry Resources Monitoring and Assessment (NAFORMA) carried out by the MNRT of Tanzania in 2015, in the last decade, the rate of deforestation has slowed slightly based on our interpretation of the data for the forest area lost during 1995–2010. Thus, the annual rate of change is lower than that for the previous period of 1984–1995. However, the NAFORMA analysis considers the reported rates close enough to be considered similar.<sup>13</sup> Land-use change and forest degradation continue, particularly due to agricultural expansion, charcoal burning and salt mining. This chapter discusses trends in deforestation in Tanzania, followed by the main drivers of deforestation and degradation, particularly those of relevance to this study. The chapter ends with a short conclusion regarding policy challenges.

## 3.1 Trends in deforestation<sup>14</sup>

The NAFORMA Land Cover results show that the rate of deforestation for all of Tanzania’s forests between 1984 and 1995 was 403,870 ha per year. During the period of 1995–2010 the rate slightly decreased to 372,816 ha per year. Similarly, the loss of other wooded areas decreased from 328,643 to 248,871 ha per year for the respective periods (Table 4).

It was not possible to find deforestation data at the district level for all of the sites included in this study. However, such data is available for coastal forests at the region and district level in the forest change map for the coastal forests of Tanzania (Godoy et al. 2011; also cited in WWF Tanzania 2012).<sup>15</sup> In 2007, coastal forest cover in Tanzania covered an area of 273,700 ha, falling from 420,765 ha in 1990 and 358,333 ha in 2000 (Godoy et al. 2011). By 2007, the Pwani and Lindi regions together had 236,633 ha or 86% of the remaining coastal forest, while only 385 ha of forest remained

**Table 4. Annual rate of change of area for forests, other wooded lands and other lands**

Year	Forest (ha)	Other wooded land (ha)	Other land (ha)
1984–1995	-403,870	-328,643	732,513
1995–2010	-372,816	-248,871	621,687

Source: MNRT (2015: 55)

<sup>13</sup> NAFORMA results show that the rate of deforestation between 1995 and 2010 was 372,816 ha per year. Comparison of NAFORMA Land Use Land Cover (LULC) statistics for forest area with the previous estimates from 1984 Southern African Development Community (SADC) Survey and 1995 Hunting Technical Services Ltd. (HTSL) mapping showed that the NAFORMA LULC statistics are very close to the linear extrapolation of the two previous estimates. The rate of deforestation in Tanzania of 403,870 ha reported by Forest Resource Assessment (FRA) (2010) was based on this linear extrapolation. The similarity of the deforestation rates is partly due to the fact that the SADC (1984), HTSL (1995) and NAFORMA (2010) maps were all based on the interpretation of remotely sensed images (Landsat). In the case of HTSL (1995) and NAFORMA (2010), the vegetation classification was also very similar (MNRT 2015: 55).

<sup>14</sup> Degradation is not included here because it is much more difficult to measure, and no official data exists.

<sup>15</sup> This assessment was completed by Sokoine University of Agriculture and Conservation International, with technical input from the World Wide Fund for Nature (WWF) and TFCG. It uses Landsat imagery to assess the area of forest for these three time frames, and calculates the forest loss area for each decade.

**Table 5. Forest cover change in selected districts of Tanzania from 1990–2007**

	Forest cover (ha)	Forest cover (ha)	Forest cover (ha)	Yearly forest change (ha)	Yearly forest change (%)	Cloud factor (%)	Yearly forest change (ha)	Yearly forest change (%)	Cloud factor (%)
	~1990	~2000	~2007	1990–2000	1990–2000	1990–2000	2000–2007	2000–2007	2000–2007
Dar es Salaam	2,007	650	385	66	-7.9	3	1	-0.2	14
Lindi	152,026	141,977	114,789	1,106	-0.8	100	181	-0.2	81
Mtwara	43,576	29,601	16,942	1,553	-4.2	100	103	-0.6	59
Pwani	201,133	165,714	121,844	1,537	-0.9	54	908	-0.7	58
Tanga	22,023	20,390	19,749	57	-0.3	60	0	0.0	55
<b>Total</b>	<b>420,765</b>	<b>358,333</b>	<b>273,709</b>	<b>3,735</b>	<b>-1.0</b>	<b>67</b>	<b>1,233</b>	<b>-0.4</b>	<b>65</b>

Source: Godoy et al. (2011); WWF Tanzania (2012)

**Table 6. Forest cover change in coastal forests of Tanzania inside and outside reserves, and total carbon emissions**

	1990–2000	2000–2007
Forest cover change (ha)	- 62,432	- 84,633
Rate of forest loss (% per year)	1.0	0.4
Rate of forest loss inside reserves (% per year)	0.2	0.2
Rate of loss outside reserves (% per year)	1.3	0.6
<b>Total carbon emissions (tCO<sub>2</sub> per annum)</b>	<b>631,933</b>	<b>198,154</b>

Source: Godoy et al. (2011)

in Dar es Salaam. The rate of forest loss had slowed from 1.0% per year in the 1990–2000 decade to 0.4% per year in 2000–2007. Deforestation rates also slowed in each of the five studied regions (Table 5) (see also Godoy et al. 2011; WWF Tanzania 2012). The decelerating patterns and trends of the rate of deforestation across the selected coastal regions as reported by Godoy et al. (2011) are thus consistent with the nationwide findings of the NAFORMA assessment (Table 4; MNRT 2015: 55), although the NAFORMA analysis does not consider these differences to be meaningful, as explained above. Therefore, the evidence for the observed weak nationwide decline cannot be viewed as conclusive. We can, however, say the rate has not been increasing nationwide.

The forest status and change analysis of Godoy et al. (2011) has also been turned into an assessment of carbon stock and change.<sup>16</sup> Results show that the greatest CO<sub>2</sub> annual emission rates in Tanzania happened in the 1990–2000 period with 631,933 tCO<sub>2</sub> per annum, which fell to 198,154 tCO<sub>2</sub> per annum in the 2000–2007 period. This research also points out that inside forest reserves, forest loss rates remained almost constant between 1990–2000 and 2000–2007 at 0.2% per year, whereas outside

16 The carbon data used was from an Africa-wide map of above-ground carbon developed by Baccini et al. (2008). Carbon content was assumed to be 50% of the dry weight. Average carbon stocks for above- and below-ground biomass were calculated for each district based on the forested area in 2000. The map of carbon stocks was combined with that of forest-loss data for 1990–2000 and 2000–2007 to estimate gross carbon emissions during each period. It was assumed that all carbon content was released into the atmosphere once the vegetation was cleared.

forest reserves, this decreased from 1.3% per year in the 1990–2000 period to 0.6% per year from 2000–2007 (Table 6).

The NAFORMA report does not, however, explain the slight nationwide decrease in rate of deforestation. In our own analysis, this period corresponds to major reforms in the forest sector including a new Forest Policy (URT 1998) and new Forest Law (URT 2002). One of the major institutional (legal) changes in these documents is the departure from conventional centralized forest governance to a more decentralized governance that increases the role of the private sector, NGOs and local communities in forestry, along with corresponding investments in private and community-based or collaborative forest management (evidence for this will be provided in Chapter 5). Thus, the slight decrease in the rate of deforestation could be partly attributed to increased conservation investments and forest decentralization, which have helped to protect or expand forest cover and counter the ongoing forest loss due to land-use activities.<sup>17</sup> Despite the overall trend, deforestation and forest degradation rates are still high in many areas, as reported by key informants during this research. Concerted efforts to address drivers are required.

## 3.2 Drivers of deforestation and degradation

The drivers identified by key informants largely overlap those already described in the literature, but the ethnography of land-use changes enriches the context of understanding through interpretations by different land users. During the early stages of district-level key informant interviews, it was evident that there was usually a general understanding of the drivers but a lack of quantitative data (e.g. satellite maps, recent vegetation maps, inventory data, etc.) to substantiate the relative impact (extent and severity) of different drivers. Researchers resorted to qualitative descriptions of such drivers as a basis on which to gauge this, using pre-selected criteria during the interviews:<sup>18</sup> the area/extent that the driver affects; the intensity of the driver; its permanence; the urgency in taking action to address the driver; and the effectiveness of such actions.

The results according to these criteria are presented in Table 7, indicating where these drivers have been reported by key informants during this study and their relative significance (where perceived impact is a qualitative composite of the criteria).

Key informants identified a number of drivers of deforestation and forest degradation in Tanzania's coastal and interior forests, including proximate and underlying drivers (see Box 1). The former are local human activities that directly impact forest cover or quality, whereas the latter are fundamental social processes that underpin the proximate causes and either operate at the local level or indirectly from national or global levels (Geist and Lambin 2002; Kweka et al 2015). The main drivers identified are discussed in turn.

### 3.2.1 Forest conversion to agriculture

The most important driver of deforestation and forest degradation in the sites visited is the expansion of agriculture. Conversion of forest lands to agriculture – including both permanent and shifting cultivation – cause deforestation and forest degradation (CEEST 1999; Luoga et al. 2000; Kweka et al

<sup>17</sup> Decentralization has led to the ongoing creation of better-managed local/VLFRs (WWF Tanzania 2012) and some private forest plantations. In addition to CBFM, improvements in the governance of some of the central government forest reserves via Joint Forest Management (JFM) with local communities have been shown to be cheaper, more effective and sensitive to local culture and experiences (Blomley et al. 2008).

<sup>18</sup> Adopted from a methodology developed by The Nature Conservancy (TNC) in the USA (TNC 2000, 2006) to prioritize threats facing forest ecosystems in Tanzania by WWF Eastern African Coastal Forests Programme (WWF-EARPO 2006). This has been modified to fit the context of this study, and variables such as 'permanence of the damage' and 'effectiveness of actions' have been added.

**Table 7. Key informants' perceived impact (high to low) of drivers of deforestation and forest degradation in coastal and interior forests of Tanzania**

Driver of deforestation and degradation	Coastal forests		Interior miombo woodlands	
	Frequency in interviews	Perceived deforestation and degradation impact	Frequency in interviews	Perceived deforestation and degradation impact
Conversion to agriculture	High	High	High	High
Increased demand for fuelwood (charcoal, firewood)	Moderate to high	High (in Kisarawe, Rufiji) close to major urban centers, moderate elsewhere	High	High
Infrastructure development	High	High	Moderate	Moderate
Unsustainable logging (timber, poles)	High	High	Moderate to High	Moderate to high
Uncontrolled fire	High	High	High	High
Over-harvesting of wood for carvings and artisan products	Low	Moderate to High	Low	Low
Unsustainable hunting (legal and illegal)	Moderate	Moderate	Low	Low to moderate
Conversion for salt pans, aquaculture	Moderate	Moderate	High in Uvinza	High in Uvinza
Mining	High in Kisarawe, Low elsewhere	High in Kisarawe, Low elsewhere	High in Kahama (Gold)/ Lake Victoria Goldfields and Uvinza (Salt)	High in Kahama (Gold)/ Lake Victoria Goldfields and Uvinza (Salt)
Adverse climate change	Low	Moderate to high	Low	Moderate to high
Unsustainable collection of non-timber products	Low	Low to moderate	Low	Low to moderate
Vegetation destruction by livestock	Moderate	Moderate	Moderate to high	Moderate to high
Vegetation destruction by wildlife	Low	Moderate	Low	Low
Invasive species	Low	Low	Low	Low
Effluent pollution	Low	Low	High in Kahama and Lake Victoria Goldfields landscape	High in Kahama and Lake Victoria Goldfields landscape

Source: Key informant interview data



### Box 1. General categories of the drivers of deforestation and forest degradation identified by the key informants

While there are differences between sites, the overall drivers of deforestation and forest degradation identified by interviewed key informants include:

- Forest conversion to agriculture, including both smallholder subsistence agriculture and commercial agriculture, e.g. tobacco cultivation in the interior miombo woodland eco-region and sesame production in southern coastal regions;
- Increased demand for woodfuels (charcoal, firewood) for subsistence use, for trade to urban and foreign markets, and for industrial uses e.g. in salt-dyeing and curing of tobacco;
- Infrastructure development including roads;
- Unsustainable legal and illegal logging for trade, and over-harvesting of wood for carving;
- Uncontrolled fires, including legal and illegal hunting that uses fires to clear vegetation and/or chase animals;
- Aquaculture, which involves clearing of coastal vegetation for seafood cultivation;
- Mining of high-profile minerals such as gold due to large clearances of vegetation within and around mining sites as well as local quarrying of industrial minerals, rocks and gravel in forest reserves;
- Livestock overgrazing and overstocking;
- Unsustainable and inadequately regulated trade for forest products (timber, poles, charcoal, etc.) to urban and foreign markets. Key informant interviews suggest that a great deal of this trade is illegal, and involves corruption.

2015). Interviewed district officials and sub-district key informants claim that in many areas, shifting cultivation has been an important practice in agriculture. The growing number of immigrants who move to more productive areas to cultivate high-value crops, as well as to new plantations to farm alternative crops, due to the decline of the price in traditional crops such as coconut, sisal and cashew, means that fertile land available for cultivation is becoming increasingly scarce.<sup>19</sup> In Kilosa, migrant laborers formerly employed in sisal plantations have remained unemployed since these stopped operating. The ex-laborers now opportunistically grow other seasonal crops, which may involve clearing forest vegetation or exploiting nearby forests.<sup>20</sup>

In interior woodland areas, the lower land productivity compared to coastal areas has created the need to clear new land for cultivation, further exacerbating the loss of forest cover. In the miombo woodlands, clearing vegetation to open land for commercial production is also pressuring forests. Vast deforestation of these woodlands has been associated with tobacco growing, which requires fertile land, despite the farmers' lack of agricultural inputs. In typical tobacco-growing districts such as Urambo, most households are involved in tobacco farming.<sup>21</sup>

Areas of woodland and coastal forest habitats have also been cleared for the expansion of large-scale agriculture and industrial plantations such as *Jatropha* production in Kilwa and Kirasawe.<sup>22</sup> Land is continuously being allocated for tree plantations and for major agricultural development plans, including those under the Southern Agricultural Growth Corridor of Tanzania and Rufiji Basin Development Authority. While these developments have rural development potential, they come with environmental and social costs. One key informant interviewee reported:

19 As reported by district forest and land officials in Kilwa, Lindi and Ruriji, and MJUMITA and TFCG Lindi and Kilosa projects, 2014.

20 District interview, Kilosa, 2014.

21 District interviews with natural resource management and forestry officials in Urambo district.

22 District interviews with natural resource and land officials in Kisarawe and Kilwa districts.

“Experiences with *Jatropha* biofuel plantations show that such large-scale investments can fail and lead to both serious social and environmental disasters. While the government often promotes such programs to bring about development and reduce poverty, they tend to favor large investors, with little regard for ecological sustainability and equitable distribution of outcomes. Nor have they so far registered positive effects on the poor.” District interview with district agriculture officer in Rufiji (2014)

There was also a general agreement among the district government key informants that these investments have played a role in intensifying land conflicts between smallholder farmers and large-scale investors.<sup>23</sup>

### 3.2.2 Demand for fuelwood

Tanzania’s dependence on woodfuels (firewood and charcoal) as energy sources also contribute to deforestation and forest degradation. This is especially true for charcoal, which has an annual consumption of about 1,658,000 tons at country-level (FAO 2014) and 500,000 tons in Dar es Salaam only (World Bank 2009), putting high pressure on forests (Table 8).

While domestic uses in rural areas alone may not be major drivers of deforestation and forest degradation, as reported in district key informant interviews,<sup>24</sup> some forms of rural industrial uses may increase the deforestation and degradation rate; for instance, burning coral to produce lime – a building material less costly to produce than cement – in coastal districts. This extremely fuel-intensive activity is practiced heavily in Zanzibar, where the tourism industry has increased demand, causing significant wood fuel consumption. Other fuel-intensive uses for wood include the preservation of fish, the production of salt and curing tobacco. Also, at the household level in urban centers, charcoal and kerosene are the major cooking fuels, although liquefied petroleum gas (LPG) is increasingly used. LPG is cheaper than electricity but is still more expensive than charcoal, limiting its use to

**Table 8. Daily amounts of charcoal transported to Dar es Salaam**

Routes	Average load per day (bags)					Percentage (%)
	Commercial Vehicles	Bicycles	Non-Commercial	Railway	Total	
Kilwa road	3,018	204	139		3,361	50
Morogoro road	1,301	167	152		1,620	24
Pugu road	578	276	15		869	13
Bagamoyo	108	97	27		232	3
TAZARA railway*				450	450	7
TRC railway				245	245	4
<b>Sub-Total</b>	<b>5,005</b>	<b>744</b>	<b>333</b>	<b>695</b>	<b>6,777</b>	<b>100</b>
Percentage (%)	73.8	10.9	4.9	10.2	100	

\* Data changed by the date of publication of this study

Source: Malimbwi et al. (2007)

<sup>23</sup> District interviews with agriculture and forest officials and field notes based on data triangulation from interviews with several key informants particularly in Rufiji and Kilwa districts.

<sup>24</sup> Across sites district officials have reported that domestic use in rural areas tends to rely more on dry/dead wood rather than charcoal. Charcoal leads to deforestation and forest degradation as it often uses green wood and is commercialized leading to heavy extraction.

relatively well-off households (Zahabu 2014; Katani, personal communication, Sokoine University of Agriculture, July 2014).

Despite the efforts of some conservation NGOs to promote the use of alternative energy fuels and the efficient production and consumption of charcoal, such efforts have only had limited and often localized impacts.<sup>25</sup> And despite the environmental concerns of charcoal consumption, both central and local government authorities (LGAs) in forested districts consider charcoal licensing to be a main source of revenue. Given insufficient production of hydropower electricity, particularly during the dry season, charcoal remains a cheaper, “more reliable” and/or an important back-up energy source.<sup>26</sup> According to key informant interviews, charcoal production is a major cause of habitat loss in areas close to large cities and alongside main roads leading to them.

### 3.2.3 Logging

Despite existing laws and regulations, logging operations are largely unregulated and, in 2012, there were management plans for only 4% of the forest cover in the country (NAO 2012). Heavy logging using pit-sawing techniques occurs extensively in forests and woodlands across Tanzania,<sup>27</sup> particularly for urban consumption and export. While in the coastal districts (Rufiji, Kilwa and Lindi) timber trade is boosted by the proximity to major cities and the oceanic link to overseas markets, in the interior districts of Mpanda and Kigoma, proximity to neighboring countries and transportation routes across Lake Tanganyika, shared by several nations, facilitates cross-border illegal trade.<sup>28</sup> Although some logging is licensed by the relevant authorities, a significant portion is illegal, through syndicates of corruption involving the rich, powerful and well connected (Milledge et al. 2007).<sup>29</sup>

After logging, areas often become more accessible to charcoal burning and/or to clearance for permanent or shifting agriculture.<sup>30</sup> While historically commercial logging was concentrated closer to Dar es Salaam and other major business centers, the depletion of valuable timber species in such areas is leading to a shift to exploitation of more distant places. Infrastructure extension, including roads, has linked resources and producers to markets at lower costs generally resulting in increased deforestation and degradation (Nepstad et al. 2001; Milledge et al. 2007; Chiesa et al. 2009), facilitating accessibility to the southern districts, which were previously completely inaccessible during the monsoon season.<sup>31</sup> Moreover, the increased logging activity in southern districts has led to the opening of numerous illegal ports (“*bandari bubu*” in Kiswahili)<sup>32</sup> across the southern coastline that by-pass road-blocks and other forms of surveillance along the way to Dar es Salaam<sup>33</sup>, facilitating timber shipping to Zanzibar and subsequently to overseas markets.<sup>34</sup>

In rural areas, poles, posts and withies are harvested and used as construction material. However, these uses do not necessarily deplete forests as compared to uses such as charcoal extraction or logging. Localized depletions can occur, nevertheless, in refugee camps and other rural areas with dense human settlements.<sup>35</sup>

25 MJUMITA and TFCG and TaTEDO interviews, 2014.

26 Key informant interviews with TaTEDO-Moshi, 2014.

27 District interviews with district forestry and land officials in Kilwa, Lindi, Rufiji, Mpanda and Kigoma.

28 District interviews with district forestry officials in Mpanda and Kigoma.

29 Key informant interviews at the district and sub-district levels in Kilwa, Lindi, Mpanda, Kigoma and Rufiji districts.

30 District interviews with district forestry and land officials in Kilwa, Lindi and Rufiji.

31 Interview, Kilwa DFO, 2015.

32 Ibid.

33 Interviews in Rufiji, Lindi and Kilwa, and interviews with forest officials in Zanzibar.

34 Interview, Kilwa DFO, 2015.

35 District interviews, with natural resource management and forest officials in Kilwa, Lindi, Kisarawe, Kusini Unguja, Rufiji, Kigoma, Shinyanga, Kahama, Urambo and Uvinza.

### 3.2.4 Forest fires

Recurrent forest fires in Tanzania have been associated with deforestation and forest degradation, and the release of large amounts of CO<sub>2</sub> (URT 2001). They are intentionally set to clear farmland, drive animals for hunting, collect honey and remove tsetse flies from an area. Other people start fires accidentally, for example, from cigarettes thrown from passing vehicles or by pedestrians.<sup>36</sup> Forest fires have been reported to be particularly problematic in Kilwa and Lindi, as well as in the interior miombo woodland districts, due to their dryness. MCDI in Kilwa has conducted extensive research on fire. The project implementers now consider forest fires to be a major producer of carbon emissions, more so than fuelwood consumption, which has challenged their earlier assumptions when they embarked on their REDD+ pilot project.<sup>37</sup>

### 3.2.5 Livestock grazing

The interior miombo woodland eco-region has a stronger livestock keeping tradition than coastal areas, although livestock pressure on forests and other forms of vegetation has been reported across all sites. Livestock grazing contributes to carbon emissions directly via enteric fermentation and as a driver of forest degradation, given overstocking in certain areas (Kweka et al. 2015).

Livestock in this region have vital social and production roles and provide insurance in periods of hardship. Yet, many areas are generally overstocked, and land scarcity is leading to the conversion of grazing lands to cultivation lands, squeezing the livestock into even smaller grazing areas.<sup>38</sup>

As a result, it has become common for livestock grazers to invade forest reserves in search of greener pastures.<sup>39</sup> According to district interviews, a number of land conservation and restoration programs that aim to address the problem of overexploitation of woodlands by humans and livestock<sup>40</sup> have been started: high deforestation and degradation effort sites (presented in this report) and projects to keep livestock in the northern interior region from migrating to other regions of Tanzania through restoration of historically degraded pasture lands (pers. obs. during field visits 2014).

Historically, the livestock sector in coastal regions has been small. However, given the small livestock population in relation to a large land area, the Morogoro, Pwani and Lindi regions are becoming the main targets of nomadic and immigrant pastoralists,<sup>41</sup> who move from northern regions due to overstocking or government evictions from areas designated for wildlife or water catchment protection. The increasing presence of the Sukuma, Maasai, Barbaig and other transhumance pastoralists has been reported in every district of mainland Tanzania visited for this research, which has led to frequent farmer–herder conflicts. Localized degradation of some forest reserves happens when large numbers of livestock are introduced in concentrated areas, often leading to conflicts between pastoralists and conservation authorities,<sup>42</sup> such as in the JGI REDD+ pilot project site.<sup>43</sup> The lack of a comprehensive land policy that takes into account the needs of transhumance pastoralists has exacerbated the problem. The Tanzania village land-planning model, which was also adopted by

36 District interviews, with natural resource management and forest officials in Kilwa, Lindi, Kisarawe, Kusini Unguja, Rufiji, Kigoma, Shinyanga, Kahama, Urambo and Uvinza. Key informant interviews with MCDI, Kilwa, 2014.

37 Key informant interviews with MCDI, Kilwa, 2014.

38 Interview with district natural resource officer, Shinyanga 2014.

39 District interviews, with natural resource management and forest officials in Kigoma, Shinyanga, Kahama, Urambo and Uvinza.

40 TaTEDO and JGE interviews; district interviews with natural resource management and forest officials in Kigoma, Shinyanga and Kahama.

41 Interview with Land Planner, Morogoro, August 2014.

42 Ibid.

43 Interview with JGI REDD+ project official, 2014.

REDD+ implementers, favors sedentary farmers.<sup>44</sup> These conflicts vary in frequency and intensity, some even resulting in murders (unrelated to REDD+, but not uncommon in the broader landscape).<sup>45</sup>

### 3.2.6 The mining sector

Mining attracts migrants from both within and outside the districts where mining takes place. Considerable vegetation in large-scale mining areas has been cleared to make room for gold, diamond and tanzanite mining operations, especially in the northern regions, including the Lake Victoria Basin Goldfields. In addition to soil erosion, deforestation from surface mining brings a significant reduction in the available arable land and in habitat for birds and other animals.<sup>46</sup> Likewise, artisanal opencast mining threatens the woodlands. Besides clearing forests to dig pits, artisanal miners fell trees to place stacks of wood around the open pits to keep the walls from collapsing and to use as firewood for heating and cooking purposes, depleting the woodlands surrounding the mining areas.<sup>47</sup> While operations with more advanced technologies use solar energy for drying purposes, local smallholders employ firewood.

In Uvinza, near Lake Tanganyika, the main economic activity is salt mining, which requires the clearance of extensive areas of vegetation to generate enough wood fuel to supply the high-energy intensity required for drying.<sup>48</sup> The coastal regions have largely remained outside the major mining zone except for recent petroleum exploration and the discovery of large gas deposits, but there are now low profile minerals being mined, including sodium chloride, calcite, gemstones, kaolin, construction minerals (sand, gravel and stones) and industrial minerals. Where mineral deposits occur in forested areas, mining has been associated with forest degradation and/or deforestation.

## 3.3 Policy challenges

The deforestation seen in Tanzania reflects a development model that began in the late 1800s and early 1900s when the Tanzanian economy was drawn into the world market for primary goods such as cotton, coffee and tobacco (Utting 1991). The country still relies on these primary goods to generate the foreign exchange needed to bring about economic growth and development. This is still reinforced by current government policies, e.g. government promotion of large-scale forest clearance to establish biofuel plantations including *Jatropha* and sugarcane (WWF Tanzania 2012) and large-scale agricultural developments through such policies as “*Kilimo Kwanza*” (meaning “Agriculture First”).

Economic factors thus play an important role. On the demand side, there are the high needs for forest products including charcoal and timber in urban centers; the poorly regulated trade between the mainland and Zanzibar; and the high demands overseas (Milledge et al. 2007).<sup>49</sup> On the supply side there is pressure to generate revenues; rent-seeking tendencies of officials; inadequate resources (human, finances and equipment), which hinder the enforcement of national policies; and the lack of political will to protect forests. Interviews with officials in both the Tanzania mainland and Zanzibar suggest that relatively improved conservation of Zanzibar’s forests is helped by a diminished demand to cut them due to the entry of illegally traded timber and charcoal through informal ports coming from the mainland’s coastal districts. Zanzibar also serves as a transit pathway for illegal timber to

44 Kilwa, Lindi, Kisarawe, Kusini Unguja, Rufiji, Kigoma, Shinyanga, Kahama, Urambo and Uvinza District interviews, with natural resource management and forest officials.

45 Interview with Rural Land Officer, MLHHS, 2014.

46 Kahama district interviews, with natural resource management, forest and land officers.

47 Kahama district interview, 2014.

48 Uvinza district interview, 2014.

49 Interviews with key informants in DFNR; interviews with district forest officials in Kisarawe, Kilwa, Rufiji and Lindi districts.

overseas, especially the Middle East and Far East. The observed lack of governing institutions that regulate forest trade between mainland Tanzania and semi-autonomous Zanzibar is a major governance weakness, showing that cross-border controls of 'imported deforestation' and conservation effort 'leakages' are just as important as local law enforcement.

Examination of the drivers of deforestation and degradation at selected sites shows a complex interaction of proximate drivers, which are local human activities such as agricultural expansion, charcoal burning and salt mining that directly impact forest cover, and underlying driving forces related to fundamental social processes. It is these underlying forces, which fuel and leverage the proximate drivers, that need to be addressed.

One of the problems is the lack of a comprehensive policy that takes into account the needs of land-use actors, such as transhumance pastoralists, in land-use decisions and planning at district and village levels. In order to halt the supply of forest products, ways to reduce the demand must be addressed. This requires multi-sector interventions that cut across different sectors to generate solutions. Addressing the problem of high charcoal consumption will not only require forest sector responses, such as stronger regulation of the charcoal trade, but also fundamental changes in energy policy to prioritize use of affordable alternatives.

# 4 Land-use categories and multilevel governance

## 4.1 Political and economic context of land-use categorization

In this chapter, we will explain how the roles of different land governance actors are defined formally, as REDD+ actors have to engage with these authorities. This chapter will also invoke an understanding of the relationships and interests among different actors as these relate to the governance of Tanzania's different land categories in practice, which is also key to understanding REDD+ governance, discourse, politics and policies. The land categories defined by the land laws and other laws in Tanzania are territorial classifications that give different levels of government, and different authorities within these levels, mandates to govern them, thus defining multilevel government roles and relationships. Disparate interests and objectives among levels and offices of government are contested in the determination of these categories, and one category can be changed into another – often through lobbying activities by the more powerful actors. Such competition is likely related to the resources found in the land category in question, such as timber, wildlife or water, as well as potential related sources of revenue. Formally, these include income, such as tourist fees, timber revenues, REDD+ payments, research grants, and conservation grants, and, informally, rent-seeking opportunities. These financial considerations shape the interests of, and the relationships among, governing authorities.

Competition among governing authorities is exacerbated by the ambiguity of authority over specific land-use categories, as more than one authority may claim certain powers over a given classification. As observed during interviews for this study, a typical category with such ambiguous power distribution is the so-called 'forests on general public lands', which, although including mainly village lands, has often been interpreted by forestry authorities as general lands (see introduction and later sections). Given these different interpretations, village, district and central government authorities are each able to issue licenses for various uses. Similarly, in some of the land and reserve categories described below, other government offices, apart from the main authority listed, can also access revenues and exert authority. The presence of overlapping, ambiguous or conflicting powers often leads to tensions and competition among levels of government and creates an incentive for different agencies to fight over land categorization, as well as over the sources of funding for the management and governance of such categories. Certain land categories have also influenced the acceptance of REDD+, due to historical relationships with local communities or villages during the creation or classification of a particular area.

Financial incentives associated with different land classifications also shape land-use priorities. Revenues (both from legal sources and from corruption) accruing from certain categories of land may provide perverse incentives, leading to a failure to address the major drivers of deforestation and degradation.<sup>50</sup> Many interviewees argued that where there are stronger incentives for exploitation, the exploitation objectives become the predominant focus of the authorities in question. This creates incentives for deforestation and forest degradation in two stages. First, it incentivizes classification of the land in categories that allow as much extraction as possible, and resists classification changes, as revenues from logging and charcoal production are greater than alternative land uses, including conservation. Second, once lands are classified to allow extraction, the potential revenue from extraction permits provides a disincentive to limit or control the number of permits granted. At the same time, little of this revenue is re-invested in sustainable forest management and conservation.

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50 District interviews with natural resource management and forest officials in Kilwa, Lindi, Kisarawe, Rufiji, Kigoma, Shinyanga, Kahama, Urambo and Uvinza.

Where there are stronger conservation incentives, the conservation objectives may take precedence, but often in competition with other potential (legal and illegal) uses. Nevertheless, when there are higher incentives for conservation (e.g. REDD+ funds), conservation NGOs and donors in collaboration with conservation-oriented government actors may lobby for certain lands to be reclassified into more conservation-oriented categories. This is exemplified by the attempt of some conservation NGOs in REDD+ pilot projects to create VLFs for conservation/carbon storage and other co-benefits.

The next section of this chapter focuses on the multilevel governance roles of different land governance actors in Tanzania. The third section addresses the broader question of governance of the multiple land and forest categories in practice. The fourth looks at the incentives for revenue generation and their relation to conservation revenues. This is followed by a short conclusion.

## 4.2 Multilevel governance framework for land management in Tanzania

The governance of various land-use categories reported in this section is based on a multilevel (national to subnational) framework with responsibilities distributed among central government ministries, departments and agencies, regional secretariats and LGAs. A detailed account of the distribution of roles and responsibilities between different actors is provided in a CIFOR multilevel governance legal study (Mbwambo 2015). The general framework of key multilevel (national and subnational) land governance actors is summarized in Figure 2. The direct management of the land-use categories described below primarily falls under (though is not limited to) the jurisdictions of the MNRT, MLHHS and Ministry of Energy and Minerals (MEM). Given that this is forestry research, of particular interest is the FBD, which constitutes one of the sub-sectors within MNRT. The other sub-sectors include Wildlife, Fisheries, Tourism and Antiquities. MNRT is further comprised of the following parastatals that are responsible for conservation and tourism: Tanzania National Parks Authority (TANAPA), Ngorongoro Conservation Area Authority (NCAA) and Tanzania Tourist Board. There are also executive agencies, including the TFS.

In forestry, the FBD has historically been responsible for forest policy formation, ensuring execution of forest legislation, and has mandate over national forest reserves in addition to specific projects of national importance (e.g. national forest plantations, water catchment forests and mangroves) (URT 1998). However, the TFS was formed in 2011 as an executive agency with the mandate for the management of national forest reserves (natural and plantations), bee reserves and forest and bee resources on general lands. The FBD retains responsibility for development of the forest policy, laws and regulations, and overseeing their implementation in the sector.<sup>51</sup> It is also still responsible for planning, manpower, research, training, statistics, licensing and quality control of forestry and beekeeping agents.<sup>52</sup>

The forestry sector, guided by the National Forest Policy (URT 1998) and the Forest Act (No. 14 of 2002) (URT 2002), provides for the legal context of management of forests. The National Forest Programme is a 10-year framework which guides implementation of the Forest Policy (FBD, 2001). In addition to detailing implementation programs, the National Forest Programme also highlights sectoral linkages with environment, agriculture, energy, health, lands, minerals, water, wildlife and gender (FBD 2001).

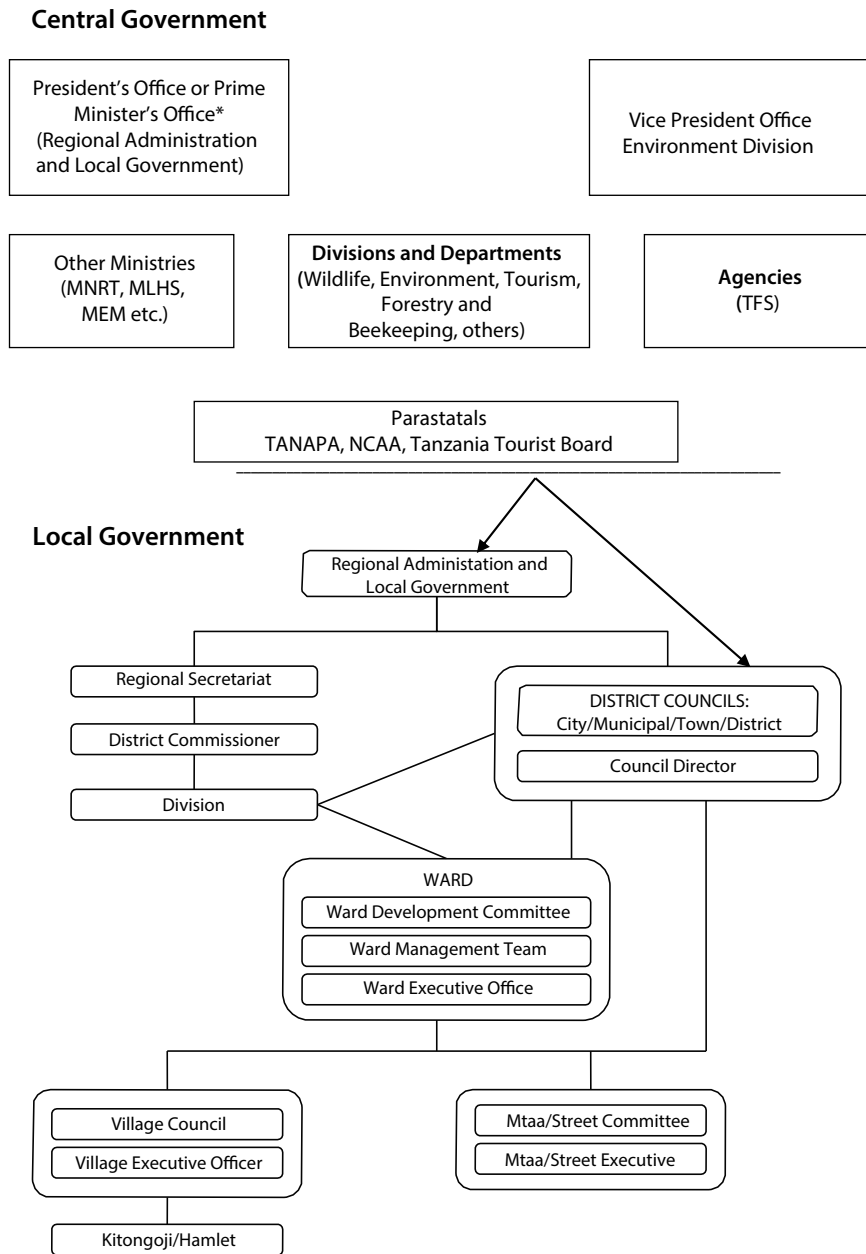
### 4.2.1 Decentralized forest and land management and REDD+

In the last few decades, policy and legislative revision took place in the forest and land sectors in light of the linked forces of decentralizing forest management and encouraging participatory forest

51 <http://www.tfs.go.tz>. Accessed 12 November 2016.

52 <http://www.mnrt.go.tz/sectors/category/forest-and-beekeeping>. Accessed 12 November 2016.





**Figure 2. Multilevel arrangements between different government levels and sectors involved in the management and governance of different land-use categories in Tanzania**

\* Historically the Ministry of Regional Administration and Local Government (RALG) has been moved back and forth between the President's Office and the Prime Minister's Office. During this research it was under the Primer Minister's Office, but currently it is under the President's Office.

Source: Author elaboration

management (PFM) including joint forest management (JFM) and CBFM. This led to the Forest Policy (URT 1998) and Forest Act (2002). Furthermore, PFM guidelines were drawn up in 2001. Part of these reforms aimed to ensure forests contribute toward national poverty alleviation goals as part of the National Strategy for Growth and Reduction of Poverty, also known as Mkakati wa Kukuza Uchumi na Kupunguza Umaskini Tanzania (see Mbwambo 2015). There have also been reforms in the land sector, which has led to greater recognition of villagers' land rights as reflected in the Land Act (1999) and Village Land Act (1999).

According to interviews with REDD+ pilot project officials, many of the REDD+ pilot projects that are presented in this report took advantage of this decentralized land and forest management, which allowed them to directly work with district and village governments to promote and implement their land and forest management projects for REDD+ in selected districts and villages. However, even working at the district to sub-district level is a multilevel governance process, as there are officials representing the central government as well as local governments within each district governance structure, including forestry, land and other sectors, as well as in administration and policy making and/or implementation.

At the time of this research, decentralized forestry programs involved LGAs (districts and villages within them). LGAs are governed by RALG, which during the time of this study was under the Prime Minister's Office (PMO-RALG).<sup>53</sup> This ministry is responsible for ongoing decentralization reform programs that aim to strengthen LGAs.<sup>54</sup> The MNRT maintained a ministerial representative at PMO-RALG to act as a link between the two ministries (TFCMP 2005). At the regional level, a regional natural resources advisor supervises all forestry functions and forms part of the Regional Secretariat, reporting to the regional administrative secretary. At the district level, a district natural resources, lands and environment officer is in charge of forestry functions and reports to the district executive director as an employee of the LGA. The district natural resources, lands and environment officer is assisted by a DFO, who also reports to district executive director. There are also regional and district catchment officers who are employees of central government and report directly to the director of FBD. After establishment of the TFS, there are also district forest managers (DFMs) who are employees of the central government who report to their zonal managers.

#### 4.2.2 Sectoral coordination of environmental issues including REDD+

Environmental consideration has to be given in all land and natural resource development activities. The environmental sector is under the jurisdiction of the Environment Division in the Vice President's Office. Environmental management is guided by the Environmental Policy (1997) and Environmental Management Act (2004). The environmental sector has an overarching role in the sense that other sectors (forestry, land, mining, wildlife, etc.) that deal with land use are expected to uphold environmental procedures and standards established by the National Environmental Policy and Environmental Act. The Division of Environment is responsible for the overall environmental policy and regulation, formulation, coordination and monitoring of environment policy implementation in the country. Institutions with an enforcement role in environmental management include sector ministries, the National Environment Management Council and LGAs. The Environment Division is responsible for the coordination of national and international matters related to environmental conservation and management. The future coordination of REDD+, therefore, is also under the mandate of the Director of Environment Division in the Vice President's Office.

#### 4.2.3 Other broader sectoral linkages

Forest management in Tanzania is also dependent on a range of other sectoral policies and actors. For example, PFM is dependent on land titling hence the Land Act, 1999, and Village Land Act, 1999 (URT 1999), which are under the jurisdiction of MLHHS. Forest governance and management is also dependent on the enactment of district and village by-laws as per the Local Government Miscellaneous Amendments Act, 1982 (URT 1982). This is under the jurisdiction of RALG, with decentralization to regional secretariats and district councils. REDD+ implementers have reported that they were required to apply the Village Land Act and Local Government Act in both project development

<sup>53</sup> Under the new government elected towards the end of 2015, the RALG has been moved from the Prime Minister's office (PMO-RALG) to the President's Office (PO-RALG).

<sup>54</sup> [http://www.tamisemi.go.tz/menu\\_data/About\\_us/Our\\_History/](http://www.tamisemi.go.tz/menu_data/About_us/Our_History/). Accessed 12 November 2016.

and implementation, particularly projects that created land-use plans and village by-laws for the governance of REDD+ projects.

During planning of land-use activities, including those under REDD+, policies from various other sectors that are directly dependent on land have to be taken into account. These include but are not limited to:

- agriculture – as both forestry and land management contributes to agricultural production for the majority of smallholder farmers;
- energy – as forest and other biomass contributes to the majority of the total energy used in the country;
- water – as water contributes to irrigated agricultural production, hydropower generation and water supply for citizens;
- wildlife – as wildlife provisions for national income through tourism and recreational hunting as well as to local subsistence and development.

#### 4.2.4 Forest governance and management regimes in practice

There have been several studies that compare the effectiveness of the management of the different land categories, in relation to the different types of associated incentives. The effectiveness of reserve management has been assessed for 146 Reserve Regimes<sup>55</sup> (Figure 3) using an approach called the Management Effectiveness Tracking Tool. While virtually all land categories that have been accorded some form of legal protection face management problems that encourage unsustainable practices, according to the scores derived from the tool, some of these categories are better managed than others. The relatively more effectively managed classes of protected areas are national parks and VLFRs (WWF Tanzania 2012). National parks are major revenue generators for the government, and most of their revenue accrues from tourism, which in practice suggests that good conservation pays. The TANAPA also has a high level of autonomy and retains revenue for management, leading to stronger re-investment in conservation. The other highest scoring category, VLFRs, provides substantial authority to local people to govern and manage the local forests through CBFM, which could explain their better management, despite not generating substantial revenues.

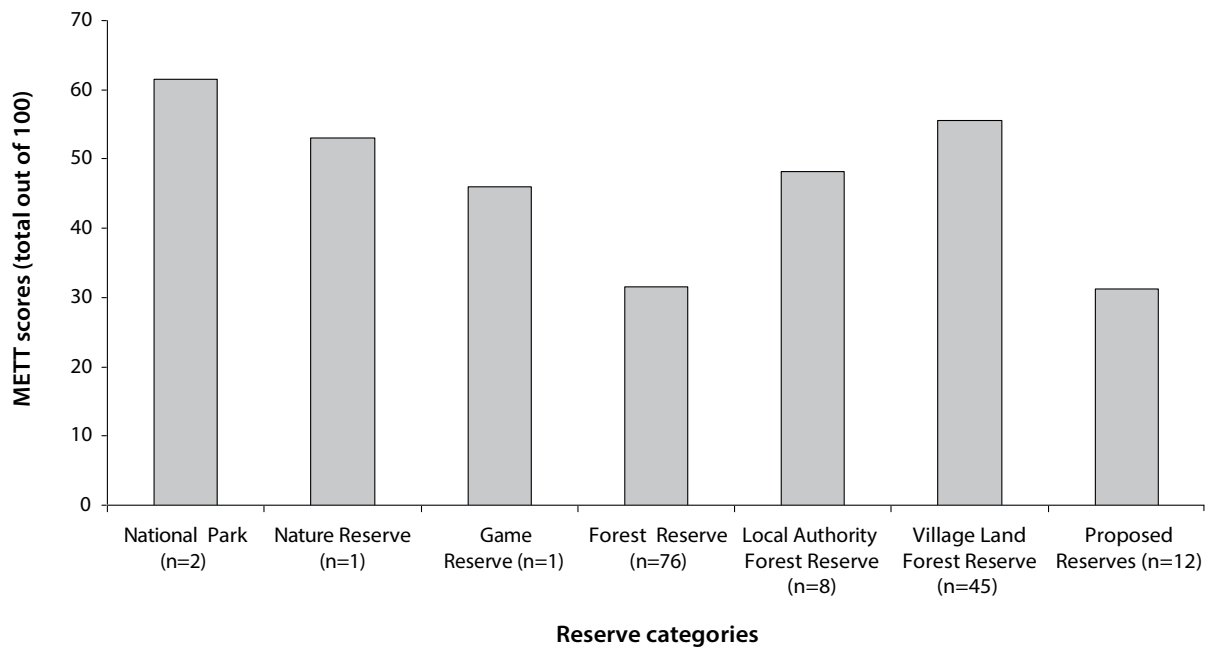
On the other hand, according to interviews with district officials and NGO staff at our study sites, forest reserves (which are managed by the central government) and local authority forest reserves (which are managed by districts) experience weak governance and poor management. These and other protected area categories allow certain extractive uses, such for logging or charcoal, with appropriate management plans. Central government officials issue permits in central government forest reserves and district officials in local authority forest reserves, though there is some joint management and overlap. The lack of effective governance is broadly confirmed by the high levels of illegal logging, charcoal production, pole cutting and illegal hunting that have been reported in many of these reserves (see also Milledge et al. 2007).<sup>56</sup> In Kilwa, Kisarawe, Lindi, Shinyanga, Kigoma and Mpanda, for example, district officials have reported lack of management plans and inadequate human, financial and technological resources (e.g. patrol vehicles), which makes it hard to control illegal practices.<sup>57</sup> The district councils are responsible for funding management plans of the district authority forest reserves, whereas the central government is responsible for the management plans for the central government forest reserves.

The main types of land categories are discussed in turn. Each one includes a discussion of its management, how it relates to other levels of government and to local communities.

55 Areas afforded different levels of protection for specific purposes.

56 District interviews, 2014.

57 District interviews and TFS interviews, 2014.



**Figure 3. Mean management effectiveness scores across different reserve management regimes (n = 146 sites with data)**

Source: WWF Tanzania (2012)

#### 4.2.5 National parks and game reserves

National parks and game reserves are well financed by tourism, and are not utilized for REDD+ pilots but have influenced the REDD+ discourse. These are some of the largest protected areas in TANAPA and the Tanzania Wildlife Division, respectively. In a multilevel governance context, these are decentralized authorities of the central government that implement policies developed by the MNRT; thus, they have stronger upward accountability to central government than to local governments. Being semi-autonomous, these authorities also are empowered to develop their own plans to govern land categories under their jurisdiction within the context of the Wildlife Conservation Act, 2013, and other relevant laws. As mentioned previously, they are normally well funded and better managed relative to forest reserves (see Figure 3, WWF Tanzania 2012),<sup>58</sup> due to the high concentration of wildlife that generates income through tourism or conservation funds from international conservation organizations (see Brockington et al. 2008). The parks produce high revenues from international tourism, and this constitutes an important portion of Tanzania's GDP. Tourism has been growing at a steady rate for the past 7 years, and, according to the Governor of the Bank of Tanzania, Benno Ndulu, "Tourism, earning USD 1 billion per year, now contributes nearly triple the GDP of agriculture, which has been the leading contributor to Tanzania's coffers for most of its history."<sup>59</sup> In the financial year 2014/15, tourism generated 17% of the Tanzanian GDP, and it was the highest contributing sector to foreign exchange reserves, for 22% of total earnings (Deloitte 2015). Revenues also support park management because TANAPA functions as a corporation, so it only pays corporate taxes to the central government, and retains the remaining funds for its own activities. Despite some illegal logging and poaching of high-value trophies (e.g. elephant tusks), rates of deforestation and degradation are considered lower than in other land-use categories (WWF Tanzania 2012).<sup>60</sup> Law enforcement is strengthened by the use

58 However, one reviewer reported critical losses in the elephant population of one reserve over the last 5 years.

59 [http://www.africa-ata.org/tz\\_economy.htm](http://www.africa-ata.org/tz_economy.htm). Accessed 15 April 2016.

60 Apart from sporadic studies, such as WWF Tanzania (2012), there is no regular systematic assessment of all protected areas in Tanzania, so there is no nationwide data.

of para-military anti-poaching approaches to protect the territory. Local governments do not play any role in the management of these reserves and only receive revenues when they are involved in game controlled areas.

These protected areas were often created by alienating local people from traditional lands. Historical evictions of people from such lands and their current exclusion from benefits, together with ongoing conflicts with their governing authorities, mean that these parks and reserves are not well accepted by local inhabitants (Zacharia and Maganga 1998). Although no REDD+ pilot projects were implemented within these areas, some REDD+ projects are located in landscapes adjoining national parks and game reserves: Kilosa is close to Mikumi National Park and Selous Game Reserve, while Kilwa, Lindi and Rufiji are close to Selous Game Reserve. Kigoma and Mpanda are close to Gombe National Park, Mahale Mountain National Park, Katavi Plains National Park, Moyowosi Game Reserve, Ugalla River Game Reserve and Mahale Game Reserve. During interviews it became apparent that some local people's perceptions and acceptance or rejection of REDD+ were influenced by their historical relationships with these pre-existing protected areas. Where such past relationships with conservation authorities were problematic, some local people feared that REDD+ would result in similar experiences (See Chapter 5).

#### 4.2.6 Central government forest reserves

Central government forest reserves (noted as "Forest Reserve" in Figure 3) are under the central government's FBD, which was previously responsible for both policy development and implementation. Since 2011, however, the management responsibility has been shifted to a newly created, semi-autonomous executive agency, namely TFS, whereby DFMs representing the central government's TFS are appointed to districts to undertake management of central government forest reserves in those districts. In a multilevel governance context, both FBD and TFS are upwardly accountable to the central government's MNRT. Nonetheless, some form of downward accountability may be exercised when these forests are co-managed with district authorities or even village authorities, either informally or formally via JFM agreements. A typical management challenge identified during interviews, however, is poor enforcement of otherwise promising JFM agreements. The Central Government Reserves primarily serve protection and production objectives, yet, according to an interviewed official, they are often poorly financed. Some of these reserves have attracted REDD+ project interests. These reserves are forested areas less endowed with wildlife and not designated for tourism. They thus primarily serve both environmental protection and production objectives, including revenue generation from extraction of timber, charcoal and other resources.

Despite being sources of revenue, their governing authorities are often poorly funded and staffed, leading to poor management. The presence of valuable timber and other resources make them targets as revenue sources via sanctioned legal logging and charcoaling, often exceeding sustainable levels, or illegal logging and charcoaling facilitated by corruption among law enforcers (Milledge et al. 2007).<sup>61</sup> Allegedly, merchants may bribe authorities for permits to avoid paying license fees, or harvest timber and bribe law enforcement officials – including surveillance and court officials – if they get caught. Sometimes there is also high-level corruption (patronage and favoritism of government officials to certain merchants, or direct involvement of officials in the timber and charcoal trade that has been associated with under-payment of taxes and royalties; Milledge et al. 2007). They also sometimes suffer from encroachment for cultivation and settlement. Interviewees report that this is also facilitated by corruption among law enforcers for personal gain or patronage by political elites to win votes or support. Thus, despite being legally reserved only for uses authorized by the relevant authorities, in practice they are prone to deforestation and degradation.<sup>62</sup>

61 Key informant interviews on ethnography of land uses in Kilwa, Lindi, Kisarawe, Kusini Unguja, Rufiji, Kigoma, Shinyanga and Mpanda districts.

62 Ibid.

A site that best exemplifies this pattern is Kisarawe district, where a pilot REDD+ project failed. The project, implemented by the Wildlife Conservation Society of Tanzania, led to an increase in deforestation and forest degradation, as well as conflict with local communities. There were also allegations of fund misuse by the project implementers. The Royal Norwegian Embassy in Tanzania, therefore, terminated the contract, which they said had been breached.<sup>63</sup> In Kisarawe, both Pugu and Kazimzumbwi Forest Reserves are reported to have experienced illegal extraction of timber and charcoal as well as encroachment for farming and settlements.<sup>64</sup> But the patterns observed in Kisarawe have also been reported by key informants at other sites, albeit to varying extents. Where attempts have been made to decentralize the management of central reserves to districts or villages via joint management, they have faced challenges regarding the delineation of roles, responsibilities and benefits accruing to different parties.

Interviewees at the district level in Kilwa, Lindi, Kilosa, Kisarawe, Shinyanga, Mpanda and Kigoma reported that while some responsibilities have been decentralized, or where joint management arrangements exist between central and district or village governments, districts and villages often take on more responsibilities and burdens than benefits (including revenues).<sup>65</sup> For example, some funds should be remitted to the districts for forest management, surveillance and control, but this is reportedly “infrequent, untimely and inadequate” (NAO 2012).<sup>66</sup> This argument has been used by some district interviewees against the proposed National REDD+ Trust Fund that will be managed centrally, as they believe it would lead to similar results: possibly, most finances will remain centralized with little trickle-down to the districts and projects, while most responsibilities will be decentralized.<sup>67</sup> Projects would benefit from aligning management responsibilities with benefit streams.

#### 4.2.7 Local authority forest reserves

Local authority forest reserves (also known as district forest reserves) generate timber and charcoal revenue for the district governments; they are not prioritized for conservation and have not attracted REDD+ projects. These reserves are under the jurisdiction of politically decentralized authorities called district councils, which were established by the Local Government Act (URT 1982). In a multilevel governance context, district councils are upwardly accountable to the central government (RALG) through its appointed executives. They are also downwardly accountable to sub-district levels through officials who are elected at the ward level by villagers constituting each ward. From a forest management perspective, they are responsible for both the implementation of the National Forest Policy (URT 1998) and Forest Act (URT 2002) of MNRT, augmented by by-laws developed by the respective district council. In addition to by-law making (legislative) power, the councils debate and approve district development plans and budgets and receive funding from both central government grants and local sources of revenue. The districts have forest officials (DFOs) and land officials (district land officers) who are directly accountable to the councils. In well-staffed districts, there are also other land, forestry, and natural resource management officials that represent the land commissioner of MLHHS and others who represent the MNRT. As we have observed from district-level interviews, it is this context of decentralization of district councils – with both upward accountability to the central government and downward accountability to district and sub-district administrative units – that prompted many NGOs that implemented REDD+ to use districts as entry points for implementing their projects, although the local authority/district forest reserves were not the target of any of these projects.

63 See REDD Monitor: <http://www.redd-monitor.org/2013/02/06/more-corruption-involving-norwegian-redd-funding-in-tanzania/>. Accessed 15 April 2016.

64 District interviews in Kisware.

65 Interviews with forestry officials in Lindi, Kilosa, Kisarawe, Shinyanga, Mpanda and Kigoma districts.

66 District interviews, 2014.

67 Interviews with natural resource management and forestry officials in Lindi, Kilosa, Kisarawe, Shinyanga, Mpanda and Kigoma districts.

In some districts, the local authority forest reserves serve as an important source of local revenue for district councils. Yet district natural resource management offices are poorly funded and staffed and the reserves poorly managed.<sup>68</sup> Timber provides potential revenue streams via sanctioned legal logging and charcoaling, but accusations of corruption are similar to those of central reserves, as reported during district key informant interviews (for similar observations see Milledge et al. 2007).

Hence, despite legal protection from unsustainable and illegal exploitation – via district by-laws that govern their sustainable use – in practice, these reserves are prone to deforestation and degradation. The difference between these reserves and the central government forest reserves is that in this case, when revenues are collected legally, the district council has discretionary powers to retain all the revenue for district development. A typical complaint of forest officials, however, is that once revenues are collected and subjected to district budgetary priorities, little is budgeted for forest investments. As one district official in Kilwa claimed: “district forests are seen as sources of money, but not deserving recipients of money”. Similar observations were made in Kilosa, Rufiji, Kisarawe, Mpanda and Kigoma.

#### 4.2.8 Village land forest reserves

VLFRs are the most decentralized and community-based reserves, and serve local people’s needs most. They are governed by democratically elected village governments (village councils) and village environment or natural resource management committees formed according to the Local Government Act (URT 1982). The creation and management of VLFRs is legally enabled by (and takes into account) the National Forest Policy (1998), Forest Act (2002) and Village Land Act (1999). These are interpreted in operational village by-laws developed by the village council with the support of forestry and land officials. The by-laws have to be approved by the district council in question. There is evidence that the VLFRs are usually better protected by the local people compared to central government and district reserves (WWF Tanzania 2012), probably due to the high level of political and legislative devolution to local people. Despite some elite capture, these forests are usually well accepted and also provide many benefits to local people by law (Blomley Ramadhani 2006; Blomley et al. 2008). Furthermore, given the level of decentralization to village councils and district councils in the governance of VLFRs, these reserves have attracted the interest of REDD+ implementers, such as the TFCG and Mtandao Wa Jamii Wa Usimamizi Wa Misitu Tanzania (MJUMITA)/ Network for Community Forest Associations, who aim to promote local forest governance.

Establishing VLFRs was, thus, the objective of several REDD+ pilot projects studied.<sup>69</sup> This is because they have legal protection, and as already mentioned, better management in practice with concomitant lower degradation, if the right incentives and institutions are established. VLFRs can be an important source of revenue for local people, which is an important incentive for local people to manage them properly. The MCDI, one of the case studies for this research, capitalizes its conservation and development objectives in establishing VLFRs for sustainable timber production.<sup>70</sup> These reserves also provide a wide range of other economic, social and ecological goods and services.

#### 4.2.9 Forests on general lands

Forests on general public lands are the most amenable to changes in jurisdiction. Ambiguity of authority creates territorial competition among authorities. Forests have attracted REDD+ interest, particularly from actors who aim to create VLFRs, given that forests in general lands are often conflated with VLFRs due to ambiguity in the existing forest policy as explained in this report’s

68 District interviews with natural resource management and forest officials in Kilwa, Lindi, Kisarawe, Rufiji, Kigoma, Shinyanga, Kahama, Urambo and Uvinza.

69 Key informant interviews with Forest Justice, Kilwa, 2014.

70 Interview with MCDI officials, Kilwa, 2014.

introduction. General lands refer to lands that are neither ‘reserve lands’ nor ‘village lands’, but they can move into either category with a legal change of designation. The general lands are under the trusteeship of the central government. Typically, they lack formal governance arrangements for managing existing forests and other natural resources or uses. Hence, in practice, they have been exploited by central government, district governments, village governments, large-scale timber and charcoal merchants, and smallholder land users, including shifting cultivators, pastoralists, etc. for various purposes, and both district officials and TFS (central government) officials or even village officials have reportedly been involved in authorizing timber and charcoal harvesting on such lands.<sup>71</sup> The ambiguity and contradictions pertaining to their ownership, use and governance (e.g. Village Land Act of 1999 and Forest Policy of 1998 elaborated earlier; see also below) often make them contested lands.

The Village Land Act (1999) distinguishes village land from general land by defining village land as “land that is occupied, communal, or set aside for future use” and general land as “all public land which is not reserved land or village land”. Reserved, here, refers to land that has a legal protection for a specific use such as government forest reserve, a nature reserve, national park, etc. General land, thus, according to this definition, is a residual category. Another law, the Land Act (1999: 25) defines general land as “all public land which is not reserved land or village land and includes any unoccupied or unused village land.” According to this definition, general land can occur within the village land. To add to this ambiguity, the MLHHS considered 70% of all land in Tanzania to be village land, and only 2% to be general land. However, the FBD of the MNRT considered 54% of forests to be on general land. The National REDD Strategy considered 17 million hectares of forests to be on general land (Veit et al. 2012). NAFORMA field inventory has estimated the total forest area to be 48.1 million hectares, which is 55% of the total land area of the Tanzania mainland (MNRT 2015). This means it would not be possible for 54% of forests to be on general land (FBD/MNRT definition), as used for REDD+ Readiness (URT 2010:1), which is close to the 56% used in the National Forest Policy (URT 1998:10), if indeed general land is only 2% of the total land area (MLHHS definition, URT 2011; Veit et al. 2012: 13-14). Further, the NAFORMA study (MNRT 2015) assessment of forest distribution shows that village land and general land forests cover 45.7% and 5.7% of total forest area, respectively, significantly reducing the area of forests under general land conventionally claimed by the FBD and MNRT.

In practice, this means there are many forest areas that the FBD and MNRT have claimed to be forests on general land (hence under their jurisdiction), while in fact they are on village land (see further elaboration below) and village forests are becoming increasingly recognized. Section 2.1.1 of the current TFS strategic plan shows the distribution of forests in terms of ownership and management (see Table 9).

Further confusion comes from the disjuncture between law and practice. The term ‘village’ in the Village Land Law is defined as follows: “‘village’ means a village registered as such under the Local Government (District Authorities) Act 1982” (Village Land Act, 1999: 20); the Local Government (District Authorities) Act 1982 (p. 12) states “‘village’ means a village registered as such under this Act”. Thus, both laws require a village to be registered. Despite this formal definition, the Village Land Law recognizes the existence of ‘villages’ and ‘village lands’ that may not yet have been formally registered, but that have been declared or designated by an authority recognized by the current Village Land Act (1999), Local Government Authorities Act (1982) or previous Acts; or that have gone through a process of adjudication of its settlement and land-use area (including boundaries thereof) by adjoining village or non-village land users. That is, by law, formal registration and issuance of village certification is still the process that accords a village recognition as a legal entity. In practice, however, there are many villages in Tanzania that are not formally registered, despite having all other features of a legal village, including *de facto* land-use rights, clear boundaries, and a demonstrable

71 District interviews with natural resource management and forest officials in Kilwa, Lindi, Kisarawe, Rufiji, Kigoma, Shinyanga, Kahama, Urambo and Uvinza.



**Table 9. Distribution of forests (million ha) by ownership and management classes**

Forest ownership and management	Central government (through TFS)	Local government land	Village government	Private sector	Forests in general lands	Other (e.g. sacred forests)	Total
Total area (million ha)	15.84	3.36	21.6	3.36	2.4	0.48	47.04
Total (%)	35	7	45	7	5	1	100.0

Source: TFS (2015)

historical presence. Such villages would still be recognized by the Village Land Law, given the more comprehensive categorization of villages and village lands it prescribes.

Nevertheless, the lack of formal registration opens up the possibility of these villages' lands, hence their forests, being treated as general public lands by any authority that subscribes to only one definition of a village, i.e. the one that requires registration. This perspective partly explains the historical overestimates of forests on general public lands stated in the Forest Policy (1998) that is still in use today. Similarly, while the Forest Law recognizes VLFRs that have either been 'declared' or 'gazetted', gazettment provides greater legal status for the forest reserve, particularly where more secure tenure is required for interventions such as REDD+. Also, in practice, it is possible that some villages may contain forests that have neither been declared nor gazetted, opening up the possibility for them to be treated as forests on general public lands amenable to issuance of timber and charcoal harvesting licenses by forest authorities.

This was one of the major challenges for REDD+ projects, such as that implemented jointly by MJUMITA and TFCG, because some villages within their REDD+ target areas were not yet registered and/or forests within those villages had not been gazetted. Thus the 'village lands' and/or their forests could be viewed as general lands in the context of the FBD and MNRT interpretation; this was supported by the current Forest Policy (URT 1998) and partly by the Draft National REDD Strategy that was being discussed during the time of the REDD+ pilots, and subsequently became adopted as the official National REDD Strategy (URT 2013), without full acknowledgment of the extent of VLFRs (see latter section on REDD+). Nevertheless, project implementers successfully promoted the interpretation of the law to mean that, given these villagers have already established claims on the general lands based on history of occupancy and use, the villages could be legally registered, their land could be considered village land according to the Village Land Act (1999), and the forests qualified to be reclassified as VLFRs. Part of the project implementation activities thus involved following legal procedures, including surveying and registration of these villages, so that they could obtain 'Certificates of Village Land', and surveying and demarcating the forests so that they could be gazetted as VLFRs.<sup>72</sup> This interpretation was contested by some central government officials who objected to the loss of central government territory to village lands.<sup>73</sup> This is discussed further in Chapter 5.

The Draft National REDD Strategy stated that "17.3 million ha (49% of all forestlands), are unprotected forests on General Land" (URT 2010: 3; MJUMITA and TFCG n.d.: 1). In a subsequent publication, MJUMITA and TFCG note some improvements in the final National REDD Strategy, stating that: "The 2013 National REDD Strategy concludes that 'In this respect, villages have right of ownership to forests in their village land.' This contrasts with the 2009 National REDD+ Framework in which non-reserved forest on village land was classified as general land" (MJUMITA

<sup>72</sup> Interviews with MJUMITA and TFCG officials, 2014.

<sup>73</sup> MJUMITA and TFCG interviews triangulated with Kilwa and Lindi district interviews with natural resource management and forest officials.

and TFCG 2014: 9). Despite such improvements, the final National REDD Strategy still fails to fully acknowledge the extent of village forests by simply lumping them together with forests on general public lands, stating that:

“Of the total forest area, 16 million ha are reserved forests, 2 million ha are forests in national parks and the rest (15.4 million ha) are unprotected forests in Village and General Land subjected to ‘open access’ and heavy pressure and consequently converted into other competing land uses.”  
URT (2013: vi)

The same report, in contradiction with this earlier assertion, later states that “57% of all of these forests are on village land or general land with open access and only 43% of the forested land is designated as forest reserves and national parks (protected)” (URT 2013: 7). In both cases, no source for these statistics is provided, making it impossible to validate them. The issue of recognizing villagers’ forest rights is thus still far from being resolved, as it remains contested even in national law and policy documents.

#### 4.2.10 Mining areas/leases

According to the Land Act Cap 113 Section 22(2), minerals are by definition not a part of land in Tanzania. The act does not define a ‘mineral land’ among its three categories of lands. This is, perhaps, simply because ‘mineral land’ is not identified until minerals are discovered through prospecting (Lugoe 2011). However, once minerals are found, the land turns into ‘mineral land’ and falls under the Minerals Act, which takes precedence over land policy and laws that govern surface rights.

A problem associated with this precedence is that such discoveries are automatically associated with communities’ loss of lands, not only through takeovers by the licensed mining companies, but also through degradation of adjacent land. By transforming community lands into ‘hazardous’ areas, mining companies have been tactically driving communities away from their lands (Lugoe 2011: 2–3). Violations of community rights to land and environmental degradation have been reported in Shinyanga with reference to ongoing large-scale mining in the adjacent Lake Victoria Gold Fields.<sup>74</sup>

Given the higher precedent accorded to the Mining Law, mining often takes priority over conservation. This is exemplified by the recent decision whereby the Tanzanian government successfully lobbied the United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Committee to change the boundaries of the iconic Selous Game Reserve, a World Heritage Site in Southern Tanzania, to allow uranium exploitation by the Mkuju River Uranium Project (owned by Russian ARMZ Uranium Holding Co. and Canadian Uranium One). The border alteration of the reserve will exclude 200 km<sup>2</sup> of previously protected land. The decision by the UNESCO World Heritage Committee stands in contradiction to their 2011 statement that “mining activities would be incompatible with the status of Selous Game Reserve as a World Heritage site”. The alteration of such a high-profile reserve for mining interests attests to the high priority of mining extraction.<sup>75</sup> The government has justified the decision on economic grounds, whereas environmental groups have protested over environmental concerns through an international petition.<sup>76</sup> In the context of multilevel governance (Figure 2), mining is governed by the central MEM with no decentralization to the districts. In mining sites, environmental law enforcement has been rather lax, and the central government authority responsible for enforcing environmental law (National Environment Management Council) is relatively weak in its mandate. The MEM has stronger political powers, as mining is one of the major earners of foreign exchange in Tanzania. For a similar reason, large mining

74 District Interviews with land and natural resource management officials in Shinyanya, 2014.

75 Access Initiative (2012) <http://www.accessinitiative.org/blog/2012/08/selous-game-reserve-altered-uranium-mining-project>. Accessed February 2016.

76 <https://www.change.org/p/beyond-nuclear-uranium-network-stop-the-mkuju-river-uranium-project-at-selous-game-reserve-tanzania>. Accessed 26 February 2016.

companies have a strong lobby with political clout that allows them to fend off serious environmental and human rights scrutiny. The lack of decentralization in this ministry/sector may also imply that local governments play no role in mining issues even when local peoples' land rights are violated.

#### 4.2.11 Private and communal lands

The Land Act (1999) and Village Land Act (1999) recognize private lands and communal lands. Given that all land in Tanzania is state land under the authority of the President, the existing 'private lands' include only leases or land-use rights. This applies both to smallholder users as well as large domestic or foreign investors. Customary land law is recognized, whereby villagers' customary land rights can be formalized with private and/or communal land titles in the form of 'Customary Rights of Occupancy'. Other land users (such as investors) can receive land titles called 'Granted Rights of Occupancy'. Given that the MLHHS is decentralized to the districts, some powers to issue land rights are decentralized to a land official who is located in the district but is accountable to and undertakes the district-level responsibilities of the central government's land commissioner. There are other responsibilities that are fully decentralized to the land officials, who are accountable to district councils. In spite of (and sometimes because of) this division of responsibilities between central and local governments, private and communal lands are increasingly contested, due to pro-investment policies and perceived land grabs that favor large-scale investments in forestry, recreational hunting, biofuels, etc., often at the expense of smallholders and communities (Nelson et al. 2012; see also next section). Some interviewees mentioned that central government officials sometimes grant land rights (e.g. to investors) for projects that may not be favored by local governments. Similarly, local governments may grant certain land rights – under their jurisdictions – that may not be favored by central government officials. In the latter case, the central government, which has higher authority on land issues, may revoke such titles/rights. Only one REDD+ project studied had been attempted on private and communal pasture lands.

### 4.3 The economics of land classification

Tanzania's economy is primarily dependent on land-use activities. Given the value of land for economic activities, and that all land is vested on the state, the state may re-classify the land to meet particular economic interests. Thus, there is a history of appropriation of land that local people consider to be their 'traditional lands' by the state for various purposes (e.g. the creation of national parks, large-scale state farms or hydropower dams, allocation to investors, etc.). As a result, during district interviews, some key informants reported that the current relationships between government authorities (e.g. forest, land, and park authorities) are often affected by local peoples' negative perceptions due to law enforcement history and alienation of local people from their lands.

Another economic aspect of land classification is that the system is based on revenue generation, among others. There is normally pressure for all the different land categories to generate revenues for both central and local governments and to fund their own activities. Table 10 outlines sources of revenue, who collects them and who receives them. The current system creates perverse incentives for destructive practices that generate revenue while rendering little investment in conservation.

There are two potential sources of revenue from forest products that benefit both central and district levels of government: licensing fees and fines for illegal activities. In some districts (e.g. Rufiji, Kilwa, Kisarawe, Kigoma and Mpanda), officials interviewed reported that issuing licenses for logging and charcoaling, and fining and auctioning confiscated illegally traded timber and charcoal, are major sources of forest-related revenues for district councils and the central government forest agency. Also, both the district and central government officials located in the districts are normally under pressure to collect more revenue. Seeking to maximize both income streams produces a system of perverse incentives in which officials auction off logging and charcoal licenses but may also allow illegal extraction to continue so that revenue from fines can be sustained. Neither permits nor fines

drive meaningful action to limit unsustainable use and extraction of forest resources. In addition, in all districts visited, officials complained about unfair revenue distribution between the central and local governments, with the exception of revenues from district authority forest reserves, where revenue is retained in the district. For the other (central government) forest reserves, it is claimed that typically more than 90% of collected revenue is taken by the central government even if it is collected by district officials and the districts incur the burden of protecting the reserves in practice.<sup>77,78</sup>

In this research, we saw evidence of these processes shaping outcomes in the districts. According to district natural resource management officials, in Rufiji and Mpanda, for example, high revenues from timber in their districts made it persistently attractive for the local and central government officials to issue logging and charcoal permits, sometimes even illegally.<sup>79</sup> A license fee is charged on forest products based on the quantity of the product brought to market, such as charcoal, firewood, building poles or timber. Checkpoints along roads allow authorities to monitor compliance with the quantity of wood products that the license allows.

There are penalties for noncompliance, including fines and/or prison sentences. Thus, when the authorities are unable to invest in planning and management of harvesting activities but are expected to generate revenues, they have an inherent incentive to allow illegal activities, then impound some of the illegally harvested products. In some cases, this involves special surveillance operations. However, fines for illegal activities are insufficient to promote more sustainable practices, because they fail to address the damage before it has occurred, and the fines charged are often not large enough to deter illegal practices.

Corruption of surveillance officials, policing officers and courts has also been blamed for poor enforcement, such that the fines from a large portion of illegally harvested products are still not captured in government coffers.<sup>80</sup> Additionally, in Rufiji and Kilwa, where both the central and district governments issue licenses for timber and charcoal, interviewees claim that some forest product traders forge documents to make illegal forest products appear legal.<sup>81</sup>

In virtually all the districts visited, problems related to poor forest management and governance were reported. Many of these problems relate to the inadequate allocation of resources. They include: timber harvesting being carried out without forest inventories, management plans and harvest plans to ensure sustainable limits; inadequate staff to undertake proper forest management and law enforcement at the district level, forest surveillance units and road checkpoints; inadequate funds and equipment (vehicles, GPS units, phones, etc.).

Part of the problem is that little of the revenue generated is invested locally in management or even surveillance. Officials reported that when the income collected is sent to central government, it is placed in the general treasury and the MNRT coffers and spent on other central government priorities. The same applies to funds collected from the district forest reserves and sent to the district council, where, again, they are spent on other budget priorities. Thus, both the central government and the district governments want to collect as much revenue as possible from forests for various development

77 Historically, district officials have been custodians of these central government forest reserves, but now there is an ongoing reform transferring authority to TFS. But where TFS is not yet established, the district officials are still responsible for revenue collection and management of the central government forest reserves.

78 Based on data triangulation from interviews with district officials across Mpanda, Kigoma, Kilwa, Lindi, Kisarawe and Lindi districts.

79 Illegal here may mean two things. (1) Government officials authorize forest harvesting for government revenues when existing assessments show that extraction is not sustainable; this would be illegal due to the violation of sustainable harvest guidelines. (2) Officials allow harvesting to take place for personal gain (e.g. bribes given by timber or charcoal harvesters to officials in order to allow them to harvest without paying fees to the government).

80 District interviews and TFS interviews, 2014.

81 Ibid.

Table 10. Revenue sources from different categories of land to different land jurisdictions

Land classification	Jurisdictional authority	Source of revenue	Who collects revenue	Who receives revenue	Study sites landscapes where given land category exists	Desirable outcome (“winners”)	Undesirable outcome (“losers”)
National parks	TANAPA	Tourism park entrance fees and anti-poaching fines	TANAPA	Corporate taxes to the Treasury; the remainder to TANAPA	Kilosa, Kilwa, Lindi, Rufiji Kigoma, Mpanda Kusini Unguja <sup>a</sup>	Central government (revenue)	Local communities (loss of resource access, park violence, wildlife-human conflicts)
Game reserves and game controlled areas	Tanzania Wildlife Division	Tourism, hunting and trophy license and animal export fees; anti-poaching fines	Tanzania Wildlife Division (local governments in game controlled areas)	Local government with hunting blocks; the Treasury; Wildlife Division; and Tanzania Wildlife Protection Fund <sup>b</sup>			
Central Government Forest Reserve	FBD and TFS Agency	<ul style="list-style-type: none"> <li>Cess<sup>c</sup></li> <li>Forest royalty fees</li> <li>Fines for illegal products</li> </ul>	Royalty, by DFOs. Fines and penalties by road checkpoint and forest surveillance unit officials	Local government: Cess 5% of (but not deducted from royalty). The remaining is divided: Treasury: 30%; MNRT: 70%, some remitted to districts, surveillance and checkpoints <sup>d</sup>	Kisarawe, Rufiji, Kilwa, Lindi, Kilosa, Kigoma, Shinyanga	Central government (revenue)	Local communities (loss of resource access)
Local authority (district) forest reserve	District council	<ul style="list-style-type: none"> <li>Cess</li> <li>Forest royalty charges/ fees</li> <li>Fines and penalties for illegal products</li> </ul>	District council retains 100% of revenue	District council budget (some of which may include re-allocation to forest management) <sup>e</sup>	Lindi, Kigoma/Uvinza, Mpanda, Shinyanga, Urambo	Local/District government (revenue)	
VLFR	Village council	<ul style="list-style-type: none"> <li>Forest royalty charges/ fees</li> <li>Fines and penalties for illegal products</li> </ul>	Village executive officer; oversight by village council and resource committee	Village council budget pool and remittances to resource management committee	Kisarawe, Rufiji, Kilwa, Lindi, Kilosa, Kigoma/Uvinza, Shinyanga, Urambo, Mpanda	Village government; local villagers	Local communities (loss of access to forest resources and/or revenue)

a Although no REDD+ pilot projects were implemented within such protected areas, some national parks and game reserves occur in areas adjoining REDD+ pilot projects.

b According to NAO (2013: 45).

c Cess is a tax charged by district governments on central government forest reserves present in their territories (usually 5% of the revenue collected).

d After charging a 5% tax (Cess tax) for central government forest reserves located in their territory, district governments submit the remaining revenue to the central government; the MNRT is, in theory, expected to retain about 70%, while the rest is sent to the National Treasury. But according to NAO (2012), the MNRT is rarely able to retain the expected 70% of the revenue, and remittance of a portion to the management authorities is infrequent, untimely and inadequate (NAO 2012; District interviews).

e Interviewees agree that this is substantially below the Forestry Department's budgetary needs.

and recurrent expenditures but not to fund the decentralized authorities that undertake local-level management, administration and enforcement.<sup>82</sup> These officials have reported that there are times when the expected funds are not allocated at all, less funds are allocated relative to their budget demands, or the allocated funds are delayed such that they do not arrive in time to conduct the required activities.

This situation creates incentives for deforestation and degradation in at least two ways. First, the lack of resources to undertake forest management leads to failures to prepare and enforce regulatory tools that are requirements for forest product harvesting (e.g. timber, charcoal), such as forest inventories, forest management plans, and forest harvest plans. Yet, despite the absence of such tools, the pressure to generate revenue remains, thus encouraging DFOs to ignore the regulatory requirements and authorize harvesting permits.<sup>83</sup>

Second, the lack of resources leads to laxity in law enforcement during and after harvesting. Such laxity, according to one district key informant, includes the following:

“District forest officials and surveillance units staff often fail to travel to inspect the timber harvesting sites to ensure that harvesters have conformed to the concessions allocated in their licenses and have adhered to environmental requirements. Also without adequate resources, check point and surveillance staff fail to monitor the forest product traders in transit to make sure that they have the documentation to prove that they harvested timber legally and have paid their dues to the government – and otherwise take necessary legal actions. In my office we often have to borrow vehicles from NGOs located here in order to undertake some of our basic operational activities. But they also need the vehicles so they are not available all the time.” District key informant interview, Kilwa (2014)

Such observations have been echoed by other key informants across districts. In addition, the laxity in law enforcement leads to corruption. During district interviews, several officials, while not associating themselves or their department directly, generally alluded to the possibility that these problems in law enforcement create opportunities for “dishonest officials to engage in corruption to support illegal forest activities”.<sup>84</sup> The problem of extensive corruption in the forest sector has also been reported elsewhere (Milledge et al. 2007).

Despite the apparent pressure for district officials to collect forest revenue, there is a persistent problem of under-collection. Research shows that a significant amount of harvesting is done illegally. There is also wasteful harvesting and processing, non-collection of royalties and undervaluation of forest products. This has been reported in both a comprehensive study of timber harvest in Southern Tanzania (Milledge et al. 2007) and in an official Controller and Auditor General report (NAO 2012). The problem is summarized by Milledge et al. as follows:

“Rural communities, traders and the government have lost massive potential revenues to wasteful harvesting and processing, non-collection of royalties and under-valuation of forest products. At village level, through mid-2004, local harvesters have chronically under-valued hardwood logs. Consequently, they have been receiving barely one hundredth of the export price despite the fact that no value-adding had taken place since the logs were obtained. Revenue lost by central and district governments due to the under-collection of royalties reached up to 96% of the total amount of potential revenue due. At central government level, it was tentatively estimated that nationwide losses of revenue to the FBD amounted nationally up to USD 58 million annually due to the under-collection of natural forest product royalties in the districts... Substantial revenue losses were also

82 District interviews with natural resource management and forest officials in Kilwa, Lindi, Kisarawe, Rufiji, Kigoma, Shinyanga, Kahama, Urambo and Uvinza.

83 District interviews, 2014.

84 This was reported in all the districts visited.

apparent prior to and during shipment. For example, the trade statistics show that China imported ten times more timber products from Tanzania than appear on Tanzania's own export records. This suggests that Tanzania collected only 10% of the revenue due from these exports." Milledge et al. (2007: 4)

During our research, TFS officials in Kilwa and Rufiji said that there have been improvements since the establishment of TFS in 2012. TFS aims to address forest revenue collection, among other objectives. But challenges remain, similar to those reported by district officials earlier, including the lack of adequate resources to undertake their activities.

Table 11 shows revenue collected for selected districts among our study sites. Most of the royalties are collected from sales of forest goods obtained from forests on general public lands and village lands<sup>85</sup> or within district forest reserves.<sup>86</sup> Interviewed officials affirm that illegal harvesting is contributing to significant under-collection of revenue, partly due to corruption.<sup>87</sup> They further blame the lack of people and resources within the forest sector, inadequate law enforcement, and corruption in law enforcement (police and courts) and other oversight institutions as contributing factors. Potential revenues could fund management and governance activities, while also providing an important source of funds for local governments, reducing dependency on central government and donor projects. Instead, meager funds are allocated by both central and local governments to the conservation of forests.

**Table 11. Forest revenue collected from selected districts in 2010/11**

	Collected amount in USD by district		
	Rufiji	Kilwa	Lindi
Total revenue collected	733,333	82,000	47,162

Source: WWF Tanzania (2012)

The failure to contribute funds to forest management, outside of the national parks, also means that the NGO sector has stepped in to fill the funding gap for conservation left by the government. This has created space for NGO domination of conservation funding and practice (see Brockington et al. 2008) in those categories with high conservation potential. The NGOs that implemented REDD+, thus, simply followed suit in a long-established practice of funding and implementing conservation activities in Tanzania. As an indicator of the role played by different actors, Table 12 presents budget commitments of different stakeholders to forest conservation and governance in the selected districts for the year 2010/11. A total of USD 3,655,594 was invested in different forests. The sum total of central and local government contributions in the same location is only USD 101,000, or less than 3% of the total.

More recently, the REDD+ pilot projects funded by the Royal Norwegian Embassy in Dar es Salaam provided another significant source of funds, as discussed in the next chapter. In fact, the contribution from this single donor has far surpassed previous funding for conservation.<sup>88</sup> Given the relatively

85 The term used by forest officials is 'general public lands', but given the conflation of public lands with village land discussed earlier, it is possible that most of these forests are on village lands.

86 Key informant interview, TFS Office, Kibiti, Rufiji, September 2014.

87 District interviews in Kilwa and Rufiji, 2014; TFS interviews in Rufiji, 2014. Interviewees made no attributions regarding who might be involved.

88 Notably, the Government and Academic institutions received as much as the NGOs from the Royal Norwegian Embassy grant; the claim with regards to conservation funds rather than funding does not include funds for research and policy development.

**Table 12. Estimated budgets (in USD) from different government and NGO actors for conservation of forests in the selected districts in 2010/11**

Actor	Rufiji	Kilwa	Lindi	Zanzibar (all districts)	Total (USD)
Central government	13,333	22,000	12,328	8,000	55,661
Local governments	12,000	18,667	14,667	0	45,334
WWF Tanzania Country Office	94,600	94,600	94,600	314,000	597,800
CARE International in Tanzania	0	0	0	90,000	90,000
Tanzania Forest Conservation Group	62,5000	22,500	150,000	0	235,000
International Union for Conservation of Nature (IUCN)	82,425	0	0	0	82,425
MCDI	14,500	372,167	0	0	386,666
Other development partners through the government (DANIDA for Kilwa and Lindi and FINNIDA for Rufiji)	20,000	18,020	24,687	0	62,707
Sustainable Management of Land and Environment (SMOLE II)	0	0	0	2,100,000	2,100,000
<b>Estimated Total</b>	<b>299,358</b>	<b>547,954</b>	<b>296,282</b>	<b>2,512,000</b>	<b>3,655,594</b>

Source: WWF Tanzania (2012)

meager budgetary contributions of district and central governments to conservation, NGOs continue to play a dominant role in conservation of forests and other ecosystems in Tanzania. For their part, in USD districts have become highly dependent on donors for performing many forest conservation and governance tasks, even those that are supposed to be part of their general responsibilities, such as land and forest surveying, or helping villagers establish VLUPs or VLFRs and other by-laws.<sup>89</sup> Though donor and NGO support might be positive in fostering conservation interests, given the government's low commitment to conservation, it raises some concerns over whose interests take precedence, and thus over legitimacy and accountability.

To what extent is this conservation agenda driven by national and citizens' interests? The question of accountability stems from the fact that typically, NGOs cannot be directly held accountable by citizens, as they are exogenous to the accountability systems that govern the relationship between state actors and citizens. Supporters of interventions by civil society organizations (CSOs), including NGOs, are often suspicious of the state's willingness or capability to respond to citizens' needs. Thus, they consider CSOs to be intermediaries between citizens' interests and a state that is less responsive. In terms of forest governance and REDD+, in particular, such assumptions cannot be presumed to be universally true. Hence, issues of legitimacy and accountability in the context of participation and representation of citizens need be investigated rather than assumed, a topic examined in Chapter 5.

#### 4.4 Conclusions

The evidence from this research underscores the centrality of land-use classification as a contested process that can have a profound influence on who holds power over land use, and what land-use outcomes are likely. All land-use categories are fraught with management problems related to capacity and corruption, as well as a strong incentive to raise revenues. However, according to data from the

<sup>89</sup> District interviews in Kilwa and Rufiji, 2014.



WWF Tanzania report (2012; see also Figure 3), the high-earning tourism reserves, such as national parks, are relatively better managed than forest reserves, if we exclude problems related to poaching. While VLFRs are not immune to problems, there is evidence that they are relatively better protected, most likely due to the direct-use values they provide to villagers, which may act as an incentive. The high level of devolution may also provide a more participatory and representative arena for their governance, which increases the possibility of collective law enforcement by the villagers. VLFRs may also suffer less from the competition and revenue demands associated with the other types of reserves, in which the primary priority appears to be to fill the coffers of central and district governments.

Land classification has particular relevance to REDD+ in Tanzania. Poor revenue collection and allocation within the forest sector overall suggests that scaling-up REDD+ funds would require a serious overhaul of the current government revenue collection and distribution structures. When lands are reclassified, especially in such a way that legal power is transferred from one authority to another, new agencies and coalitions gain influence over land use. For this reason, recognizing erroneously classified general public lands as village lands has been a central part of REDD+ proponents' project strategies, and is expected to have benefits both in terms of forests and livelihoods. Such efforts are part of the ongoing struggle between centralization and decentralization of governance and management of forest reserves in Tanzania, where the Central Government Reserves represent the highest level of centralization and the VLFRs represent the most decentralized form of forest management and government. In this way, REDD+ can improve local participation and representation, particularly given the history of disenfranchisement of local populations in forest and protected areas conservation and management. The next chapter further explores the politics of land use in the diverse case studies under their varied land classifications, including the political influence of REDD+ and shifts in the flow of land-use benefits.

The discussion presented above also shows that each type of land use is under the authority of specific national, district and village authorities, with upward accountability to the central government and/or downward accountability to the local government. However, where existing laws and policies define certain categories (e.g. general public lands and village lands) in ambiguous and contradictory terms, institutions can stretch their authority to land and forest-use categories by adopting the definition that is more consistent with their interests. This affects land-use management and decisions that may lead to a lack of explicit recognition of the rights of certain groups, such as local communities' rights to VLFRs, with a consequent lack of management responsibilities. This leads to poor governance and unsustainable use of resources on these lands. When villagers' lands are classified as general public lands, they also become susceptible to being allocated to other uses connected to state interests, e.g. allocation to large investors. The issue of clarifications and recognition of local land users' land and forest tenure rights – including revisions of laws, policies and other documents to ensure consistency between land and forest laws – remains a highly desirable policy intervention. Such reforms are not only necessary for REDD+, but also for general sustainable land management.

Lastly, the discussion shows that NGOs contribute many resources to forest management at the district and village levels, particularly in areas of high conservation interest. This is associated with an increase in 'power' and influence of NGOs in forest and land-management decisions. On one hand, this promotes conservation interests at the district and village levels, and provides resources needed to advance conservation. On the other hand, it raises concerns over whose interests take precedence, and thus the legitimacy and accountability of these NGOs. To what extent is this conservation agenda driven by national and citizens' interests? Participation and representation of citizens' needs and interests, even in the work of these NGOs, have to be given high priority.

# 5 REDD+ pilot projects and other initiatives to address deforestation

The Tanzania mainland has a total of 33.428 million hectares of forests (37.8% of the landmass), and its annual deforestation rate is around 1.2% (URT 2013). Key sectors required to address the drivers of deforestation and forest degradation include environment, forestry, agriculture, energy and minerals, and transport (URT 2013).<sup>90</sup> With regard to policy, the forest sector focuses on sustainable forest management and PFM, private sector involvement and sector reform programs, as per the National Forest Policy (URT 1998); and the National Strategy for Growth and Reduction of Poverty (URT 2010; Mbwambo 2015). Tanzania has also engaged with bilateral and multilateral climate and carbon forestry initiatives in order to improve its financial capacity, coordination and governance, including UNFCCC processes since 2005; The Bali Action Plan (2007); and Decision 2/CP.13, which guided key components on REDD+ readiness (Nashanda 2013).

To what extent did the REDD+ pilot experience make an impact in forestry and land governance decisions? This chapter addresses this question by examining REDD+ project implementation in relation to village, district and national government levels. It begins with a discussion of the multilevel governance context. The second section discusses the pilot projects and the third, national level REDD+. The fourth section focuses on issues related to the legitimacy (e.g. accountability, participation, representation)<sup>91</sup> of the REDD+ projects and the question of targeting for results. This is followed by a short conclusion. The chapter draws on the perspectives of the actors in the different governance structures, as well as our own observation and analysis.

## 5.1 Multilevel governance context of REDD+ in Tanzania

At the national level, Tanzania has developed REDD+ policies and mechanisms, including the National REDD Strategy (URT 2013). The Tanzanian–Norwegian Climate and Forest Initiative included the aim of developing REDD+ policies; training and research on climate change impact, adaptation and mitigation; developing monitoring, reporting and verification (MRV) capacities; establishing the National Carbon Monitoring Center; and piloting REDD+ (URT 2013; FCPF 2014). The UN-REDD Tanzania Programme was implemented by the Government of Tanzania, mainly through the MNRT FBD with three UN agencies (the Food and Agriculture Organization (FAO), the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP)). It aimed to strengthen the national governance framework and institutional capacities (FCPF 2014). Tanzania–Finland–FAO technical and financial support developed the NAFORMA (MNRT 2015).

To facilitate multilevel and multi-sector REDD+ processes, the National REDD Task Force (NRTF) was established in 2009 to oversee the implementation of technical and operational issues in relation to REDD+ readiness. It was viewed as an interim arrangement that would eventually be replaced by more

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90 National REDD Strategy.

91 These variables were used as they were the easiest to measure. Participation and representation logically correlate with other indicators of legitimacy such as democratic rights, economic governance, anti-authoritarian attitudes, and social trust that have been identified as important determinants of legitimacy (e.g. see Gilley 2006).

permanent structures such as the National Climate Change Steering Committee (NCCSC). At the time of this research, the NRTF coordinated all REDD+ related activities in the country.<sup>92</sup>

The NCCSC is an inter-ministerial committee that comprises Permanent Secretaries from 13 ministries responsible for energy, finance, industry, natural resources, justice and constitutional affairs, land, agriculture, livestock development, foreign affairs, and international cooperation. The NCCSC reports to the Vice President's Office. Together with the National Climate Change Technical Committee (NCCTC), the NCCSC is responsible for overseeing and guiding the implementation of climate change activities in the country. The NCCTC is made up of directors of the various ministries in the NCCSC. Its function is to oversee all technical issues related to the implementation of climate change issues, including the implementation of the National REDD Strategy. The NCCTC reports to the NCCSC.<sup>93</sup> The NCCSC and the NCCTC are expected to take over the responsibilities of the NRTF at a later stage of REDD+ implementation.<sup>94</sup>

At the subnational (district to village) level, nine REDD+ pilot projects have also been implemented in Tanzania to test key REDD+ policy issues through project implementation across the country. The expectation is that they will provide feedback that will contribute to national-level policy development (FCPF 2014). Some projects have provided incentives for people to become engaged through benefit distribution mechanisms with lessons for future policy development (Campese 2012; Njaidi 2014, *personal communication*).<sup>95</sup> Other projects have developed the country's reference emission levels. Others have developed modalities to address leakage and permanence, and establish MRV systems (URT 2013; FCPF 2014). The main focus of this study were these subnational pilot projects, starting at the district level and looking at how, in the multilevel governance context, these projects link to national-level policies and processes, as well as to sub-district policies, processes and practices. We observe that project interventions, such as land-use planning, establishment of forest reserves, conservation agriculture, sustainable charcoal production and provision of alternative energy sources are directly linked to national-level sector policies and laws in forestry, land, agriculture, energy, etc. This was in agreement with the notions of participatory forestry and land management as enabled by the Forest Act (URT 2002), Village Land Act (1999) and other relevant laws. Thus, important policy lessons can be drawn for these and other sectors.

The projects also attempted to impact governance at the village level by establishing sub-district institutions such as committees for land adjudication, environment and natural resource management, and REDD+. This was supported by the development of village by-laws that convert national policies and laws into locally implementable and enforceable rules, as enabled by the Local Government Act (URT 1982). Key policy lessons can, thus, be drawn regarding institutionalization of supranational interventions like REDD+ and national natural resource and land laws into a local decentralized arena.

92 Starting with representation from the MNRT and Vice President's Office Division of Environment, over time the NRTF membership has significantly broadened, from 6 ministry representatives in 2009 to 12 ministry and 1 civil society representative in 2012. It includes representatives from key ministry sectors, such as agriculture, energy, livestock, water and lands, and NGOs. The Task Force was supported by the Institute of Natural Resource Assessment at the University of Dar es Salaam, which also hosted the REDD+ Secretariat. Additionally, as of 2012, the NRTF was supported by five Technical Working Groups: (i) Legal and Governance; (ii) MRV; (iii) Financial Mechanisms; (iv) Energy Drivers; and (v) Agriculture Drivers. They provided technical guidance and/or advice to the Task Force as appropriate. Each working group comprised about six members drawn from relevant sectors. The REDD Task Force also provided expertise and oversight on specific REDD+ strategy options and guided finalization of the National REDD Strategy accordingly. The associated Working Groups assisted the Task Force with providing necessary advisory information to the NCCTC and the NCCSC regarding REDD+ matters in Tanzania. Source: NRTF (Tanzania). <http://theredddesk.org/countries/actors/national-redd-task-force-tanzania>. Accessed November 2016.

93 NCCTC (Tanzania) <http://theredddesk.org/countries/actors/national-climate-change-technical-committee-tanzania>. Accessed November 2016.

94 NCCSC (Tanzania). <http://theredddesk.org/countries/actors/national-climate-change-steering-committee-tanzania>. Accessed November 2016.

95 Njaidi R. MJUMITA – network for community forestry organizations, March 2014, Dar es Salaam.

Another important expected contribution of these projects was to inform National REDD+ Policy development. This requires strong coordination and communication between the pilot projects and the NRTF and/or its committees. In this regard, we observe weak coordination and communication, implying the need for stronger multilevel institutions for the future.

Although the REDD+ pilot projects have facilitated the development of land-use alternatives and establishment of legally recognized VLFRs or other forms of conservation in villages, their central feature is the financial contribution to conservation, village development projects and household dividends. Nevertheless, the REDD+ land-use and benefit model favored groups such as sedentary farmers over shifting cultivators and pastoralists, since the latter were only rarely included in decision-making processes. The decentralized nature of the pilots, and the reclassification of some general lands as village lands, also reinforced existing tensions between the central government, and the NGOs and districts.

The evidence suggests that REDD+ has a long way to go to bring about long-term or sustainable change. REDD+ pilot projects provided only short-term financial incentives and failed to address the underlying drivers of deforestation. A look at actor networks of articulation and interactions reveal the missing links between REDD+ incentives/trial payments and the key actors who drive business as usual.

## 5.2 Experience of pilot projects at district and village level

This section discusses the REDD+ pilot projects as they were designed and implemented at the district and village level. The first part summarizes the project approach to districts and villages, including community participation and REDD+ benefit sharing. The second part addresses some of the challenges faced in implementation.

### 5.2.1 REDD+ project implementation

The REDD+ NGOs and donors interviewed, including TFCG, MJUMITA,<sup>96</sup> CARE, JGI and TaTEDO, consider their interventions to be a promising model of conservation incentives. Governance and institutional arrangements for the REDD+ pilot projects studied center around the idea of PFM enshrined in the Forest Act (2002). This, in the most comprehensive strategy, included establishing legally recognized VLUPs, which include VLFRs in some districts (e.g. Lindi, Kilosa) as per the Village Land Act (1999).<sup>97</sup>

The particular village-community model applied by these REDD+ pilot projects requires strong participation by villagers, for the process to be inclusive, *de jure*. Participation is achieved through village assemblies, village councils, village natural resource management committees and land-use planning committees – collective bodies that represent REDD+ pilot project individuals and villages. All adult men and women have the right to participate in village assemblies, the highest body of village governance. The village council is the body of representatives elected by the assembly to govern on behalf of the villagers. In all projects visited, these bodies were involved during REDD+ introduction and implementation.<sup>98</sup> The participation of such institutions in forestry- and land-related matters at the village level is required by the Local Government Act (URT 1982), Forest Act (URT 2002) and Village Land Act (1999), which provide a framework for communities' land and forest

96 TFCG and MJUMITA worked together in their two REDD+ pilot projects in Lindi and Kilosa districts.

97 In the other projects, no comprehensive land-use plans were undertaken, but certain local forest areas were identified and dedicated to conservation for REDD+.

98 Key informant interviews with project implementers, 2014. The extent to which village natural resource management committees and land use planning committees were also involved depended on the modality of REDD+ implementation, e.g. whether it required a comprehensive land use plan or not.

tenure. These laws also have mandatory requirements for a specific number of women representatives. Together with village land registration/certificates, village forest governance committees and village land and forest by-laws, these institutions facilitate the legal recognition of communal lands. In addition, there is a *de jure* dispute resolution mechanism in place that includes the village land councils, ward land tribunals, and district land and housing tribunals. As reported by project officials interviewed, project implementers also involved district officials in natural resource-related sectors and those required to be in district land-use planning teams to facilitate the village-level process. These included District Natural Resource Management Officers, Forest Officers, Land Officers, or Beekeeping Officers, depending on the project activities. The officials were involved in training villagers about REDD+ and relevant laws (e.g. Village Land Law) and implementation of project activities, e.g. development of VLUPs and VLFRs, and facilitating the development of village by-laws. The district officials facilitated the application of national laws, policies and processes by local implementers (villagers).

Project implementers reported that free, prior and informed consent (FPIC) was an intended integral part of land-use and benefit-sharing decision processes; projects were introduced to the district administration then to villagers via their village assemblies. During these assemblies, villagers were given an opportunity to decide whether they wanted to participate in REDD+.<sup>99</sup> MJUMITA and TFCG found that starting with meetings at the hamlet (sub-village) level, prior to larger village assemblies, helped to improve overall participation and representation of different voices, including those of women, those who live in remote parts of the village, and other relatively marginalized community members.<sup>100</sup> Other projects have also involved villagers and their various committees at least at the village level.<sup>101</sup> Notably, while we do not discuss its REDD+ projects for reasons explained already, MCDI involved villagers in previous forest certification for timber production in VLFRs, as discussed later. Most of the REDD+ projects interviewed (MJUMITA, TFCG, CARE, TaTEDO and JGI<sup>102</sup>) made land-use decisions and benefit-sharing arrangements with the village forest governance committees, in addition to meeting with the village and sub-village assemblies.

Some REDD+ projects, such as the MJUMITA and TFCG project, undertook the comprehensive approach described above. In those cases, the benefit-sharing arrangements were integrated into CBFM and VLUPs to establish a Community Carbon Enterprise.<sup>103</sup> The creation of a Community Carbon Enterprise was the ultimate objective of MJUMITA and TFCG REDD+ piloting in Tanzania.<sup>104</sup> Other REDD+ projects such as TaTEDO required only implementation plans from the participating communities or individuals, rather than comprehensive VLUPs. The particular modality chosen depended on the objectives of the project implementers and the local circumstances. The success we observed did not depend on the modality used but on the degree to which the process involved a high level of participation of local stakeholders, including villagers and their committees, and the level of transparency and accountability of the process.

Project implementers generally viewed the direct REDD+/carbon project financial transfers to government actors and villagers involved in sustainable management as a success. Villagers in REDD+ pilot villages received money for village development projects and individual/household REDD+ dividends (see Box 2). Project implementers and district officials working with participating communities in the trial payments provided guidelines for the village to develop by-laws on the

99 Key informant interviews with representatives of NGOs that implemented REDD+.

100 Key informant interview with MJUMITA and TFCG in Lindi and Kilosa, 2014.

101 Key informant interviews with project implementers from CARE Tanzania, MCDI, TFCG and MJUMITA, TaTEDO and JGI.

102 The JGI project also created inter-village CBO to address REDD+ issues across participating villages.

103 An entity to aggregate voluntary emission reductions from its members and sell them according to internationally recognised standards.

104 Key informant interviews at MJUMITA and TFCG Headquarters, Dar es Salaam, September 2014.

### Box 2. REDD+ Trial payments under the MJUMITA and TFCG REDD+ pilot project

Trial financial REDD+ payments went to the village government, with distribution of individual dividends governed by village by-laws. While subsequent payments were ultimately based on performance against baselines, testing phase payments were ‘effort based’, and focused on: projected village deforestation (historic rates); proportion of village forest reserved; assumed leakage (proportion of village forests outside reserve).<sup>a</sup> Payments assumed an estimated carbon price of USD 5/ton.<sup>b</sup> Each village resident, including women, men and children, received an individual cash dividend. Specific distribution rules were made by community members via village assemblies and set in village by-laws. Adult women collected dividends on behalf of their children.<sup>c</sup> Community members decided in advance what portion of their individual dividend to set aside for a community fund. Typically, village residents contributed a substantial portion of their share to the community fund.<sup>d</sup> In Mkanga village, for example, residents collectively decided to set aside TZS 4000<sup>e</sup> of their TZS 10,469.74 (approximately USD 6.75 at the time) per-person dividend for the community fund, on the condition that this money would be held by the project to avoid any governance concerns (Campese 2012). This would leave each individual with a personal dividend of TZS 6,468.74 (approximately USD 4.17).

a Interviews at MJUMITA Headquarters, Dar es Salaam; TFCG Headquarters, Dar es Salaam; MJUMITA and TFCG REDD+ projects in Lindi and Kilosa; Forest Justice Southern Zone Office, Kilwa; district offices, Lindi and Kilosa, 2014.

b Interviews, MJUMITA and TFCG officials, 2014.

c Ibid

d Ibid

e The exchange rates used throughout this document are the rates reported by the references cited.

distribution of REDD+ dividends to address governance and accountability.<sup>105</sup> Where payments included payments to individuals and/or chosen village development projects, the village assembly decided how much (if any) each person would contribute to the community fund. Villages developed by-laws to set specific terms of benefit sharing, with reference to implementers’ guidelines. Eligibility criteria for benefit-sharing arrangements tested by pilot projects include performance, tenure, contribution, and equity or equality, among others. Some projects, such as MJUMITA and TFCG ensured that dividend payments were made publically at village assemblies where all adult villagers (over 18 years old) were entitled to participate.<sup>106</sup> If villagers chose to contribute part of their payments to village development projects, these were subject to the formal rules of accountability – via established village councils – and an additional set of rules by villagers (in the form of by-laws) during meetings.

“By-laws in Mkanga village, for example, stipulate that: village will annually approve proportion of REDD+ revenue to be placed in community fund, all residents (women, men and children residing in village for at least 3 years) are eligible to receive payments, as well as non-resident dependents (students); and payments to children and mentally disabled people go to guardians – usually mothers.” Campese (2012: 24)

The REDD+ projects also supported a variety of governance and livelihood activities in the form of ‘in-kind payments’ through: training district officials, training village land-use and natural resource management committees, training villagers on land-use planning, land laws, REDD+ and sustainable practices, including conservation agriculture, sustainable charcoal production, use of improved wood fuel stoves, alternatives fuel (rice husks) to replace charcoal in brick-making, beekeeping, small-

105 Key informant interviews with project implementers in Lindi, Zanzibar, Shinyanga, Kigoma and Kilosa, 2014.

106 Interviews with MJUMITA and TFCG officials and district officials in Lindi and Kilosa.

scale ecotourism projects and other income-generating activities linked to reducing deforestation and degradation.

Specific benefits for each project are summarized in Table 13. More details of each project including its benefits sharing arrangements are presented in the case summaries in Annex 1.

### 5.2.2 Key multilevel governance challenges

In areas where REDD+ projects were implemented, lack of clear, recognized or enforced tenure rights for local forest communities was reported by district and REDD+ project officials as a major obstacle for designing equitable forest and land based benefit-sharing arrangements.<sup>107</sup> Community tenure security is often obstructed by: cost-prohibitive and technically demanding requirements for implementation, low levels of awareness, weak enforcement of laws, and contradictions in interpretation and implementation of land laws, e.g. the ambiguity about general lands as already reported.<sup>108</sup> Notably, even within some REDD+ projects, while villagers were able to establish VLUPs and forest reserves, they were not issued individual Customary Rights of Occupancy (CCROs). If this were done, it would have entailed a much more costly and longer process to complete within the limited time frame of REDD+ pilot projects, as each villager's land parcel would have to be surveyed and registered. On the other hand, the REDD+ projects' objectives could be met with the less costly and less time consuming establishment of VLFRs (and in some cases land-use plans).

District and sub-district interviewees reported improvements in local governance structures to enhance the process of decentralized land-use decision making. At the district level, the district land-use planning team (consisting of forestry, land, agriculture and community development officers, among others) has been trained and participated in the development of VLUPs and VLFRs. At the village level, various land committees – including village land-planning committees, village land tribunals (for land conflict resolution), village natural resource committees and REDD+ sub-committees – were created and/or trained for land-use governance and forest management purposes. The process was a manifestation of multilevel governance in two ways: first, it involved the direct engagement of district and village governments in the development of land-use plans and VLFRs; second, it involved the central government both directly and indirectly. The indirect involvement was through the obligation of the district land-use planning team to apply the relevant national (forestry, land and local government) laws in the process, although they are also mandated to create district and village by-laws that are local interpretations of the national laws. The implication here is that the national level controls the outcomes through the land laws they have created. One example is that the Land Law requires the creation of 'reserve lands' as one of the categories created in the village's land-use plan. The central government retains power to allocate such reserve lands to specific uses in the future including allocating it to investors. Some district officials have also pointed out that sometimes the process of VLUPs has been interpreted by some as an opportunity for the central government to 'legally' create such reserve land for investors. The direct involvement of the central government authorities was through certain approvals. For example, the (national) land commissioner was required to approve and register newly surveyed villages and provide village certificates to them before their land-use plans and VLFRs were legally valid. Also, the land-use plans require the approval of the land commissioner, although typically, there may be a district land officer mandated to approve and sign the land-use plans on the land commissioner's behalf. In spite of such multilevel engagement in the REDD+ arena at the district level, some sub-district key informants had a less favorable view of the process, as captured in the following view of one key informant:

107 Interviews with district and project implementation officials in Kilosa, Lindi, Kilwa, Shinyanga, Urambo and Kigoma.

108 Key informant interviews with district land and forestry officials in Kilosa, Lindi, Kilwa, Shinyanga, Urambo and Kigoma.

**Table 13. REDD+ benefits accruing to the REDD+ pilot projects studied**

Actor	Benefit-sharing arrangement	Benefits achieved
CARE Tanzania Hifadhi ya Misitu ya Asili (HIMA)	<ul style="list-style-type: none"> <li>• Benefits to be distributed through Jumuiya ya Uhifadhi Misitu ya Jamii Zanzibar (JUMIJAZA) / Zanzibar community forestry network, facilitated by umbrella community-based organizations (CBOs) and CARE Tanzania Hifadhi ya Misitu ya Asili (HIMA) in collaboration with Department of Forestry and Non-Renewable Natural Resources (DFNR) in Zanzibar</li> </ul>	<ul style="list-style-type: none"> <li>• For trial payments, shares of funds were distributed to all participating villages based on (pro-poor and gender equality) social and environmental criteria</li> <li>• Funds paid to village-level Shehia Conservation Committee bank accounts and were used for community development projects selected and approved by village residents</li> </ul>
Mpingo Conservation and Development Initiative (MCDI)	<ul style="list-style-type: none"> <li>• Carbon revenues to be split by the beneficiary community and the NGO (as service provider) to meet transaction costs of expanding PFM facilitation and FSC to the village</li> <li>• Mechanism for distribution and use of financial benefits was being developed</li> </ul>	<ul style="list-style-type: none"> <li>• Benefit sharing likely to be based on approach already established for timber revenues under PFM/FCS facilitated by MCDI (payments to village natural resource committee for forest management costs and community development projects) working through village governments</li> </ul>
Tanzania Forest Conservation Group (TFCG) and Community Forest Conservation Network of Tanzania (MJUMITA)	<ul style="list-style-type: none"> <li>• Payments per village to be ultimately based on performance</li> <li>• For trial payments, payments were based on area of forest reserved, minus estimated leakage</li> <li>• Village assembly decided how much (if any) each person would contribute to community fund</li> <li>• Villages developed by-laws to set specific terms of benefit sharing, with MJUMITA guidelines available for consideration</li> </ul>	<ul style="list-style-type: none"> <li>• Individual cash payments/dividends paid to each registered resident of the village, including women, men and children (with payment to children collected by mother)</li> </ul>
Tanzania Traditional Energy Development Project (TaTEDO)	<ul style="list-style-type: none"> <li>• Funds allocated to stakeholders based on contributions to forest management and protection, e.g. village government and local militias involved in monitoring, patrols and conflict resolution</li> <li>• Payment to forest owners based on performance on implementation of resource management plan, the Ngitili size and carbon baseline data</li> </ul>	<ul style="list-style-type: none"> <li>• Financial incentives (payments) flow from Ngitili Association, to Ngitili Group, to Ngitili owner</li> <li>• For Ngitilis owned by households or institutions, not all village residents may benefit directly from carbon payments; however, other benefits are available to broader village (e.g. energy efficient stoves, conservation agriculture training, beekeeping, etc.)</li> </ul>
Jane Goodall Institute (JGI)	<ul style="list-style-type: none"> <li>• Money from carbon credits and other ecosystem services go to inter-village CBO (five members from each of seven participating villages)</li> <li>• Benefit-sharing mechanism informed by village survey of preferences for benefit-sharing options</li> </ul>	<ul style="list-style-type: none"> <li>• Test payments to each village based on performance-related criteria</li> <li>• Payments used for community projects approved by village assembly</li> <li>• District government plays facilitation and oversight roles</li> </ul>

Source: Field data and project documents



“The process was imposed from the top. It was dominated by big NGOs partnering with district governments to influence village land decisions. Even though the villagers were involved, their involvement was more about telling them about the project that had already been designed by the big NGOs. Also, given that REDD+ is such a new and foreign idea, to what extent do you expect the villagers to contribute ideas to an already designed project in ways that can change it significantly in their favor in case they do not agree with how the project has been designed?” Sub-village key informant interview with a ward councilor in one of the wards where REDD+ was implemented, Kilosa (July 2014)

While many of the targeted villages accepted REDD+, in both Lindi and Kilosa (MJUMITA and TFCG) some villages rejected it. This has been reported by several key informants.<sup>109</sup> Some villages chose not to participate, and others chose to participate early on but subsequently left the projects. Causes of local resistance were at least in some way related to the REDD+ process itself. Influential individuals in those villages spread rumors<sup>110</sup> about REDD+ being “another land grab scheme”. People were influenced by an earlier history of state ‘fortress conservation’,<sup>111</sup> fearing that REDD+ was another government plan to take their forest and put it under preservation where local people would be denied access. History and ‘rumors’ affected trust.<sup>112</sup> It appears that REDD+ projects faced challenges delivering appropriate and convincing information corresponding to REDD+ and in countering misinformation in timely fashion. As one key informant observed:

“The rushed nature of such typical top-down donor and NGO designed projects means that there is little time allowance for community members to have free discussions about the proposals being presented. Often you feel the dominating role of NGO and government representatives who bring the projects to villagers. I have participated in a meeting where those who opposed were not given enough time to be listened to; rather a vote was quickly held and the majority won without allowing the minorities who opposed to be heard. Some influential individuals among these minorities started to spread rumors that the project was a land grab scheme.” Key informant in Lindi, who currently works for the government but has also previously worked with conservation NGOs (2014)

During the project introduction stage and follow-up stages of the MJUMITA and TFCG, CARE and JGI projects, there was a prominent presence of project staff and district officials at village assemblies in order to promote the project or subsequently to distribute REDD+ dividends or other benefits.<sup>113</sup> Some people raised concerns about this, regarding the potential domination of the agenda and paternalism by district and NGO officials, as pointed out by sub-district key informants.<sup>114</sup> Nevertheless, project officials stated that their goal was for the village councils and village assemblies to be able to largely manage the project and payment process themselves in the future.<sup>115</sup>

The process at the village level was not adequately inclusive in other ways. For example, even though REDD+ piloting has been framed as pro-poor by the implementers, the distribution of the benefits and burdens was not equal among all the poor, particularly the poorest. A post-project brief by the Norwegian Embassy in Tanzania observes that:

109 Key informants interviewed include district officials, sub-district government and non-government officials and project implementation officials. Findings presented are based on triangulation of information across these informants.

110 The people interviewed called them rumors, but we think these fears were in fact legitimate. Land is, after all, being taken out of production.

111 Interviews with project implementers triangulated with information based on district and sub-district key informant interviews in Lindi and Kilosa.

112 Key informant interviews in Kilwa and Lindi, with a forest justice official and MJUMITA official, respectively.

113 District interviews with district officials that participated in the projects.

114 Key informants from selected ward and village councils in Lindi, Zanzibar, Shinyanga, Kigoma and Kilosa.

115 In Lindi, Zanzibar, Shinyanga, Kigoma and Kilosa, 2014.

“A recent evaluation of Tanzanian REDD+ pilot projects has shown that while many projects are working on activities that are designed to reduce poverty and increase incomes, those who depend most on forests (poorer households) are often not effectively targeted by project interventions.” Norwegian Embassy and the United Republic of Tanzania (Tanzanian REDD+ Pilot Projects: Policy Brief 2 n.d)<sup>116</sup>

The government land-use planning model adopted by the REDD+ proponents fails to address the ecological, sociocultural and economic factors that govern the movement of groups such as shifting cultivators, transhumance pastoralists and smallholder charcoal producers, whose practices have simply been assumed to be environmentally destructive without consideration of integrating such practices into a more sustainable land-planning model. REDD+ proponents argue that the objective of REDD+ (to reduce emissions) is incompatible with that of shifting cultivators (to clear forest for cultivation). But this remains to be investigated. It is known that if shifting cultivation involves long fallow periods, forests/vegetation can regenerate adequately. Such secondary forests could also capture carbon. To our knowledge, the possibility of increasing fallow lengths has not been investigated.

Herder–farmer conflict can be serious. While villagers frequently allocate land for pasture in VLUPs, the resulting plans are often not deemed legitimate by pastoralists themselves, who are often considered ‘minorities’ and/or ‘outsiders’,<sup>117</sup> and are thus not usually present during planning meetings.<sup>118</sup> These groups have had their livelihood activities restricted by the establishment of the village carbon forest reserves and land-use plans, and they have not been provided with viable long-term alternatives. It is the sedentary farmers who choose where pastoralists should graze their livestock. Some district officials with experience in village land-use planning have reported that often, allocated grazing lands lack the necessary infrastructure (e.g. water access, livestock dips, etc.) for both the livestock and herders. Some key informants reported that in villages where Maasai and other pastoralists were present, they were often not involved in REDD+ meetings.

Kilosa district, where some of the MJUMITA and TFCG projects were implemented, is historically considered to be one of the ‘hotspots’ of farmer–herder conflict in Tanzania, with some of the bloodiest herder–farmer conflicts in the country (Benjaminsen et al 2009). Other districts where REDD+ was implemented have also experienced some herder–farmer conflict (unrelated to REDD+), though less intense than in Kilosa. However, the REDD+ sites in Kilosa and elsewhere were strategically selected to avoid such high conflict areas. There is also a problem of livestock encroachment into protected forests including some of the REDD+ sites, which has been reported across study sites.<sup>119</sup> The pastoralist problem is less prevalent in southern coastal districts, but officials interviewed predicted that it could become serious in the future due to the ongoing influx of pastoralists who have been disenfranchised in conflict hotspots and see the southern coastal regions as their next frontier.<sup>120</sup> In Kilosa, MJUMITA and TFCG avoided the farmer–herder conflict problem by strategically choosing REDD+ pilot sites in mountainous areas that pastoralists do not frequent. This ensured a relatively conflict-free implementation of the project, except in one village where reportedly during one dry season Maasai pastoralists brought their livestock for grazing up the mountains and camped with their livestock in a VLFR allocated for REDD+. It took a court order to evacuate them.<sup>121</sup> Only one REDD+ pilot project (TaTEDO project) that we know of directly engaged with the pastoralists to enhance a

116 This policy note is one of seven produced by the Embassy of Norway in partnership with the Government of United Republic of Tanzania to profile some of the policy messages that have arisen from the implementation of REDD+ pilot projects in Tanzania.

117 Traditionally transhumance pastoralists had their own pastoral lands where they did not heavily mix with cultivators. The history of disenfranchisement of pastoralists by development and conservation projects has pushed them into lands traditionally occupied by cultivators, who see themselves as the original occupants or the majority.

118 With forestry and land officers in Lindi, Kilwa and Kilosa districts.

119 District key informant interviews with forestry and land officers in rural Kigoma and Mpanda districts.

120 Based on interviews with district officials, other (sub-district) key informants, and field observations.

121 Sub-village key informant interviews, 2014.

land-use approach that was created by the pastoralists based on indigenous management of pastures and natural vegetation.

The projects also created 'hard boundaries' between participating and non-participating villages, hence the VLUPs and REDD+/VLFRs sometimes created conflicts between villages.<sup>122</sup> While historically these villages shared forest resources across their common borders, the creation of financially lucrative pilot REDD+ reserves only in participating villages led these villagers to attempt to exclude their neighbors from trans-border forest access. Some REDD+ sites encountered conflicts between villagers' boundary claims versus official maps, leading to delays in implementation.<sup>123</sup> Some disputes involved non-participating villages that did not change their own practices, especially if they continued to use forests protected by participating villages. In addition, a few participating villages were accused by their neighbors of extending the boundaries into the other village's part of the forest reserve in order to benefit more from REDD+, after realizing the increase in the value of the forest due to carbon funding. Similarly, participating villages accused non-participating villages of starting boundary conflicts because they were jealous of being excluded from the REDD+ projects.<sup>124</sup> The restrictions on forest use in REDD+ project areas reportedly led to the increase of such restricted activities in neighboring villages, thus resulting in leakage.<sup>125</sup>

During one MJUMITA and TFCG pilot project stakeholder workshop, for example, one participant said:

"There are challenges in conservation and protection of VLFRs [created for REDD+]. [In] Ruhoma village, ... people from the neighboring village (Milola Magharibi) are farming in the VLFR. These farmers were taken to village land council, ward tribunal, and district natural resources office. But nothing has been done. It seems that there are people who are trying to protect these farmers. I think it is better these farmers be taken to a court of law." MJUMITA and TFCG (2014: 16)<sup>126</sup>

A participant from another village (Nandambi) reported that

"the condition of VLFR is not good; the forest is attacked by fire, which comes from the neighboring village. During patrols, 15 timber [sic.], 2 saws were found. The timbers [sic.] were used to make tables for the village office." MJUMITA and TFCG (2014: 16)

Another said:

"[In] Mkombamosi the condition of the VLFR is good. It was affected by shifting cultivation, but since last year, 2013, farmers got training in conservation agriculture, and now they have started to practice it. ... The condition of the VLFR in all zones is good except in the Noto zone. The forest has been encroached by people from one family. These law-breakers were summoned by the village council but they are still continuing. During carbon stock assessment, surveyors were attacked by the law-breakers (Libwage family), this makes patrols ... difficult." MJUMITA and TFCG (2014: 16–17)

122 Interviews with MJUMITA and TFCG, JGI and CARE field officials, 2014.

123 Key informant interviews with district and project implementation officials in Kilosa, Lindi, Kilwa, Mpanda and Kigoma.

124 Key informant interviews with district and project implementation officials in Kilosa, Lindi, Kilwa and Kigoma.

125 Ibid.

126 MJUMITA Community Forest Project (Lindi) Workshop Proceedings on Sharing the Climate, Community and Biodiversity (CCB) Standards and Verified Carbon Standard (VCS) Project Design Documents, Project Implementation Reports and Monitoring Plan to Lindi Stakeholders. Conducted on 4<sup>th</sup> February 2014 at MM Hotel, Lindi Report prepared by Mwila Mbegu, TFCG Monitoring Officer, February 2014.

In the early stage of the Kilosa project, there were conflicts between mountain villagers and lowland villagers, as well between the implementers and villagers. The conflicts resulted from relocation of mountain villagers to pave a way for the establishment of VLFRs for REDD+ purposes, and villagers feared that REDD+ was a form of ‘land grab’.<sup>127</sup> In addition to fears of land grabbing, mountain villagers also complained about losing income, as the fertile mountain land is what they depended on for their survival.

Another disagreement was reported between villagers and charcoal makers and loggers, with the latter challenging the size of land to be demarcated as VLFRs.<sup>128</sup> While the disagreeing villagers were subsequently persuaded, some ‘illegal’ logging and charcoaling continued after the VLFR was established.<sup>129</sup>

According to key participants in the implementation of REDD+ projects in sites visited, through constructive conflict resolution, project implementers and facilitators have been able to address some – though not all – conflicts by engaging with the villagers to address their concerns.<sup>130</sup>

Benefits notwithstanding, in addition to these conflicts, conservation also comes with other burdens to participants. Such burdens include wildlife–human conflict, where adjacent communities lose crops to elephants, monkeys, bush pigs and warthogs or people are attacked or killed by animals.<sup>131</sup> In REDD+ project sites villagers also incur burdens in enforcing forest protection rules, such as conducting regular patrols against illegal harvesting that involve walking long distances into the reserve, and firefighting.<sup>132</sup>

“Villages working with MCDI are establishing forest reserves far from village centers, on lands not prioritized for agriculture. Their opportunity costs are thus relatively low. In contrast, the TFCG/MJUMITA project is working with villages to reduce deforestation in areas closer to village centers. There is thus a potentially greater chance for reduced deforestation and forest degradation (and carbon credits), but also higher opportunity costs and greater challenges in balancing REDD+ with other land-use needs. A key component of all the projects is ensuring that all participating communities understand and agree to the benefits, as well as the risks.” TNRF et al. (2011: 12); see also Campese (2012: 14)

Some villagers are also not fully satisfied with the amount of payments relative to the costs and burdens associated with conflicts and ongoing surveillance, as well as the potential forgone economic opportunities due to REDD+. While some payment recipients had fairly positive perceptions of REDD+, they assumed the future payments would be greater.<sup>133</sup>

Field observations at selected REDD+ project implementation sites and interviews with key informants show that initial payments were based on villagers’ minimal efforts and interest, and thus do not necessarily lead to long-term changes of behavior.<sup>134</sup> At the time of the study, alternative livelihood

127 Key informant interviews – sub-village, Kilosa, 2014.

128 Ibid.

129 Based on interviews with several anonymous key informants (Village Councillors and Resource Management Committee members) at several wards in Kilosa district.

130 Interviews with district and project implementation officials in Kilosa, Lindi, Kilwa, Shinyanga and Kigoma.

131 Interviews with Lindi District Natural Resource Office, June 2014.

132 Key informant interviews with project implementers 2014 with CARE Tanzania; MCDI; TFCG and MJUMITA; TaTEDO; JGI; and interviews with several anonymous key informants (village councillors and resource management committee members) at several wards in visited districts.

133 Interview, sub-district key informants, Kilosa district, September 2014.

134 Key informant interviews with Kilwa, Lindi, Kusini Unguja, Kigoma, Shinyanga, Kahama; district and sub-district interviews with natural resource management and forest officials, and sub-district (ward and village) elected councilors.

activities were yet to deliver significant income to communities to be considered self-sustaining. This is in contrast to the other (non-REDD+) benefit-sharing arrangements studied, whose incentive structures are less dependent on heavy external sources of funding. The MCDI forest certification scheme, for example, depends on revenue from sustainable timber production in VLFRs. The revenue from timber that accrues directly to the participating villages is, therefore, a strong incentive for villagers to participate in the scheme.<sup>135</sup> The Hifadhi Ardhhi Shinyanga (HASHI) (meaning Shinyanga land conservation) programme is built on creating fodder banks for villagers. In addition to protecting the land, the vegetation in the fodder banks is used in rotation by local pastoralists to feed their livestock, which creates a strong local incentive to create and sustain them.<sup>136</sup>

Community perspectives, as gauged from key informant interviews at the sub-district level with representatives of villagers,<sup>137</sup> were mixed. Among the beneficiaries of trial payments, villages have expressed satisfaction with the payments used for household needs and village development projects. However, they also expressed concerns over the uncertainty of future payments, which would likely affect their future commitments to protect the established REDD+/carbon forests. As one key informant stated:

“Villagers have fears of being cheated by the REDD+ implementers. They have put a lot of work to create these forest reserves for carbon storage. Some groups of forest users such as charcoal makers had to give up their livelihood activities from the forest to allow for the forests to recover. Also villagers are putting a lot of effort to guard these forests from use by outsiders and those who do not support the project. If there will be no future carbon payments after all the work they have committed to creating carbon forests, villagers will give up.” Sub-district key informant interview, Kilosa district, July 2014.

### 5.2.3 REDD+ implementation at the district level

REDD+ projects in Tanzania have had significant interaction with subnational (particularly district and village) government officials, leading, among other things, to “a concrete impact on policy decisions at the district level where there has been significant interaction with government officials leading to changes in land classifications and benefit-sharing agreements for REDD+ on government forest land” (Deloitte 2012: 3). This is due to both the decentralization of administration in forestry and land sectors, as well as political decentralization to the districts. It has provided the institutional legal framework for district officials to support the REDD+ projects administratively and legally, while simultaneously implementing relevant policies of several central government ministries including the MNRT, MLHHS and Ministry of Agriculture, Livestock and Fisheries. As mentioned previously, this district–NGO relationship in the context of decentralized governance was an important basis for using districts as entry points for this study. This section examines the relationship of REDD+ projects to district governments.

The overarching feature of the pilot projects is their financial contribution to conservation. It is evident that the contribution of REDD+ to funding conservation of coastal forests – from one donor alone (Table 14) – surpasses by far the typical megaproject funded by multiple actors in coastal forests, as seen in the previous chapter (Table 12). REDD+ was, thus, a rather welcome initiative for its financial contributions as expressed by the interviewed districts officials in all visited sites.

Institutionalizing REDD+ with reliable budgetary/financial commitments can improve forest governance. At the district level, some REDD+ funds were used to support important district forestry

135 MCDI Interviews, 2014 op cit.

136 Key informant interviews with district forest officials and National Agroforestry Center, Shinyanga, July 2014.

137 Interviews with elected village and ward councillors and members of natural resource management committees.

and land activities as part of REDD+ implementation, as reported in multiple interviews with district officials<sup>138</sup> and summarized by one:

“The REDD+ pilot projects’ funds facilitated various tasks of mutual interest between the NGO implementer of REDD+ and district governments, including forest surveying, helping villagers to establish VLUPs or VLFRs, including by-laws to govern them. These are responsibilities of district governments. However, district councils often do not give them high priority in their budget allocations. So REDD+ funding to these activities was a great contribution.” District interview with district natural resource management officer, Kilosa 2014

Nevertheless, this support also came with drawbacks. Although the NGO funding has facilitated district governments’ tasks, NGOs also carried out some of the responsibilities that should have been conducted by the district governments, such as the establishment of VLUPs and VLFRs.

At the district level, a past history of interactions between district officials and NGO project implementers helped to increase trust between these actors even before REDD+. <sup>139</sup> The REDD+ pilot projects further developed that trust, through engagement with technocrats and administrators (forest officials, land officials and other district officials).

In mainland Tanzania, forest authority is decentralized to districts for certain categories of forests. Hence they were entry points to access village land for REDD+ pilots, as districts have the discretion to make certain forestry and land decisions without direct involvement of the central government. As a result, district officials felt that they had strong ownership of the REDD+ pilot process and some discretionary powers to shape REDD+ practice (e.g. powers of establishing VLFRs, helping the formulation of village by-laws).

The NGOs (especially MJUMITA and TFCG) and district officials successfully fought to interpret land laws (particularly Village Land Act, 1999) in favor of the villagers, subsequently creating VLFRs in village lands out of what the forest sector would conventionally consider to be general public lands, as mentioned previously. The NGOs simply interpreted an already existing law (the Village Land Act), which gives legal powers to villagers to manage forests on their lands and declare them as VLFRs. What prevents most villages from doing so is a lack of knowledge of such rights and/or lack of resources to undertake the expensive process of surveying, demarcation, and gazetting. The NGOs helped villagers by educating them and providing the resources needed.<sup>140</sup>

Under decentralized forest management, district councils can facilitate such procedures. Therefore, NGOs also lobbied district councils to support the project and to facilitate the process.<sup>141</sup> As already reported, at the district level these efforts have often been resisted by the central government (TFS) managers present at district level, due to perceived loss of territories.<sup>142</sup> At the district level, while the district governments overall supported the actions, there were internal conflicts. On the one hand, administrators and technocrats were more supportive, perhaps because during the REDD+ piloting, and in future activities, they have a role as technical and legal facilitators and were rewarded accordingly by the projects or by villagers through established benefit-sharing arrangements. This is better than the status quo, where they often serve both the district and central government authorities as administrators, revenue collectors and law enforcers, but often without corresponding rewards

138 District key informant interviews in Kilwa, Lindi, Kilosa, Mpanda, Kigoma and Shinyanga, 2014.

139 Key informant interviews with district and project implementation officials in Kilosa, Lindi, Kilwa, Shinyanga and Kigoma.

140 Interviews with NGO project officials in Kilwa, Lindi and Kilosa districts.

141 Ibid.

142 District key informant interviews in Kilwa, Lindi and Kilosa districts.

Table 14. Estimated budgets of studied coastal and interior districts REDD+ pilot projects

Actor	Location	Estimated budget (USD)	Project name	Objective of project
CARE Tanzania Hifadhi ya Msitu ya Asili	Zanzibar: Unguja and Pemba islands	5,500,000	HIMA/ Piloting REDD+ in Zanzibar through Community Forest Management	Ensuring REDD+ benefits contribute to reducing poverty and enhancing gender equality by promoting CoFMAs through: addressing drivers; improving governance, including equitable benefit sharing; ensuring that the poor benefit and are not further disadvantaged; controlling leakages, e.g. domestic woodlots and income-generating alternatives; mainstreaming gender
Mpingo Conservation and Development Initiative (MCDI)	Kilwa district	1,900,000	Combining REDD+, PFM and FSC Certification in South-eastern Tanzania	Using financial flows from REDD+ to expand PFM and FSC certification
Tanzania Forest Conservation Group (TFCG) and Community Forest Conservation Network of Tanzania (MJUMITA)	Lindi and Kilosa districts	5,900,000	Making REDD+ Work for Communities and Forest Conservation	Generating equitable financial incentives for communities to sustainably manage or conserve Tanzanian forests; performance based
Tanzania Traditional Energy Development Project (TaTEDO)	Shinyanga and Kahama districts	2,900,000	Integrating REDD+ and pastoralism in semi-arid areas	Integrating REDD+ with Ngitili indigenous silvo-pastoral system (traditional method for natural forest regeneration); promoting sustainable forest management and reducing greenhouse gas emissions through carbon market incentives
Jane Goodall Institute (JGI)	Kigoma Rural/Uvinza and Mpanda districts	2,800,000	Building REDD+ Readiness in the Masito Ugalia Ecosystem	Building awareness and enhancing capacity and governance for local communities and government to administer and benefit from REDD+ in high biodiversity forests, by facilitating establishment of inter-village CBOs to manage forests, replicating scalable remote sensing methods, community and CBO capacity building to monitor carbon stocks, and community mechanisms for equitably sharing carbon revenues
Sub-total — Coastal Forests	Zanzibar (Uguja and Pemba); Kilwa, Lindi, and Kilosa districts	13,300,000	REDD+ pilot projects in coastal forests of Tanzania	
Sub-total — Interior Forests	Shinyanga, Kahama, Kigoma, Rural/Uvinza and Mpanda districts	5,700,000	REDD+ pilot projects in interior miombo woodlands of Tanzania	
<b>Grand total</b>		<b>19,000,000</b>		

Source : Campese (2012)

(e.g. budgets). In all districts visited, administrators tend to welcome donor funds.<sup>143</sup> On the other hand, there was relatively strong opposition from district executives (who are officially appointed by the central government) and elected officials (district councilors), though not from the majority. For them this change represented an opportunity cost, namely: loss of potential timber and charcoal license revenues (even when the royalties are collected by the central government, the district charges the licensing fees, and is entitled to 5-8% remittance of the total). Even when such forests remain unprotected and are converted to agriculture, the district stands to benefit more, as they collect 100% of traded agricultural produce cess/tax. In case study sites like Kilwa and Lindi, where lucrative cash crops, such as sesame, in particular, or in Urambo where tobacco cultivation is lucrative, forest clearance (shifting cultivation) to grow these crops represents a good source of revenue to the district councils.<sup>144</sup> But it has also been mentioned that some local government officials and politicians could possibly be involved in illegal timber and charcoal trade, and the changes to more legally protected reserves represents a threat to their economic interests. There were councilors who claimed that their opposition was a response to the electorates in their constituencies who have concerns about REDD+ being a possible land grab scheme.<sup>145</sup>

In addition, there were delays in final approvals for VLFRs by the FBD. There were also delays in the approval of VLUPs and Issuance of Village Land Certificates by the Land Commissioners Office. District interviewees attributed the delays from the FBD partly to the mentioned conflicts of interest. Others attributed delays in both ministries to the lack of political interest to support REDD+ pilot projects, because their piloting process bypassed central government authorities, as the donor (Royal Norwegian Embassy) decided to work directly with districts and NGOs. Yet, others explained the delays as part of typical bureaucratic red-tape involved in these ministries.<sup>146</sup> Despite these challenges, the coalition of NGOs, district technocrats (particularly land-use planning team), district administrators, and villagers prevailed mostly because their case had the strong legal support of the Village Land Act 1999. This sets a legal precedent. TFCG and MJUMITA lobbied for the National REDD+ Policy to incorporate interpretations of national land laws that are consistent with communities' full tenure rights (MJUMITA and TFCG 2011: 1). Specifically, they agreed that forests outside of government reserves should be considered to be on village land, unless it is proven that no community uses or plans to use that land. They argue that "misrepresentation of unreserved forests within village boundaries as being general land/unclaimed land, considered 'open access' leaves them open to land grabbing and exploitation without the consent of the village thereby increasing the risk of deforestation" (MJUMITA and TFCG 2011: 1).

Furthermore, during the period when REDD+ piloting took place, REDD+ "raised the forest agenda in the political platforms in their districts". Echoing views of several district officials interviewed across sites, one district official in Shinyanga stated:

"These days, certain sectors receive more attention because they have issues that have generated high political interest. For example, if you talk about fighting HIV or malaria, that is important, and a lot of money is sent to the health sector to fight those diseases. Even here in the district. But if you talk about forestry or environmental problems no one pays much attention. REDD+ has started to change that. District politicians have started to pay attention. After seeing the money being invested in REDD+ they started to realize that forestry and environmental issues are important too."

In a multilevel governance context, the NGO-district REDD+ coalition results from a history of mutually beneficial arrangements between NGOs and districts, including international and national

143 District key informant interviews in Kilwa, Lindi and Kilosa, Kigoma/Uvinza, and Shinyanga districts.

144 District key informant interviews in Kilwa, Lindi and Urambo districts.

145 District key informant interviews in Kilwa, Lindi, Kigoma/Uvinza, and Kilosa districts.

146 District key informant interviews in Kilwa, Lindi and Kilosa districts.



NGOs funding of forestry, conservation and land-use projects. Objectives and approaches differed across districts and REDD+ projects to tackle different perceptions of deforestation and degradation drivers. For example, in Kilosa and Lindi, TFCG and MJUMITA emphasized establishing VLUPs and VLFRs,<sup>147</sup> whereas in Shinyanga, TaTEDO's emphasis was on conservation of traditional fodder banks (Ngitilis) in agro-pastoral lands without formalizing VLFRs or land-use plans.<sup>148</sup> In Kigoma and Mpanda, JGI established inter-village conservation committees to conserve carbon forests.<sup>149</sup> Due to a different legislative context in Zanzibar, CARE has capitalized on increasing the number of CoFMAs between the state/central government and local communities.<sup>150</sup>

Instead of necessarily addressing the main deforestation and degradation drivers, REDD+ projects have addressed only a few of the proximate, more observable drivers (particularly local human activities, such as agricultural expansion, that directly impact forest cover) and none of the underlying ones. Among interviewees, a few people referred to the role of driving forces or fundamental social processes, e.g. human population dynamics or sector and trade policies (or failures thereof) that underpin the proximate causes and either operate at the local level or indirectly from the national or global level. As one agricultural officer interviewed said:

“We may blame the shifting cultivators. But the politicians encourage migrant farmers to produce more in order to increase farm produce for trade, government taxes on food security. They blame local residents for being lazy and not producing enough. So when migrant farmers come and open new lands they are often encouraged by the local politicians regardless of the environmental consequences. The politicians claim that they are just following the central government policy and directives now focused on the ‘Kilimo Kwanza/Agriculture first’ motto.” District interview, 2014, with District Agricultural Officer, Rufiji, September 2014.

Projects including CARE, TaTEDO and JGI focused on addressing deforestation and degradation by providing incentives to smallholders. However, research by REDD+ shows that their project assumptions about deforestation and degradation – particularly the dominant role of charcoal burning as the main driver of deforestation and degradation – were subsequently refuted by the actual research (Ball and Makala 2014).<sup>151</sup> Based on this experience, Ball and Makala make the following observations:

“We wrote a REDD+ project proposal based on the assumption that the biggest local driver of deforestation would be charcoal production. Our plan was to develop some kind of sustainable charcoal initiative subsidized by carbon offset sales derived from REDD+ approaches [...] Initially we talked to lots of stakeholders whose activities led to deforestation and forest degradation. Focus groups included farmers, livestock keepers, timber traders and makers, charcoal makers and traders, petty traders, and village leaders [...] But the most important analysis came later, and led to a significant project redesign in 2012. We did a rough calculation of likely carbon losses from each of the four deforestation drivers. We had some data, but not on all of the variables we needed to know, so we used expert estimates. This introduced a major element of uncertainty, so we added minimum and maximum likely extremes to provide a range around the best estimate on each variable.

[...] Rough though they were, these calculations gave us an order of magnitude estimate for each driver of deforestation. But they also highlighted just how little we actually knew. In fact, charcoal production almost certainly has a negligible impact (at present – we expect it to climb sharply in

147 District interview with district natural resource management officer in Kilosa, 2014.

148 District interview with district land officer and district forestry officer in Shinyanga, 2014.

149 District interview with district land officer and district forestry officer in Kigoma, 2014.

150 District interview with district agriculture and forestry officer in South Unguja, 2014.

151 Interview with MCDI staff, Kilwa, May 2014.

coming years) compared with fire, which we estimated to be the leading driver of forest carbon loss, accounting for about 60 per cent more than the next highest driver, agriculture [...] This was our first practical lesson in designing a REDD+ program. We realized that we were focusing on the wrong driver: charcoal was not the answer—fire management was, even though fire is the least well-understood of the four drivers, with by far the widest range between minimum and maximum estimates.” Ball and Makala (2014: 9–11)

### 5.3 REDD+ at the national level

In Tanzania, forests were previously primarily under central government authority. REDD+ has challenged the conventional centralization of power by engaging districts and villages more than the central government. NGOs and districts worked together, leveraging REDD+ to empower districts and villages. This section discusses the relationship of the REDD+ projects to the central government.

#### 5.3.1 Central or district authority?

There is a history of tension between the central and district governments over forest authority in Tanzania (see Mbwambo 2015 for more detail). The Forest Policy of 1999 (URT 1998) and the Forest Law (URT 2002) created the legal basis for community-based forest ownership. According to interviews with district officials, even when most forests were owned by the central government, in practice these forests were ‘managed’ by the local/district authorities via district natural resource officers and DFOs, in the absence of central government officials.

As mentioned previously, even though the Forest Act (URT 2002) decentralized forest governance by creating a legal basis for CBFM, many forests are classified by the National Forest Policy (URT 1998) as ‘forests on general lands’, which lack clear tenure; and both the central government forest reserves and more particularly the forests on general public lands have been characterized by poor management, governance, and revenue collection. In order to address these problems, the central government created the TFS on 30 July 2010. The agency is part of the FBD of the MNRT.

“TFS has been given the mandate for the management of national forest reserves (natural and plantations), bee reserves and forest and bee resources on general lands. TFS as an Executive Agency will enhance the management and conservation of forest and bee resources for sustainable supply of quality forest and bee products and services. The FBD will remain with the responsibilities of development of the forest policy, laws and regulations and overseeing their implementation in the sector.”<sup>152</sup>

Within the multilevel governance framework (Figure 2), today, central government officials representing the TFS are appointed to work in the districts as DFMs alongside the pre-existing local government DFOs. One mandate of these central government DFMs is to collect revenue (royalties, fees and fines) from central government forest reserves and forests on general lands. One particular source of tension between these two entities is that many forests historically treated as forests on general public lands are now increasingly regarded as VLFRs; the DFB took advantage of the lag in the Forest Policy in recognizing the extent of these village forests to collect revenues from them. Reportedly, DFMs from TFS expected to continue to do so. On the other hand, DFOs who worked for the district councils supported the REDD+ NGOs’ agenda to promote the status and extent of VLFRs. This has been cited by district-level respondents (key informants of both district councils and central government’s TFS) as an ongoing and/or latent source of intermittent conflict. However, it appears that the TFS is now recognizing the true extent of VLFRs as reflected in the new TFS strategic plan

152 <http://www.mnrt.go.tz/agencies/tanzania-forest-services-agency-tfs>. Accessed June 2016.

(URT 2015), although this recognition is still contradicted by the National Forest Policy and National REDD Strategy.

### 5.3.2 The REDD+ process

A letter of intent was signed with the Government of Norway in 2008 with the proposal to develop a National REDD Strategy and conduct in-depth baseline studies to inform REDD+ implementation (see Kweka et al. 2015). The NRTF, initially comprised of eight technical officers from government, was appointed in 2009, as an interim body to oversee REDD+ readiness activities (Kweka et al. 2015). That same year, Norway moved ahead with REDD+ piloting by reaching agreements with NGOs to implement multiple projects. The NGOs designed the projects and received funding from the Royal Norwegian Embassy for implementation. The NRTF was consulted during approval of the pilot projects;<sup>153</sup> technical working groups,<sup>154</sup> including some civil society representatives, were established in 2011. The Royal Norwegian Embassy grant also provided support to the Tanzania government (e.g. FBD in the MNRT) and academic/research institutions (e.g. Faculty of Forestry, Sokoine University of Agriculture, and the Institute of Resource Assessment, University of Dar es Salaam), since they were part of the same program and were connected to the REDD+ pilot projects to provide expert/technical support, as well as to conduct research.

There was, however, limited coordination and communication between national-level policy processes and the subnational-level REDD+ piloting. The design and implementation of REDD+ pilot projects on the Tanzania mainland largely bypassed the National REDD+ Policy development process, which was moving relatively slowly. A number of factors led to limited engagement between national REDD+ proponents and key central government officials. For example, the Task Force is not a permanent structure of the government, and some argued that its involvement might be of little consequence to the national government. There was also a general weak representation of CSOs and communities in the Task Force. The extent to which REDD+ project CSOs and community voices were represented in the national-level policy process seem to have been limited, as reflected in the more centralized approach to REDD+ benefit sharing of the resultant National REDD Strategy (URT 2013), which was not their preferred option.<sup>155</sup> While the NRTF held zonal meetings to get input from regional and district-level staff, these were less well attended by CSOs and rural community members.<sup>156</sup>

Given this disconnect between the REDD+ pilot projects and the national REDD+ processes, the mid-term evaluation of the REDD+ pilot projects portfolio made the following observation:

“The portfolio as a whole is clearly testing key REDD+ policy issues through project implementation across the country. However, it is difficult to determine how these projects are influencing national policy. REDD+ Task Force members are knowledgeable of the projects and have conducted frequent sites visits yet it remains uncertain how project results are influencing the policy debate.” Deloitte (2012: 3)

The fact that the implementing NGOs were able to largely by-pass the National REDD+ Policy development process and simply engage with districts and villages meant that the national government had little ownership of the REDD+ piloting (but see Box 3 on Zanzibar). According to participants, there were no significant exchanges between the national-level REDD+ policy process and the pilot experiences. National UN-REDD program evaluators (Lutz and Chamshama 2012) observed that:

153 Interview with an official involved in the REDD+ projects funded by the Royal Norwegian Embassy, Dar es Salaam, March 2014.

154 Interviews in Njaiidi, and Mechack, 2014; TFCG and MJUMITA Headquarters, Dar es Salaam.

155 Key informant interviews with project implementation officials in Kilosa, Lindi, Kilwa and Kigoma.

156 Ibid.

### Box 3. Zanzibar

REDD+ evaluators state that, “While the CARE project in Zanzibar has had considerable interaction with the Zanzibar national/central government officials, it is an outlier within the group”.<sup>a</sup> In this particular case, how did the higher-level engagement of the Zanzibar central government translate downward into local level governance policy and practice?

In the current study,<sup>b</sup> the CARE project in Zanzibar revealed a major difference in forest governance between the Tanzania mainland and Zanzibar in general and their approaches to REDD+ implementation in particular. In Zanzibar, where forestry is more centralized, the implementing NGOs used the central (Zanzibar) DFNR as an entry point to implement REDD+ in Villages (Shehia) through the establishment of CoFMAs between the Zanzibar government and local communities. The greater ownership of the REDD+ process in Zanzibar by its central government allowed better development of a Zanzibar national vision of the future of REDD+ beyond the pilot stage, and stimulated high-level policy discussions in direct response to the process of REDD+ piloting.

Yet, conversely, in comparison with the mainland experience, there was a feeling of reduced local ownership of the process as revealed by the district interviewees who felt that they were merely implementing high-level (central government) decisions.

a Zanzibar is semi-autonomous so it has its own national/central government apart from the central government of Tanzania.

b Interviews with officials involved in REDD+ implementation in the Zanzibar DFNR.

“[The Tanzanian] government’s performance was hampered by limited national ownership. This is partly connected with a financial management capacity assessment which determined that the level of risks was high related to both the capacity to manage a UN-agency-funded Programme and the financial management capacity [in MNRT]. There was other relevant history as well. On that basis the UN-REDD Programme could not responsibly transfer the grant funds to MNRT to be managed in a recipient-executed manner without significant capacity building and additional safeguards. But managing the funds by the UN agencies caused the MNRT not to fully engage in the program resulting thus in a reduced national ownership.” Lutz and Chamshama (2012: vi)

At district level, REDD+ implementers have engaged the DFOs more than the DFMs<sup>157</sup> and favored villagers’ land rights over centralized control. This helped to further distance the projects from the national-level discourse and policy processes; led to a less favorable view of REDD+ by DFMs as compared to the DFOs; and heightened the tension between district forest officials and central government forest officials working at the district level, as described earlier.

The National REDD Strategy process also reflects tensions emerging from REDD+ with regard to the design of the national funding mechanism. Central government actors preferred a National REDD+ Trust Fund, with funds controlled by the central government and distributed to subnational actors. CSOs preferred payment systems where funds would go to specific subnational REDD+ actors/projects, or systems that involve a mixture of the two.<sup>158</sup> The National REDD+ Trust Fund was adopted, however (URT 2013). Also, as noted earlier, despite efforts by CSOs to correct the misrepresentation of the extent of VLFRs in an earlier draft, the final National REDD Strategy still failed to explicitly acknowledge the extent of VLFRs. Even during a policy workshop organized by CIFOR in March 2016, the officials from Tanzania’s FBD and TFS could not agree with officials

157 District interviews with natural resource management and forest officials in Kilwa, Lindi, Kisarawe, Kusini Unguja, Rufiji, Kigoma and Shinyanga.

158 Interviews with representatives of MJUMITA, TFCG, TaTEDO, and JGE REDD+ projects, and with DFOs in Kilosa, Lindi, Kilwa, Shinyanga and Kigoma, 2014.

from the MLHHS and TFCG on the divergent interpretations of Land and Forestry Laws regarding general lands.<sup>159</sup>

## 5.4 Legitimacy of REDD+ interventions

We use the concept of legitimacy to consider the extent to which participating actors, particularly villages, accept REDD+ initiatives and would thus be more likely to accept their associated strategies and land-use goals. Legitimacy refers to the democratic nature of decision-making processes and reflects opportunities for representation and participation, as well as the transparency of such processes (Beisheim and Dingwerth 2008). Procedural legitimacy refers to participatory processes and “depends on the degree to which those affected by [decisions] have been included in the decision-making process and have had the opportunity to influence the outcomes” (Young 2000: 5–6). The legitimacy of REDD+ initiatives is shaped by who is at the table (which levels, and which sectors), how representative they are of diverse interests, and how trusted related actors or institutions are, given the historical context.

### 5.4.1 Transparency and accountability

Perhaps because the idea of REDD+ and carbon emissions is new, foreign and technically complex, REDD+ projects faced a high burden for ensuring transparency and accountability as they articulated REDD+ objectives with other actors in practice. This includes transparency and accountability in the operations of, among others, the REDD+ implementers, district officials, governments (village councils) and their various committees (e.g. natural resource committees, land adjudication committees, land tribunals, finance committees, etc.).

A key component of operationalizing transparency and accountability is timely information sharing, in project conceptualization, design, implementation and monitoring. Information should be accessible to all parties, including communities, using appropriate languages and written and oral mediums, particularly in cultures with strong oral traditions, such as in Tanzania. REDD+ projects in Tanzania, as elsewhere, have faced some challenges in delivering appropriate information in timely fashion. Adequate and early provision of information to the villagers, as part of ‘informed consent’ processes, is key to enabling villagers to make more informed decisions. Community members need time to fully understand and discuss the project and its implications. Also, benefits notwithstanding, conservation, even under REDD+, comes with burdens to participants. Some of the reported burdens include: the time and effort spent in protecting the newly created REDD+ forest reserves against encroachment from forest users who are not interested in REDD+; fire fighting in REDD+ forest reserves; and increased human–wildlife conflicts (e.g. monkeys from the forests invading farms and eating crops due to an increase in wildlife in REDD+ forests). Village governments also experimented an increase in land and forest disputes related to the violations of land-use plans and forest protection for REDD+.

Another aspect of accountability is being able to verify agreed commitments – and being answerable to other parties if a given party fails to meet such commitments. Communities and others implementing REDD+ have performance-related responsibilities to which they will be held accountable, e.g. emissions reductions by the communities and REDD+ incentives including payments from NGOs/donors. However, given the heavy presence of district officials and the REDD+ project officials during the distribution of REDD+ funds in villages, it is unclear how local-level accountability related to REDD+ funds would have played out in the absence of this heavy oversight role of the intervening actors. Also, the process was designed to enforce accountability of villagers and their government to

159 Authors’ personal observation during CIFOR policy workshop held in Dar es Salaam, Tanzania, in March 2016.

NGOs/donor money, but not necessarily reciprocally designed for villagers to demand accountability from the implementing NGOs/donors if they did not deliver, or misused the promised resources.<sup>160</sup>

REDD+ pilot projects have sought to improve forest sector accountability at the local level. For example, by providing an opportunity to further PFM, REDD+ pilots have helped to nurture the kind of local political oversight that forest stakeholders stress as important for successful forest governance, particularly through enhancing capabilities of local institutions, namely village councils, village natural resource committees and village land committees. In addition, through helping to clarify and resolve forest land tenure rights conflicts, REDD+ pilots that have established legally recognized village forests have assisted in reducing opportunities for corruption that can arise from less regulated access to forests on general lands.<sup>161</sup> Nevertheless, these efforts will not be replicable without a broader institutional mechanism to address the more systemic problem of corruption and lack of accountability at higher levels involved in policy and law making and enforcement.

#### 5.4.2 Participation and representation

At village level, local communities should be able to say yes or no to REDD+ projects, as well as to specific benefits and costs, especially those affecting their rights to lands and resources.<sup>162</sup> They should be engaged in the design of benefit-sharing mechanisms so that they reflect local understandings of fairness and equity (McDermott et al. 2013).

Key informant interviews in all REDD+ pilot sites indicated that implementers understood the importance and attempted to enhance participation of villagers during the project implementation. Nevertheless, participation is challenging, and representation goes beyond participation (Ribot 2011). It is imperative that multiple groups have their voices heard, and that their needs are taken into account during the decision process and outcomes. Fair and effective representation, particularly of vulnerable people, is an important factor in the governance of land decisions and benefit sharing and increases their legitimacy.

Effective participation and representation of local people in projects require not only resources but also time to engage with the beneficiaries or participants. This is a critical factor in ensuring equitable sharing of both benefits and burdens. Only one REDD+ pilot project (TaTEDO) directly engaged with pastoralists to develop a land-use approach based on the pastoralists' indigenous management of pastures and natural vegetation. This provided an alternative and contrasting model to those used by the other projects. The TaTEDO project was specifically designed so that REDD+ was compatible with the indigenous pastoralist land-management system. The pastoralist problem is of interest all across Tanzania, as there are growing pastoralist populations in virtually all the visited sites (except Zanzibar). The pastoralist problem, thus, needs to be addressed in a more inclusive way in all land-use decisions, rather than choosing sites relatively isolated from such conflicts.

Gender equality is also important in land-use decisions and benefit sharing, as REDD+ will have gender differentiated impacts, due in part to the different powers, roles, rights and responsibilities of women and men in forest governance. However, numerical participation is not always equal to representation. MJUMITA and TFCG in Lindi and Kilosa reported using a method whereby women and marginalized groups were able to meet in smaller sub-village meetings, where they might be more willing to speak than at the subsequent large village assembly. Across six Tanzanian REDD+ project sites, in the early stages of the REDD+ initiatives, data from a village focus group exclusively for women indicated that women only demonstrated a basic understanding of REDD+ in 43% of villages,

160 District officials and sub-district key informant interviews in Kilosa, Lindi, Kilwa, Shinyanga and Kigoma.

161 District and project implementation officials in Kilosa, Lindi, Kilwa, Shinyanga and Kigoma.

162 See UN-REDD+ FPIC guidance (2013).

relative to the village as a whole (mixed focus groups), where 74% had a basic understanding (Larson et al. 2015). Two years later this gap had closed.<sup>163</sup>

### 5.4.3 The role of history

The findings from interview research demonstrate that history matters: the legitimacy of REDD+ is contingent on stakeholder relations as shaped not only by REDD+, but also by prior interventions and community experiences and interpretations of those interventions. In both Lindi and Kilosa, some villages resisted REDD+. They chose not to participate, meaning that FPIC was exercised, at least in MJUMITA and TFCG sites, but it also means the legitimacy of REDD+ was challenged by some villages.

Villages opposed REDD+ for a variety of reasons, but previous experiences played an important role: some people believed REDD+ was ‘another land grab scheme’, or ‘a government plan to take their forest and put it under preservation where local people would be denied access’.<sup>164</sup> Interviewees among REDD+ proponents referred to these as rumors, sometimes spread by people who were disgruntled for other reasons. But villagers were vulnerable precisely because past experiences with ‘fortress conservation’ and land grabs led them to distrust REDD+.

The foregoing analysis demonstrates the challenges of de-linking REDD+ from previous or parallel land interventions. It is important for projects to invest in building trust, through long-term relationships and mutual commitments, better communication and bottom-up planning and decisions.

## 5.5 Conclusions

The overarching feature of the REDD+ pilot projects is their financial contributions to conservation, which helped the REDD+ pilot projects register some important successes. Implementing NGOs have worked with district governments to develop carbon forests and other sustainable land uses. Villagers in REDD+ pilot villages have received money for village development projects and individual/household REDD+ dividends. Some have also benefited from the support to establish legally recognized VLFRs, and enhanced legal recognition of their lands via the establishment of VLUPs, village forest governance committees, and village land and forest by-laws. It has raised the forest agenda in political platforms in the districts, although with heavy donor and NGO dependence. Institutionalizing REDD+ with reliable budgetary/financial commitments could foster improved forest governance.

Despite the observed successes, the REDD+ pilot projects had limitations. Locally, most approaches were more favorable to sedentary farmers than to shifting cultivators and pastoralists, which revives concerns about historical marginalization of such groups via fortress conservation and exclusionary development projects. REDD+ also led to conflicts between participating and non-participating villages. REDD+ trial payments raised expectations, but payments were low, even by rural standards, and in comparison to other activities that contribute to deforestation and degradation. Field observations and interviews show that initial payments were based on villagers’ minimal efforts/interest, so do not guarantee long-term changes of behavior, just intermittent short-term responses to project financial inducements. Without sustainability of payments the increased village conservation efforts that were evidently induced by financial incentives may cease. Also, some interviewees perceived domination of the REDD+ piloting process by NGOs and district government officials in

163 Unpublished project data.

164 Interviews with project implementers with triangulation with information based on district and sub-district key informant interviews in Lindi and Kilosa.

influencing village land decisions. Concerns were also raised about NGO dominance of local agendas more generally, and the lack of accountability structures for NGOs.

The pilot process re-kindled the ongoing struggle between centralized forest control and coalitions for change toward increased decentralization and representation under REDD+. Government officials' perspectives show that REDD+ legitimacy was higher among district officials but lower among central government officials, indicating that old territorial conflicts were heightened by REDD+ pilot projects favoring districts and villages. Hence, although the NGO-district coalition strengthened the sense of ownership at a local level, the connection to a broader national REDD+ plan was weak. The National REDD Strategy was bypassed, and tensions between the uninvolved central government and the district government were revived, rendering a less favorable view of REDD+ by the central government. In contrast, a more centralized REDD+ process in Zanzibar permitted the development of a more advantageous national vision for the future of REDD+ and fueled prominent high-level discussions related to REDD+ piloting. Nevertheless, in Zanzibar district officials were the ones who felt less local ownership. The results suggest that a power balance between central and local authorities is key to the improved governance of REDD+, as both levels of the government have critical roles to play in addressing deforestation and degradation. Reconciling roles, responsibilities and coordination of activities of the different levels, therefore, is a critical governance improvement challenge for better forest and land governance in general and REDD+ implementation in particular.

The legitimacy of REDD+ initiatives is shaped by who is at the table (which levels, and which sectors), how representative they are of diverse interests, and how trusted REDD+ proponents are, given the historical context. The implementation of the REDD+ pilot projects exemplifies multilevel governance, involving actors operating at different levels and sectors of the governance regime. The legitimacy of REDD+ is contingent on stakeholder relations, as shaped not only by REDD+, but also by prior interventions and village experiences.



# 6 The potential to change land-use behavior

The focus of REDD+ pilots on smallholder producers failed to address the broader or underlying drivers of deforestation, such as urban expansion and the demands it exerts on forest and agricultural products, or the political and policy aspects of those drivers. Payments were small and future funding unclear, raising concerns about the sustainability of the project investments. A look at actor networks of articulation reveals some of the missing links with the key actors who drive business as usual. The analysis found multiple, separate – albeit overlapping – bureaucratic, civic, trade and subsistence networks of articulation. Significant efforts in REDD+ projects have been made to provide incentives through civic and subsistence networks. Yet a great deal of forest degradation is also vested in the articulation among actors in trade and bureaucratic networks, and improvement in forest governance will require addressing them all.

The implementation of these pilot projects exemplifies multilevel governance: it involves multiple actors operating from different sectors and governance levels as they interact in the broader context of land use and land-use change. To what extent did – or could – REDD+ make an impact in forestry and land governance decisions? This section examines the potential to change land-use behavior, examining issues such as site selection and whether projects and incentives are addressing the actual deforestation and degradation drivers, as well as who is involved and who is not.

## 6.1 Limitations in site selection

REDD+ proponents in Tanzania generally selected sites that were relatively conflict-free, which do not necessarily represent the status quo or the sites with most need. For example, herder–farmer conflicts were avoided in some cases by strategically selecting higher mountainous areas where transhumance pastoralists (such as the Maasai) do not go. The sites where the funds were allocated for REDD+ were partly dictated by the NGOs' conservation interests and locations where they were already promoting such interests. Examining the history of conservation, the money tends to go where the NGOs see a great potential in conservation, not necessarily to areas with the greatest concerns about deforestation or degradation.

Ideally, the sites would include both. Indeed, the sites where REDD+ pilot projects have been implemented are not free of deforestation and degradation. But based on the analysis in this study of sites where deforestation and degradation are ongoing, it appears that some of the districts with critical increasing deforestation and degradation problems have attracted very little or no conservation funding from NGOs before and during REDD+. For example, even prior to REDD+, many NGOs had concentrated their funding on southern coastal forests of Tanzania, which are internationally known for high species diversity and endemism, plus deforestation and degradation threats (see, for example, WWF Tanzania 2012). This draws attention away from other areas with less biodiversity and endemism potential but with high rates of deforestation and/or forest degradation. However, as noted by a project official well informed of the projects' design process, this selection also reflects an interplay with international priorities. Thus, the CCB Standards were used to identify projects that simultaneously address climate change, support local communities and smallholders, and conserve biodiversity, which then favored areas with high biodiversity values.

## 6.2 Limitations in financial incentives

The financial incentives provided by the REDD+ trial payments have raised expectations. However, given the international finance and donor dependence of these incentives, it is unclear whether such activities undertaken by the projects can be supported in the future. Currently, there are great uncertainties regarding the future of REDD+ (and REDD+ funding). This was evident during the research that showed that most respondents, including project implementers, were not sure of future financial flows beyond the pilot projects. Thus, the villagers' conservation efforts that were induced by financial incentives may cease. The important governance lesson is that while financial capabilities of local authorities are necessary for their proper functioning and for enhancing the process of decentralization, such capabilities need to be anchored in self-sustaining sources of funding and governance structures rather than transient projects. Also, it is not clear as to how the more centralized future funding system proposed in the national strategy will be reconciled with more localized approaches like those adopted by community-based REDD+ projects. Thus, future success requires comprehensive accountability systems to be established between the funders (donors and buyers), NGOs, central government, local governments and the communities involved.

Furthermore, the financial incentives provided by the REDD+ trial payments are quite low even for a rural village economy for someone who, say, had to give up an economic activity, such as charcoal burning, in order to protect a carbon forest. In the case of payments in the Mkanga village, each individual is left with a personal dividend of approximately USD 4.17, which is just around the local value of a simple bag of charcoal (about TZS 8000–10,000, which at the time was roughly USD 5–6). Unless the in-kind benefits are considered to be high enough value, the incentives may not be enough to make carbon forests a legitimate investment, particularly from an individual local forest user's point of view (see also Ravikumar et al. 2017).<sup>165</sup> This may lead to conflicts such as encroachment into carbon forests.

## 6.3 Proximate versus underlying deforestation drivers

There are different interpretations and understanding of the drivers of deforestation and degradation. There are two main problems: the failure to take into account the underlying and indirect drivers, and problems in correctly identifying the proximate, local drivers. The dominant understanding of deforestation and degradation drivers is limited to the more readily observable (i.e. proximate) drivers, particularly local human activities. Some key informants identified much broader-view narratives. For example, it is true that shifting cultivators for sesame production are driving deforestation as reported; however, some government trade and agricultural policies (or their failures) created the reported surge in shifting cultivation for sesame production.

The exclusion of underlying drivers led to the focus of attention of the REDD+ pilot projects on villagers, particularly smallholder producers. For example, the TFCG and MJUMITA REDD+ projects aimed:

“To demonstrate, at local, national and international levels, a pro-poor approach to reducing deforestation and forest degradation by generating equitable financial incentives for communities that are sustainably managing or conserving Tanzanian forests at community level.”  
(Luwuge, 2012).

<sup>165</sup> As pointed out by an official of Tanzania Forest Conservation Group, these low local REDD+/carbon dividends were reflective of the broader global dynamics in terms of the price of carbon credits. Our interpretation of this observation is that local successes of imparting high financial incentives under REDD+ will also be dependent on the global carbon market prices (see also Ravikumar et al. 2017).

Multiple projects such as CARE, TaTEDO and JGI focused on addressing deforestation by providing incentives to smallholders, prioritizing the drivers related to smallholder forest clearing for permanent agriculture or for shifting cultivation; smallholder forest exploitation for timber and charcoal; and overgrazing and/or overstocking. The problems with the identification of proximate drivers are compounded by the use of casual observations, conventional wisdom and assumptions without site-specific research. To our knowledge, the MCDI REDD+ project was the only one that retrospectively conducted research that questioned their earlier assumptions about the drivers of deforestation. The other projects did not undertake such site-specific research. They may also have implemented their REDD+ projects with wrong assumptions about what constitutes the major drivers of deforestation in their sites and, therefore, the priority investment of REDD+ funds. Thus, landscape/site-specific research should be an ongoing component of governance, as part of adaptive learning and management.

In addition, this strategy did not address the deforestation and degradation created by other large contributors such as timber and charcoal merchants outside the villages; large-scale producers of crops (such as sesame or tobacco) who depend on forest clearance; or the consumers of farm and forest products (crops, timber and charcoal) produced using unsustainable practices. That is, projects attempted to fix the supply side (village land uses) while leaving the demand side (e.g. unsustainable urban or foreign timber and charcoal demand) unchallenged.

REDD+ also avoided taking on other actors in deforestation and forest degradation; for example, patronage and corruption networks run by the rich, powerful and well connected, that promote business as usual, including illegal logging as well as large investors in mining, biofuel schemes, infrastructure development, and environmentally perverse government policies. It did not address high-level policy and decision makers and decentralized central government authorities. For example, at the district level, forest authorities often issue harvest licenses above sustainable harvest levels, and Forest Law enforcement authorities might engage in corruption. REDD+ does not currently seek to change the behavior of these often highly organized actors. While agreeing this observation is partially true, an official from TFCG has pointed out that, in the Lindi case, REDD+ implementers worked on supporting the MJUMITA networks to address illegal logging, including challenging those placing the orders for timber, and that NGOs were not just implementing the REDD+ projects.<sup>166</sup> We agree with this observation. However, this may not have been a general approach used by all REDD+ pilot project designs. More importantly, the implication of this observation is that for REDD+ to succeed, there need to be prior or parallel interventions that promote good governance in forestry that go beyond the REDD+ financial incentives. As reported by various key informants,<sup>167</sup> the failure of the REDD+ pilot project in Pugu and Kazimzumbwi Forest Reserves in Kisarawe districts, for example, cannot be simply blamed on REDD+, but also on failures of prior interventions including unkept promises to engage local people and to allow them to benefit from participation in forest management and governance.

## 6.4 Who works with whom?

REDD+ challenged the conventional centralization of power by engaging districts and villages more than the central government: NGOs and districts worked together, leveraging REDD+ to empower districts and villages. REDD+ implementers have engaged the local government's district officers more than the central government's, and have favored villagers' land rights over centralized control. This has fueled what was already a power struggle.

<sup>166</sup> Other projects were being implemented by the same NGOs that were intended to tackle some of the broader governance issues. For example, with TFCG and MJUMITA, the Forest Justice in Tanzania project aimed to increase accountability and did a lot of work on the issues mentioned. Similarly, the Mama Misitu campaign was ongoing at that time with a focus on accountability. Source: Comment from TFCG official during the review process.

<sup>167</sup> Key informant interviews with district and sub-district (ward) officials in Kisarawe district, May 2014.

An important aspect of this analysis is the significance and sustainability of this NGO–local government coalition and the challenges of governance efforts with central government politics and policies. A fundamental contradiction is that NGOs often have to confront the status quo, which includes challenging state institutions, yet their practices need to be taken up by these same state institutions in order for alternatives to be formalized in broader policy and formal governance.

One of the biggest challenges to the status quo of state forest lands was the establishment of village forests. Ensuring secure tenure for communities in Tanzania means making sure that national laws are appropriately interpreted and enforced through compatible legally binding by-laws at the village and district levels.<sup>168</sup> While the NGOs–district officials coalition<sup>169</sup> has advanced villagers' land rights and has set a good precedent for its interpretation of the Land Law to be replicable and scaled up, the Land Law needs to be taken up as the formal interpretation by government forest officials. We acknowledge that CBFM has been part of REDD+ projects; it preceded REDD+ by a decade and was already central to the National Forest Policy and supported by the Forest Act. Yet, even the initial CBFM initiatives in Mgori and Duru-Haitemba in Tanzania were started in the absence of full support from the existing Forest Policy and Law during their initiation. Their success led to CBFM being taken up in the subsequent Forest Policy and Forest Law in 1998 and 2002, respectively (Babili and Wiersum 2010). Thus, despite the ongoing contestation regarding the extent of village forests, the success in favor of villagers will likely positively affect future land decisions regarding villagers' forestry and land rights, and may lead to more substantive reforms in the Forest Policy of 1998 and National REDD Strategy of 2013 to ensure that the villagers' forest rights that are more consistent with the Village Land Act of 1999, as explained earlier.

The research also revealed a major difference in forest governance between Tanzania mainland and Zanzibar in general and their approaches to REDD+ implementation in particular. In essence, on the decentralized mainland there was a disjuncture between the national policy debates and practice, whereas in Zanzibar the national discourse strongly directed and dictated local practice. Both approaches have weaknesses, as mentioned: both require increased coordination among levels, as well as strong national ownership that does not sacrifice local discretions and perspectives.

## 6.5 Missing links

The missing links between REDD+ incentives/trial payments and the key actors who drive business-as-usual land use, including deforestation and forest degradation, is perhaps the most 'elusive' governance aspect of REDD+ pilot projects in Tanzania. The analysis of data on ethnography of land use and articulation among REDD+ and land-use actors<sup>170</sup> indicates the presence of multiple and separate overlapping networks of articulation between multiple government and non-government actors.

Based on the evidence on drivers of deforestation and forest degradation presented in Chapter 3, and secondary data from a study on illegal timber trade reported earlier (Milledge et al. 2007), we can link such drivers to several networks of articulation among actors who contribute to these drivers. These networks include: bureaucratic networks of articulation; civic networks of articulation; trade networks of articulation (exemplified by the ethnography of charcoal and timber trade); and subsistence networks of articulation (see example in Box 4). At the district land governance level, the bureaucratic networks involve both upward articulation to the regional and national level, and downward articulation to the village level. Upward articulation involves reporting, revenue collection, and uptake

168 Key informant interviews with district land and forestry officials in Kilosa, Lindi, Kilwa, Shinyanga, Urambo and Kigoma.

169 Those who agreed on the reclassification of 'general lands'.

170 In all REDD+ and non-REDD+ sites where interviews were conducted for this study.

of laws, policies, regulations and procedures. Downward articulation involves training villagers, helping villagers to develop forest management by-laws and management plans, and law enforcement. These networks operate in the traditional bureaucratic forest governance model. The civic networks of articulation are exemplified by the CSOs (NGOs, CBOs, etc.) working with communities and government authorities outside the 'regular bureaucracy'.

Regarding the interventions studied, these two networks have shown their deficiencies. The bureaucratic networks of articulation are characterized by a power monopoly of state actors, with strong upward accountability of actors to state authorities, but little or no downward accountability to local communities; because *de jure* appointed officials are accountable to their superiors but, as unelected officials, local people are usually unable to hold them accountable, for example via the ballot box. On the other hand, the civic networks of articulation indicate strong power monopoly by NGOs.

What we can infer from our secondary analysis of evidence/data presented in an earlier study of illegal timber and the charcoal trade (Milledge et al. 2007) and deforestation and degradation data for this study (Chapter 3), is that trading networks of articulation include merchants with upstream integration with producers and downstream integration with suppliers and consumers. They also have networks of articulation with state bureaucrats who regulate the trade. Such networks can be formal or informal. When legal trade is involved, merchants tend to form formal networks with state bureaucrats who regulate trade through acquisition of licenses and payments of relevant license fees and product taxes and royalties. Where illegal trade is involved, merchants often have informal articulation networks with bureaucrats in both forest and law enforcement sectors that allow them to operate without following the licensing and/or royalty payment regulations,<sup>171</sup> such as the Forest Act. Besides the Forest Act, in general, Tanzania has a fairly advanced policy and institutional framework that, if implemented, would lead to far more sustainable and equitable forest management (Milledge et al. 2007). Also, the government has implemented wide-ranging measures to better regulate timber trade, increase financial benefits and control corruption.<sup>172</sup>

However, the report notes that, while commendable, the majority of interventions have focused on relatively 'quick fixes', such as regulatory controls and boosting management capacity, without fully addressing some root causes. While forest management is severely disadvantaged by deficiencies in public sector capacity, more profound governance shortfalls, including corruption, are a major limiting factor reducing the effectiveness of current measures (Milledge et al. 2007). Thus forestry-related corruption is used for the gain of both individuals and organized networks. Reportedly, there are massive losses in potential revenues to wasteful harvesting and processing, under the collection or non-collection of taxes and royalties and undervaluation of forest products. The study notes that the majority of timber exporters have some form of institutional relationship (e.g. patronage, formal shareholding, board members) with senior public officials, both Tanzanian and foreign. Both at central and district government levels, many examples of self-dealing, nepotism and cronyism involving the timber trade, including the presence of a direct interest in the timber trade by public officials, would

171 The Forest Act (No. 14 of 2002) provides for the management of forests that came into operation on the 1st July 2004 (Forest Act (Date of Commencement) Notice, 2004; Government Notice No. 160). The Forest Regulations, 2004 (Government Notice No. 153) were made under section 106(1) of the Forest Act (2002). During 2006, further revisions to forest legislation have included the Forest Amendment Regulations, 2006 and the Forest (Charcoal Preparation, Transportation and Selling) Regulations, 2006. Details of regulations covering the harvesting, trade and export of forest products are given in Annex 3 of the report by Milledge et al. (2007).

172 These measures include: review of procedure for issuing licences for harvesting and transporting forest products; empowerment of villagers to manage forests through PFM approaches; periodic bans of timber exportation to address irregularities; National Forestry Inventory (2005) and ongoing development of district harvest plans; guidelines on harvesting of forest products and formation of district forest harvesting committees; establishment of Forest Surveillance Unit in 2005/2006; strengthening of checkpoints and improved security of documents used for harvesting forest produce; introduction of scanning of forest product exports; countrywide assessment of sawmills in 2005; establishment of a forest resource database; and development and implementation of an improved forest revenue collection strategy.

undermine integrity in decision making, fairness, impartiality, transparency and justice. Some of these officials were involved in trade that had a large proportion of illegally sourced timber (Milledge et al. 2007).

As a result, some irregularities and infractions persist during timber harvesting and export, including irregular consignments (e.g. breaching authorization, especially the mixing of illegitimate logs) and collusion (e.g. preferential treatment, such as allowing nocturnal transport), logging without the required documentation or in unauthorized areas, the use of invalid export documentation, the marking of logs using forged hammers, low tax and royalty collection compliance, fraudulent legalization – or ‘rubber stamping’ – during which official documentation was issued for illegally harvested timber, thereby rendering it legal on the market (Milledge et al. 2007).

Subsistence forest users tend to have formal and informal networks of articulation. Where formal rules are favorable for them to access forest resources they engage with various actors, including government and NGOs, to make their forest claims. This is exemplified by joint ventures involving communities, NGOs and government actors as seen in the REDD+ pilot projects studies. Where the formal rules are not favorable, subsistence users use the so-called ‘weapons of the weak’ to access forest resources. As reported by district and sub-district key informants, this includes circumventing formal laws in order to access forest resources. The very notion of ‘encroachment’ into government forest reserves by local communities reported by district officials in some deforestation and forest degradation sites and even in some REDD+ sites (reported earlier) is evidence of this circumvention.

The significance of these multiple networks of articulation is that improvement in forest governance will require addressing all of them. While this is the case, it is typical for governance interventions to be limited to only one or a few of these networks. As shown in the REDD+ pilot projects studied, significant efforts have been made to provide incentives to local subsistence users of forests – and only one portion of the bureaucratic network. Yet a great deal of forest degradation is vested in the articulation among actors in these other networks. This would make such efforts that target one network moot (see Box 4).

**Box 4. Actor networks of articulation in Pugu-Kazimzumbwi Forest Reserves (PKFR), Kisaware (site with low efforts to reduce deforestation and forest degradation)**

The Misitu Yetu Project was designed by CARE Tanzania in collaboration with TFCG and exemplifies civic networks of articulation. Later the Wildlife Conservation Society of Tanzania was incorporated. Other key partners were incorporated during the implementation stage though they were not involved in the initial design. These included the FBD, Wildlife Division, Kisarawe and Kibaha District Councils and the Municipalities of Ilala and Kinondoni in Dar es Salaam – key actors from the bureaucratic network (i.e. the network consisting of the formal government bureaucracy). Villagers, from the subsistence network, were subsequently involved during the establishment of JFM agreements with local communities as well as Misitu Yetu Savings and Credit Association.

Both the government actors and local communities were brought into the process late on, which might have contributed to its failures. There were also problems with financial transparency, including possible mismanagement of funds. Kaale and Mwakifwamba (2006) reported that “Misitu Yetu Project implementation budgets were not transparent to its partners outside NGOs involved.” This raises an important accountability challenge, both in this case and more generally in Tanzania, where most conservation work (including REDD+) is undertaken by NGOs that are not obliged to account to the government or local citizens with whom they work. A subsequent REDD+/HIMADA project (Himada Project 2011) under the Wildlife Conservation Society of Tanzania in collaboration with Lawyers’ Environmental Action Team (LEAT)(LEAT 2011) funded by the Royal Norwegian Embassy reproduced these deficiencies.

**Box 4. Continued**

The charcoal trade (trade network) is important in the region, and forest officials in Kisarawe have reported patronage and corruption (including of court officials) being a hindrance to law enforcement, whereby transgressors normally go unpunished, or incur very small fines, which demoralizes other law enforcers.

Attempts at JFM agreements involving communities, NGOs and government actors in PKFR represented the subsistence network's attempt at formal articulation. However, in the PKFR case, where the formal rules are not seen as favorable, both subsistence and commercial users circumvent the formal laws in order to access forest resources, as evidenced by 'encroachment' into the PKFR.

This case illustrates multiple networks of articulation between actors, and how they can all replicate and/or multiply forest governance problems. Attempts to address governance challenges pertaining to only one or some of these networks may lead to failures. In this case, the REDD+ project in Pugu and Kazimzumbwe failed due to its focus on financial incentives under the JFM model that had failed earlier in the same area, without addressing a wide range of other governance challenges.

## 7 Conclusions

The REDD+ pilot projects in Tanzania are built on a fairly developed, though poorly enforced, multilevel governance policy and institutional framework for forest management that, if implemented, with adaptive improvements over time, might lead to far more sustainable and equitable forest management. There has been considerable development of key instruments and tools for forest governance, including the Forest Policy revised in 1998 and Land and Village Land policies revised in 1999, as well a revised Forest Law that was enacted in 2002, participatory land-use planning initiatives and various decentralization reforms. In this context, one of the central questions is how the REDD+ initiatives can contribute to a broader transition to a self-sustaining national strategy to reduce emissions from deforestation and forest degradation, where local experiences are integrated into broader national policies and institutions.

Deforestation and degradation drivers are multifaceted. Underlying drivers are key, and approaches to change must be multi-sectoral, addressing not just proximate but also distant drivers, including the national policy context itself. The REDD+ framework provides room for multiple actors from the central government to the local level, as well as civil society and the private sector, to play a part in management of different categories of forests. The missing links between REDD+ incentives, however, and the key actors who drive business-as-usual land use, including deforestation and forest degradation, are perhaps the most notable governance problem of REDD+ in Tanzania.

In some REDD+ pilot projects, significant efforts have been made to provide incentives to local subsistence users of the forests. These initiatives are a promising way to address some of the governance challenges, particularly via civic and subsistence networks. While commendable, these are relatively temporary remedies. The particular emphasis of REDD+ proponents on land degradation caused by the poor (e.g. shifting cultivators, village charcoal producers) parallels the lack of political interest in taking on other actors in deforestation and forest degradation; for example, entrenched networks of corruption run by wealthy, powerful and well connected actors, which have already been revealed by previous research to be central in promoting business as usual. Some NGOs that implemented REDD+ have supported parallel or prior initiatives that address other governance challenges; but as we have pointed out, such a comprehensive approach was not applied by all REDD+ projects. Moreover, these findings imply that REDD+ incentives may be a necessary, but not sufficient, policy intervention to address deforestation and forest degradation. They need to be supported by a broader range of governance interventions.

REDD+ efforts also attempt to fix the supply side (village land uses), while leaving the demand side (e.g. unsustainable urban or foreign timber and charcoal demand) unchallenged, unless they also address broader governance reforms. A great deal of forest degradation is vested in the articulation among actors in trade and bureaucratic networks. In particular, governance shortfalls, including corruption, inadequate revenue collection, inadequate budgets, lack of transparency and accountability, presence of forest reserves without clear boundaries and failure to enforce laws, remain major limiting factors that reduce the effectiveness of current measures to address deforestation and forest degradation, as well as other forest management and governance challenges. Government policies such as the petition to change the borders of the Selous Game Reserve UNESCO Heritage Site suggest official economic priorities that are not necessarily compatible with REDD+ goals.

The land classification system, as currently conceived, and its ties to revenue collection affect competition between levels of government and provide perverse incentives for deforestation. District authorities from both levels of government are under strong pressure to raise funds and therefore to issue more permits than would be appropriate. Often revenues collected from forestry have



been captured by the central government with few remittances to districts or to management and surveillance units to implement forest management rules and enforce the law. The incentive and existing accountability structure also leads to corruption. Also, over a decade after PFM was enshrined in law, while there is a benefit-sharing arrangement formula between the central government and districts or with local communities, particularly under the JFM regime, the formula is often not enforced in practice. These are deep-seated institutional issues that would need to be addressed in order to find more sustainable solutions. This also raises concerns regarding the current National REDD Strategy, which proposes a centralized National REDD+ Trust Fund, whereas interviewees from CSOs and district officials prefer a nested system of benefit sharing, with some funds going directly to districts and the REDD+ initiatives in question.

Recognizing that VLFRs (together with national parks) have forests in the best condition, according to some existing research, the recognition of what was conventionally considered general lands as village lands suggests one possible institutional solution, though this has generated conflict between government levels and sectors. The REDD+ projects presented here attempted to address the problem of deforestation and degradation by funding and working with district officials and local communities to establish VLFRs in an enabling legal environment. Several pilot projects tested PFM as one possible solution for enhancing forest governance capacity. CBFM was particularly attractive to 'community-minded' NGOs, such as MJUMITA, TFCG, JGI and MCDI.

Scaling-up and replicating such PFM efforts, including those resulting from REDD+, therefore, offers a viable model for better governance of Tanzania forests in the context of multilevel governance. Similarly, in Zanzibar, the CARE REDD+ pilot project together with DFNR worked with local communities (Shehias) to establish CoFMAs. These efforts are not new; both in the mainland and Zanzibar, numerous NGOs have been working with various levels of government to address issues related to forest management, conservation and governance.

These forest governance options are seen as more participatory and inclusive of local people, and therefore from a governance point of view have higher legitimacy than, say, national parks. Increasing village rights to and control over local forests improves local participation in meaningful ways through land tenure security. After all, many so-called general lands are already *de facto* in the hands of villagers, but they have no recognized forest management rights.

At the local level, there are a range of possible incentives that can be given to communities to increase their participation in forest management including financial incentives and in-kind payments such as training on (and equipment for) sustainable livelihood methods. The studied REDD+ projects attempt to provide both kinds of incentives. Nevertheless, some villages refused to participate in REDD+ due to fear of 'land grabbing' or 'fortress conservation', based on historical experience with both of these practices in the landscapes in question. Though national parks also maintain forests in good condition, para-military protection that excludes local people has little legitimacy for communities around these national parks. This emphasizes the need for FPIC of local REDD+ actors, and for REDD+ implementers to invest in establishing trust with the local land users, to de-link REDD+ from previous or parallel land interventions, and to consider the diverse needs and interests of local people.

The participation of women, pastoralists and other vulnerable groups is a crucial factor to ensure just benefit and burden sharing for all poor, rural people. Some actors feel disenfranchised by the restrictive government land-use plans adopted by REDD+ proponents; such plans have historically held little legitimacy for transhumance pastoralists and shifting cultivators because they favor settled farmers. Also by creating 'hard boundaries' between participating and non-participating villages, the VLUPs and REDD+/VLFRs have created conflict between participating and non-participating villages. While historically these villages shared forest resources across their common borders, creation of financially lucrative REDD+ reserves only in participating villages led some to try to exclude their neighbors from trans-border forest access. To address these problems, accessible conflict resolution systems

capable of resolving imminent land or forest boundary disputes and anticipation of future conflicts are required.

In order to make the REDD+ process both fair and effective, actors operating at different sectors and government levels should be represented and fully participate in all stages of implementation. NGOs brought important funding to conservation initiatives in Tanzania, raised the visibility of the forest sector in the districts, won recognition for village lands and empowered both districts and villages. But the funds that the pilot projects brought in are not independently sustainable, and the NGOs are not part of the state or its accountability structures. Moreover, NGOs sometimes carry out the work that falls under the government's responsibility. The significance and sustainability of the NGO–local government coalition emerging from REDD+, and the challenges of linking these efforts with high-level (central government) politics and policies, are interesting issues worthy of further study over time.

Our findings suggest that reconciliation and coordination between central and district officials on land-use planning and decision making, building national ownership while maintaining a certain degree of local autonomy and discretion, is necessary to achieve improved forest governance. There is a need to strengthen the sense of national *and* local ownership of REDD+ to create significant change.

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# Annex 1: Case/site summaries

## Case 1: High deforestation and degradation reduction efforts site of Jozani-Chwaka Bay landscape, under the CARE-HIMA Tanzania REDD+ pilot project in Kusini Unguja district of Zanzibar

**Organization/initiative:** CARE Tanzania Hifadhi ya Misitu ya Asili (HIMA)/Piloting REDD in Zanzibar through Community Forest Management

**Description:** The initiative aims to ensure REDD+ benefits contribute to reducing poverty and enhancing gender equality. The project covers 60,000 ha forest and 16,000 rural households across 29 sites. It promotes CoFMAs through addressing deforestation and degradation drivers; improving governance, including equitable benefit sharing; ensuring the poor benefit and are not further disadvantaged; controlling leakage (e.g. domestic woodlots and income-generating alternatives); and mainstreaming gender. Its timeline is 4 years and its costs are USD 5.5 million.<sup>173</sup>

**Benefit-sharing arrangements:** Benefits to be distributed through JUMIJAZA (Zanzibar community forestry network) facilitated by umbrella CBOs and CARE/HIMA in collaboration with DFNR in Zanzibar. For testing, shares of funds are to be distributed to all participating villages based on (pro-poor and gender equal) social and environmental criteria. Funds to go to village-level Shehia Conservation Committee bank accounts and are used for community development projects selected and approved by village residents. Other (non-monetary) benefits are agreed and included in the CoFMAs between the government and communities.

**Key benefit-sharing and governance lessons:** Main governance and benefit-sharing successes include: forming a CBO to aggregate carbon sales and redistribute benefits among villages; determining villages' share of benefits based on environmental and social criteria, including gender equality, poverty levels and forest criteria; and using REDD+ revenues to support community development projects selected by villages. A major benefit to communities of developing a CoFMA is that they regulate land access, which minimizes unsustainable use of the land – as community members become more active watchers of each other. Also, it gives them a sense of ownership and collective responsibility. In order to obtain CoFMAs, communities must also agree to a set of responsibilities, which include the preservation of high protection zones and sustainable management of lands designated for various levels of use. However, the land and forests remain property of the state, which provides only a limited sense of ownership and security of tenure to Shehia members. Defining certain forest rights such as carbon rights as 'property rights' to the communities in question would enhance their sense of ownership and tenure security. The involvement of NGOs, such as CARE and JUMIJAZA, and umbrella NGOs, such as Jozani Environmental Conservation Association, South Environmental and Development Conservation Association and Ngezi-Vumawimbi Natural Resources Conservation Organization, alongside CBOs and local conservation committees represents multiple decision-making centers (poly-centrism). The nested structure of the formal state dictates most of the land-use decisions, by virtue of its control of laws, policies and ownership of the land itself. But the poly-centric structures constituted by NGOs, CBOs and local committees dictate the benefit-sharing arrangements – by virtue of the fact that the donor (the Royal Norwegian Embassy) channeled funds via NGO–CBO–community networks. While the plurality of institutions might have had its own strength, it has a weakness in terms of a lack of clear overarching, oversight and accountability mechanism. If the future of REDD+ in Zanzibar involves similar institutional arrangements, the issues

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173 [www.careclimatechange.org/files/carbon/HIMA\\_2011.pdf](http://www.careclimatechange.org/files/carbon/HIMA_2011.pdf). Accessed 11 May 2017.

of establishing oversight institutions with mandates across state and non-state actors involved would likely be an important part of REDD+ governance of land decisions and benefit-sharing arrangements.

### **Case 2: High deforestation and degradation reduction efforts site of Masito Ugalla Ecosystem landscape, under the Jane Goodall Institute (JGI) Building REDD Readiness in Mpanda and Kigoma Rural**

**Organization/initiative:** JGI/Building REDD Readiness in the Masito Ugalla Ecosystem Pilot Area in Support of Tanzania's National REDD Strategy

**Description:** The project aims to build awareness and enhance capacity and governance for local communities and government to administer and benefit from REDD+ in high biodiversity forests. The project covers 90,989 ha of forest under varied ownership between 15 villages. Its activities include: facilitating the establishment of: inter-village CBOs to manage forests; a replicable and scalable remote sensing method; community and CBO capacity to monitor carbon stocks; and a community mechanism for equitably sharing carbon revenues. Target outputs include 90,989 ha of conserved forest, sequestering 55,000 MTCO<sub>2e</sub>. Its timeline and costs: 3 years, USD \$2.8 million.<sup>174</sup>

**Benefit-sharing arrangements:** Money from carbon credits and other ecosystem services goes to inter-village CBO (five members from each of seven participating villages). Test payments made to each village based on performance-related criteria. Payments used for community projects are approved by village assembly. District government plays facilitation and oversight roles. Benefit-sharing mechanism design is informed by village survey.

**Key benefit-sharing and governance lessons:** Project established CBO (called JUWAMA in Swahili) as mechanism for inter-village governance and coordination of benefit sharing from REDD+ in shared forest. The approach involved establishing ongoing oversight by the inter-village CBO Jumuiya ya Watunza Msitu wa Masito (JUWAMMA)/Association of Forest Conservators of Masito and the district government. In the pilot phase, JGI will also play an advisory role to ensure that the district government and inter-village CBO (JUWAMMA) are managing the resources as planned, through visits to the identified projects and a review of bank statements and related documents. JGI also provided training to JUWAMMA on the importance of independent auditing, including conducting a sample financial review. These oversight and capacity building efforts are meant to help ensure sustainability of the payments mechanisms. However, they also raise questions about the governance of these oversight bodies (NGOs, district officials, etc.).

### **Case 3: High deforestation and degradation reduction efforts sites in Kilwa District: FSC-certified village land forests, under Mpingo Conservation and Development Initiative (MCDI)**

**Organization/initiative:** MCDI/ Combining REDD, PFM and FSC certification in South-Eastern Tanzania

**Description:** Project aims to use financial flows from REDD+ to expand PFM and Forest Stewardship Council (FSC) certification. The additionality principle means communities cannot earn money from timber *and* carbon, but communities will likely financially benefit more from timber than from carbon. The project is located in Southern Tanzania, with an expected 50,000 ha of conserved

<sup>174</sup> [www.janegoodall.org/](http://www.janegoodall.org/). Accessed 11 May 2017.



forest. MCDI aims to use REDD+ revenue to overcome start-up costs for PFM and FSC certification (combining REDD+, PFM and FSC). Expected outcomes include sequestering 50,000 MtCO<sub>2</sub>e, and providing economic benefits to approximately 18,000 people. The timeline and costs are: 4 years, USD \$1.9 million.<sup>175</sup>

**Benefit-sharing arrangements:** Carbon revenues to be split by the beneficiary community and the NGO (as service provider) to meet transaction costs of expanding PFM facilitation and FSC to the village. Mechanism for distribution and use of financial benefits is being developed. Likely to be based on approach already established for timber revenues under PFM/FCS facilitated by MCDI (payments to village natural resource committees for forest management costs and community development projects) working through village governments.

**Key benefit-sharing and governance lessons:** REDD+ can be a means to expand PFM (and FSC). PFM benefit-sharing arrangements can be a basis for REDD+ arrangements. There are challenges in clarifying the NGO service provision role in the benefit-sharing mechanism. The case research project showed the importance of early analysis of deforestation drivers. The full and effective participation of forest communities and other stakeholders is critical for benefit sharing. Participation in mechanism design helps ensure that arrangements are accepted as fair and legitimate, and that rules reflect local realities. Participation in implementation and monitoring helps ensure communities can understand the benefits and costs, make effective claims, and hold one another accountable. Governance of community funds will be critical, and that part of ensuring this is making sure that the village leaders as well as village natural resource committees understand the process and understand how they will benefit from governing PFM effectively.

According to a project official,<sup>176</sup> for the MCDI approach to be allowable under carbon market rules, the implementers demonstrated that the higher carbon storage that results from improved fire management is additional and permanent. MCDI officials believe this is the case because:

- when communities join MCDI's FSC group certificate, they make a commitment to keep the forest standing for the foreseeable future;
- revenue from timber sales alone is insufficient to provide the ongoing support communities need to implement proper forest management;
- without explicit payments (which will be generated by this REDD+ project), existing local resources would be insufficient to provide fire protection to prevent further forest degradation and support replenishment of carbon stocks.

Previously (mainly because of restrictions over *additionality*), experts tended to view REDD+ as an alternative tool to support sustainable forest management where other mechanisms would not succeed. However, by combining FSC-certified timber production and third party verification of carbon offsets, the MCDI REDD+ project demonstrates that REDD+ can be used in conjunction with other approaches to bring social and environmental benefits.

#### **Case 4 (with two sites – one in Kilosa district and another in Lindi district): High deforestation and degradation reduction efforts in MJUMITA and TFCG REDD+ pilot sites in Noto and Chitoa Plateaux landscape and Kilosa Highlands Landscape in Kilosa and Lindi districts, respectively**

**Organization/initiative:** TFCG and Community Forest Conservation Network of Tanzania (MJUMITA)/Making REDD Work for Communities and Forest Conservation in Tanzania.

175 [www.mpingoconservation.org/redd\\_project.html](http://www.mpingoconservation.org/redd_project.html). Accessed 11 May 2017.

176 Who provided this additional information during the report review process.

**Description:** Pro-poor approach to REDD+, generating equitable financial incentives for communities sustainably managing or conserving Tanzanian forests; performance based. Communities directly access REDD+ finance. Credits validated by VCS and CCB. Project covers 215,000 ha of forest and 51,000 beneficiaries across two biodiversity hotspots and 36 villages. Its activities include: assisting communities to market emission reductions generated through interventions that aim to address the main deforestation drivers including PFM, improved agriculture, improved forest governance and land-use planning and; national and international advocacy on REDD+ policy. Its timeline and costs: 5 years, USD 5.9 million.<sup>177</sup>

**Benefit-sharing arrangements:** Payments per village are ultimately based on performance. For testing, payments are based on area of forest reserved, minus estimated leakage. Dividends paid in cash to each registered resident of the village, including women, men and children (with payment to children collected by their mothers). Village assembly decides how much (if any) each person will contribute to community fund. Villages develop by-laws to set specific terms of benefit sharing, with MJUMITA guidelines available for consideration.

**Key benefit-sharing and governance lessons:** Individual cash payments can have low transaction costs, and (combined with the voluntary community fund) can be an incentive for improving governance. By-laws are an effective mechanism for villages to determine and enforce benefit-sharing agreements. Integrating REDD+ with village land-use planning is feasible. Using REDD+ as incentive for CBFM is a viable policy option. The mix of activities, including financial payments, in-kind benefits and land-use planning, used by the project present important lessons for future REDD+ or similar initiatives. Full and effective participation and representation of local people in projects require adequate investments in time and resources to build trust. Project interventions should not limit the promotion of the benefits of the project, but should also inform about the potential burdens to the beneficiaries so that the benefits are weighted vis-à-vis the costs. The project has enhanced interpretations of national land laws that are consistent with communities' tenure rights; i.e. forests outside of government reserves should be considered to be on village land, unless it is proven that no community uses or plans to use that land. REDD+ piloting has helped to nurture the kind of local political oversight that is important for successful forest governance, particularly thorough enhancing capabilities of local institutions namely village councils, village natural resource committees and village land committees. However, even when statutory tenure is seemingly clear, there may be land conflicts, including customary tenure claims or contradictory official maps, which will affect REDD+. The current land-use planning model does not adequately address the herder–farmer conflict, particularly regarding transhumance pastoralists.

### **Case 5: High deforestation and degradation reduction efforts in TaTEDO REDD+ pilot sites in Acacia woodlands silvo-pastoral landscape of Shinyanga district**

**Organization/initiative:** Tanzania Traditional Energy Development and Environment Organization/ community-based REDD Mechanisms for Sustainable Forest Management in Semi-Arid Areas

**Description:** The project aims are to: integrate REDD+ with indigenous silvo-pastoral system called Ngitili (traditional method of natural forest regeneration); and promote sustainable forest management and reduce greenhouse gas emissions through carbon market incentives. It is implemented in 11 villages of the semi-arid region in northern/central Tanzania, working with 250 forests (10–50 ha each) that are owned by households, villages or institutions such as schools. Its activities include: aggregating forest/Ngitili owners to facilitate REDD+ implementation and access to carbon markets; building local community capacity on MRV and carbon market access; developing a participatory

<sup>177</sup> [www.tfcg.org/makingReddWork.html](http://www.tfcg.org/makingReddWork.html). Accessed 11 May 2017.

benefit-sharing mechanism; and addressing drivers, including energy efficient technologies and improved land-use practices. Expected outcomes include 2,500 ha conserved forest, 108,285 MTeCO<sub>2</sub>, with 6,000 local beneficiaries. The timeline and costs are: 4 years, USD 2.1 million.<sup>178</sup>

**Benefit-sharing arrangements:** Funds are allocated to stakeholders based on contributions to forest management and protection, e.g. village government and local militias involved in monitoring, patrols and conflict resolution. Payment to forest owners based on performance in implementing the resource management plan, the Ngitili size and carbon baseline data. Financial incentives (payments) flow from Ngitili association, to Ngitili group, to Ngitili owner. For Ngitilis owned by households or institutions, not all village residents may benefit directly from carbon payments. However, other benefits are available to the broader village; e.g. energy efficient stoves, conservation agriculture training, beekeeping, etc. Carbon payments are made directly to Ngitili owners through bank accounts held by Ngitili groups. Where the Ngitili owners are individuals (rather than the village government or an institution), these are essentially household payments. However, the Ngitili ‘owner’ in such cases is typically viewed as the male farmer in the household. The implications of this arrangement for women and children, including widows and divorced spouses, remain unclear. Other co-benefits, such as fuel efficient stoves and fodder bank development, are available to all village residents (not just Ngitili owners).

**Key benefit-sharing and governance lessons:** The project involves a good demonstration of REDD+ based on customary approach to forest regeneration meaning that REDD+ can also learn from and make use of customary institutions; aggregation of carbon from small, individual forests to reduce transaction costs; combining benefit sharing among individual land holders with additional co-benefits for the broader community to create incentives for all community members; integrating REDD+ and pastoralism. In Shinyanga, where TaTEDO is piloting REDD+, a main challenge is managing Ngitilis to integrate sustainable livestock grazing, as grazing is the main use of Ngitilis. The project has introduced and trained communities to adopt improved pasture management techniques, and facilitated establishment of alternate fodder sources such as fodder banks. The project’s work on land-use planning effectively engaged local institutions in formalizing customary rights of small forest owners and enhancing and expanding a traditional forest management system (Ngitili).

## **Case 6: Sites with low efforts to reduce deforestation and forest degradation: Pugu-Kazimzumbwi Forest Reserves in Kisarawe district**

**Organization/initiative:** Central government’s FBD/Protection of Pugu and Kazimzumbwi Forests

**Description:** Understanding drivers of deforestation and degradation in central government owned forest reserves. Pugu and Kazimzumbwi Forest Reserves (7272 ha) have important ecosystem services, but they suffer from high deforestation and degradation rates (forest cover < 20%) by virtue of being located close to an urban center (Dar es Salaam). The deforestation and degradation has also been contributed by the lack of effective involvement of local community members in the management of the reserves and the application of strict laws that deny access to forest resources. Attempts at improving forest management through complementing central government’s management and engaging adjacent communities have been partial and ineffective.

**Benefit-sharing arrangements:** Previous (largely unsuccessful) efforts include JFM agreements between adjacent villages and central government, as well as engaging and rewarding village residents for their contributions to forest management and patrol. However, inadequate inclusion of community

178 [www.tatedo.org/cms/images/stories/brochure/reddbrochure.pdf](http://www.tatedo.org/cms/images/stories/brochure/reddbrochure.pdf). Accessed 15 April 2016.

members in PFM plans and lack of an agreed formula for sharing benefits between the government and the community remains an important legitimacy challenge in governing these reserves.

**Key benefit-sharing and governance lessons:** Challenges of establishing fair and equitable benefit sharing under JFM, and in context of contested land (ongoing land dispute between government and surrounding villages). The centralization of decision-making processes relating to the management of the reserves and access to forest benefits has led to negative perceptions from villagers leading to increased deforestation and conflicts between local communities in the proximity of the reserves and the central government. There is need to reform the legal procedures to ensure effective participation of communities living in close proximity to the reserves. Authorities need to decentralize decision-making processes in order to effectively take into account views, needs and interests of local communities.

### **Case 7: High deforestation and degradation reduction efforts sites via silvo-pastoral system called Ngitili (traditional method of natural forest regeneration) to address deforestation and degradation and soil/land conservation and rehabilitation in Acacia woodland landscape in Shinyanga**

**Organization/initiative:** HASHI via re-vitalization of traditional fodder banks (Ngitili) project

**Description:** Indigenous silvo-pastoral system called Ngitili (traditional method of natural forest regeneration) to address deforestation and degradation and soil/land conservation and rehabilitation. Ngitili, or enclosure, in Shinyanga involves the conservation of rangelands for use in the dry seasons. There are two types of Ngitili reserves: family or individual reserves, and communal reserves. Ngitili developed in response to acute fodder shortages due to droughts, diminishing grazing land due to increased cropping, rapidly declining land productivity and shortages of herding labor. The initiative was implemented in a semi-arid region of Shinyanga in northern/central Tanzania. The initiative addresses drivers through improved land-use practices. The opening of the Ngitili is done in sections, one section being completely grazed before the next is opened. The underlying idea is to maintain an area of standing vegetation until the next rains.

**Benefit-sharing arrangements:** To supply browse for livestock, fruit and foods for people, medicine for both people and livestock, as well as wood-based products, and serve as vital safety net in times of drought.

**Key benefit-sharing and governance lessons:** Customary institutional and management arrangements exist to manage, conserve and use fodder banks and enhance forest regeneration. A viable option for integrating conservation and pastoralism. It exemplifies the use of traditional governance institutions in modern conservation. The Sukuma people in the area have traditional rules for protecting individual and communal Ngitilis using traditional guards known as '*Sungusungu*', and traditional community assemblies known as '*Dagashida*'. The majority of the Sukuma people adhere to these traditional rules, and this has contributed to the successful management and restoration of Ngitilis in modern times.

### **Case 8: Site of low deforestation and degradation reduction efforts: Matumbi Kichi Hills landscape in Rufiji district**

**Organization/initiative:** Management by central government's DFB and TFS of central government forest reserves and forests on general public lands in Matumbi Kichi Hills, Rufiji district

**Description:** Matumbi Kichi Hills has important forest reserves (both state and village reserves) including protected and unreserved forests on general lands with significant ecosystem services. But this landscape also experiences high deforestation/degradation rates from unsustainable (timber and charcoal) harvesting due to demand from urban centers (Dar es Salaam, Zanzibar). It serves as an illustrative site to understand drivers of deforestation and degradation in central government owned forest reserves and forest on general public lands, and governance challenges in addressing them. High among the causes of forest degradation and/or deforestation in the area are illegal logging, pit sawing, shifting cultivation and forest fires. The major concern is the increasing trend in illegal activities, such as logging without documentation, logging in unauthorized areas, logging of unauthorized species and the use of invalid export documentation. Other infractions include the marking of logs using forged hammers, and nocturnal transport or transport along the so-called ‘panya’ roads (‘rat roads’), which are unauthorized routes where law enforcers are not present. Government actions include efforts to increase revenue collection from forest reserves; attempts at improving forest management through complementing central government’s management and engaging adjacent communities in establishing VLFRs; and law enforcement to address illegal harvesting of timber and charcoal.

**Benefit-sharing arrangements:** timber and charcoal harvest licensing arrangement between central government, district government and village government; establishing VLFRs; engaging village residents and rewarding them for their contributions to forest management and patrol and forest rehabilitation.

**Key benefit-sharing and governance lessons:** There are challenges of establishing sustainable forest (timber and charcoal) harvesting in the context of high pressure from the central government to increase forest revenues, while also dealing with ongoing illegal harvesting. Legitimacy of benefit-sharing arrangements is perceived to be higher where forests are governed via PFM, particularly CBFM. Under the CBFM arrangements, villagers are expected to benefit from timber revenue and non-timber forest products on legally recognized VLFRs. This is in addition to improvement in forest governance via the development of village environment and natural resource management committees. Thus, increasing the creation of VLFRs under CBFM to complement the existing state forest reserves is a desirable governance arrangement. However, higher-level governance interventions are also needed to curb thriving networks of patronage and corruption that facilitate illegal harvesting activities.

### **Case 9: Sites of low deforestation and degradation reduction efforts in Miombo woodlands in Urambo district due to woodland clearance for tobacco cultivation and curing**

**Organization/initiative:** Tobacco industry and smallholder producers/tobacco cultivation and curing

**Description:** The case illustrates drivers of deforestation and degradation in general public lands. Urambo landscape has woodland ecosystems with important ecosystem services but high deforestation and degradation rates from tobacco cultivation and curing. Tobacco farming relies heavily on shifting cultivation and an abundant supply of fuelwood to cure the crop. Vast deforestation of miombo woodlands has been an issue in tobacco-growing areas in Urambo, where the majority of residents are regular tobacco growers. The high demands of wood for the tobacco (curing) industry is also causing a high rate of woodland deforestation.

**Benefit-sharing arrangements:** Revenue accruing to smallholder farmers for tobacco production, raw materials to tobacco industry, and agricultural/crop and industrial (tobacco products) taxes to the government.

**Key benefit-sharing and governance lessons:** Challenges of establishing sustainable land management for smallholders in the context of high pressure from the central government to increase

agricultural and industrial production with limited farm inputs to farmers, which encourages farm intensification. Also, limited cheap energy options encourage extensive use of woodlands to produce charcoal for industrial processing (tobacco curing). Direct incentives to farmers, e.g. agricultural inputs to intensify (rather than abate) production, and making cheap alternative energy sources available for curing tobacco could be more effective than current regulatory restrictions on woodland clearance. Government or the tobacco industry could play a major role in providing these incentives. Solutions for deforestation and degradation require an integrated approach between agriculture, forestry, industrial and energy sectors among others.

### **Case 10: Sites of low deforestation and degradation reduction efforts in miombo woodlands of Uvinza district due to woodland clearance for salt mining and drying**

**Organization/initiative:** Salt industry/salt mining and drying in Uvinza

**Description:** Understanding drivers of deforestation and degradation in general public lands. Uvinza landscape in Kigoma has important woodland ecosystems with essential ecosystem services but high deforestation and degradation rates from salt mining. This is associated with efforts to increase salt production as a source of revenue to smallholder producers, big salt industries, and the government (taxes). It has been estimated that about 20,000 m<sup>3</sup> of fuelwood per day are needed for drying ovens at the salt mines at Uvinza. This fuelwood is harvested from the Masito Ugalla ecosystem, mostly on the Mpanda District side near Uvinza.<sup>179</sup> The largest salt producer in Uvinza, namely Nyanza Salt Mine has particularly been blamed for indiscriminate clearing of forests (without replanting) to cater for its energy needs.

**Benefit-sharing arrangements:** Revenue accruing to smallholder salt producers, industrial salt producers, and the government (through taxes).

**Key benefit-sharing and governance lessons:** Establishing sustainable land management for smallholders and major industries in context of high pressure to increase industrial production with limited alternative economic activities. Limited energy options encourage extensive use of woodlands to produce charcoal for industrial processing (salt drying). Thus, making cheap alternative energy sources available for salt drying could be more effective than current regulatory restrictions on woodland clearance. Alternatively, establishment of woodlots for salt drying may mitigate the pressure from the woodlands. Both the government and the salt industry could play a major role in facilitating availability of these alternative sources of energy. Solutions for deforestation and degradation require integrated approach between industrial, forestry and energy sectors.

### **Case 11: Sites of low deforestation and degradation reduction efforts in Lake Victoria Goldfields due to woodland clearance for gold mining infrastructure and energy**

**Organization/initiative:** Gold mines/artisanal and large-scale gold mining

**Description:** This case illustrates drivers of deforestation and degradation in mining sites and adjacent lands in Lake Victoria Gold Field landscapes in northern Tanzania. This area has important woodland ecosystems with significant ecosystem services but high deforestation and degradation rates from large-scale and artisanal gold mining. Efforts to increase gold production as a source of revenue to artisanal large-scale miners and the government have led to deforestation due to vegetation clearance

<sup>179</sup> United States Department of Agriculture (USDA) Forest Service Technical Assistance Trip Watershed Assessment of the Masito-Ugalla Landscape July 4–20, 2009.

in mining sites. Considerable areas of land and vegetation in large-scale mining areas have been cleared to make room for mining operations. Surface mining operations have consumed considerably more land than in underground mining. Mining companies consume extensive land areas for activities such as siting mines, heap leach facilities, tailing storage facilities and open pits, mine camps, constructing roads and arranging resettlement for displaced communities. This has an adverse impact on land and vegetation, the major sources of livelihood for rural inhabitants of the area. Limited cheap energy and construction material options encourage extensive cutting of trees by miners for energy and construction of mining structures or settlement areas. Communities displaced by mining also create their own environmental degradation as they need new land on which to settle, cultivate and obtain energy.

**Benefit-sharing arrangements:** Revenue accruing to smallholder artisanal miners, large-scale miners, and the government (through taxes and royalties). Some (limited) social services to communities via corporate social responsibility.

**Key benefit-sharing and governance lessons:** Establishing sustainable land management in and around gold mining sites in context of high pressure to increase gold production and smallholder miners, corporate, and government revenues from mining. The solutions to combat the cause of environmental degradation by the mining sector must take into account many factors such as adequate funding from the government and the private sector to assure application of appropriate and environmentally friendly technologies. Furthermore, the government needs to promote a better understanding of the environmental impacts of mining activities and enforce the laws that regulate the mining sector. More regular monitoring of the mining sites by government authorities to enforce the laws may be more effective than the current self-reporting by the mining operators of their environmental compliance. But solutions go beyond regulating the mining industries. Multi-sectoral approaches are needed including the involvement of forestry, agriculture, environment, mining and land sectors e.g. in seeking solutions for artisanal miners and communities adjacent to, or displaced by the mining activities.

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Who makes land-use decisions, how are those decisions made, and who influences whom, how and why? This working paper is part of a series based on research studying multilevel decision-making institutions and processes. The series is aimed at providing insight into why efforts to keep forests standing, such as initiatives like Reducing Emissions from Deforestation and Forest Degradation (REDD+), are still so far from altering development trajectories. It underlines the importance of understanding the politics of multilevel governance in forest, land and climate policy and practice, and identifies potential ways forward, while highlighting the role of conservation and sustainable management of forests for the enhancement of forest carbon stocks in developing countries.



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