



Responsible Land Governance: Towards an Evidence Based Approach

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 20-24, 2017



DOCUMENTING CUSTOMARY RESOURCE RIGHTS: RECONCILING STATE AND CUSTOMARY RECORDS FOR LAND-USE PLANNING:

SANDWE CHIEFDOM, ZAMBIA

**MATT SOMMERVILLE 1, SIMON NORFOLK 2, TERENCE MOTHERS 2, BWALYA CHUBA
1, MOSES PHIRI 3**

1. Tetra Tech, USAID-funded TGCC Program, Lusaka, Zambia
2. Terra Firma, Maputo, Mozambique
3. Petauke District Land Alliance, Petauke, Zambia

Matt.sommerville@tetrattech.com

**Paper prepared for presentation at the
“2017 WORLD BANK CONFERENCE ON LAND AND POVERTY”
The World Bank - Washington DC, March 20-24, 2017**

Copyright 2017 by author(s). All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.

Abstract

Zambia possesses a dual land tenure system of customary and state land, with very few structures for communication between the state and customary land administration authorities. The majority of Zambia's rural landmass is managed by traditional authorities through an informal and undocumented land administration system, while the state system is largely absent in these rural areas. There is growing recognition of the importance of documenting rural customary land rights to provide long-term tenure security to households in these customary areas. These approaches recognize the customary rights of traditional leaders to administer land, including offering documents to landholders. The documentation of customary land, however, brings with it some risks to current landholders and has the potential to ignite latent conflicts.

Within most of these chiefdoms there are pockets of land that is ostensibly state land, but which is de facto under community/customary control, for example resettlement camps, forgotten forest reserves, and pre-colonial titled farms. Additionally, the state has management rights over all forest and wildlife, even on customary land, particularly in vast game management areas. Given Zambia's irreversible process for conversion of customary land to state land and the vast areas within limited state presence, many of these statutory rights are latent, and in some cases are unknown to government. The documentation of customary rights in this context will raise these latent claims and has the potential for government to reassert tenure rights over these areas and resources. In some cases, these rights reflect the underlying ownership or leasehold of land (e.g. abandoned farms, or state forest land) in other cases the overlapping rights may be related to customary ownership of land, but government management of resources (e.g. game management areas).

This paper will describe the process that USAID's Tenure and Global Climate Change Project is undertaking across a 200,000+ hectare chiefdom to systematically document customary rights, while navigating relationships and agreements with a variety of Ministries and Departments to clarify customary rights across a range of overlapping customary and statutory tenure systems. Consideration of these overlapping rights on customary land will inform the approaches that government uses moving forward to secure the customary rights of rural communities in Zambia. The paper also considers how the data from ground up customary mapping can interface with government efforts to undertake a land audit and where there are differences with state land records that can form the basis of participatory land-use planning.

Key Words: Communal Resources; Participatory Mapping; Participatory Land Use Planning; Customary Rights

BACKGROUND & JUSTIFICATION

Zambia possesses a dual land tenure system of customary and state land, with very few structures for communication between the state and customary land administration authorities. The majority of Zambia's rural landmass is managed by traditional authorities through an informal and undocumented land administration system, while the state system is largely absent in these rural areas. There is growing recognition of the importance of documenting rural customary land rights to provide long-term tenure security to households in these customary areas. These approaches recognize the customary rights of traditional leaders to administer land, including offering documents to landholders. The documentation of customary land, however, brings with it some risks to current landholders and has the potential to ignite latent conflicts.

Within most of these chiefdoms there are substantial pockets of land that is ostensibly state land, but which is de facto under community/customary control, for example resettlement camps, forgotten forest reserves, and pre-colonial titled farms. Additionally, the state has management rights over all forest (when commercialized) and wildlife, even on customary land, particularly in vast game management areas. Mining prospecting rights are prevalent across the country. Given Zambia's irreversible process for conversion of customary land to state land and the vast areas within limited state presence, many of these statutory rights are latent, and in some cases are unknown to government and or local communities. The documentation of customary rights in this context will raise these latent claims and has the potential for government to reassert tenure rights over these areas and resources. In some cases, these rights reflect the underlying ownership or leasehold of land (e.g. abandoned farms, or state forest land) in other cases the overlapping rights may be related to customary ownership of land, but government management of resources (e.g. game management areas). However, in the best case scenarios the mapping of customary and state rights together has the potential to result in participatory land-use planning that will reconcile long-standing ambiguities. Given recent policy and legislative developments around a draft Land Policy, Wildlife Policy and Wildlife Act, Forest Policy and Forest Act, Decentralization Policy, and Urban and Regional Planning Act there is an opening to bridge customary and state information sources. Additionally, emerging programs such as the National Land Audit and jurisdictional investments in forest and agricultural landscape management, as well as pilots of customary land documentation and community-based forest management, all require spatially explicit data sources both from the customary and state land estate.

This paper will describe the process that USAID's Tenure and Global Climate Change Project is undertaking across a 200,000+ hectare chiefdom to systematically document customary rights, while navigating relationships and agreements with a variety of Ministries and Departments to clarify

customary rights across a range of overlapping customary and statutory tenure systems. Consideration of these overlapping rights on customary land will inform the approaches that government uses moving forward to secure the customary rights of rural communities in Zambia. The paper also considers how Zambia's current tenure regime in customary areas influences rural livelihood options, including investment in game farms and wildlife tourism, commercial agriculture and the dynamics between forest conversion for agriculture and forest and wildlife protection. This will consider the potential that rights clarification has for improving the management of these forest and wildlife resources.

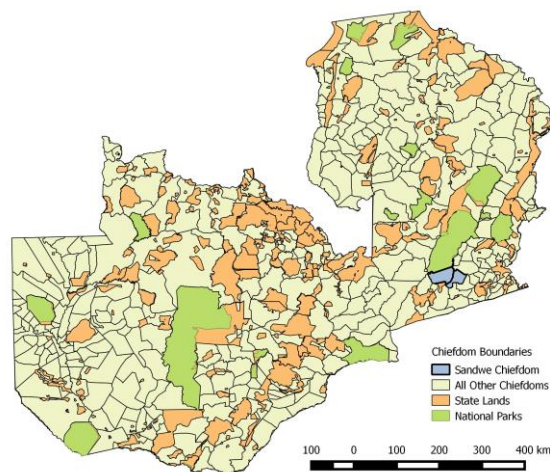
INTERVENTION & METHODOLOGY

USAID is working with the Petauke District Land Alliance (PDLA) to navigate the land documentation challenges. Building on previous USAID-supported work in Chipata District, the PDLA, with technical support from two international consulting firms, Tetra Tech and Terra Firma, has applied a systematic approach to working with communities to initially document village boundaries and classify shared resources and their tenure regime. These activities provide a background for household documentation and the resolution of existing land conflicts. It also can form the basis of a land-use planning exercise. The approach combines classic participatory rural appraisal techniques with mobile technology, and combines both paper and digital mapping in the field depending on the needs of each community. PDLA follows these broad land use and tenure exercises with household documentation of each field and area of household and family land. The results are ground-truthed through public displays of maps and land claimants prior to village, area and chiefdom sign off and delivery of certificates.

Yet within this mosaic there are areas of ambiguity between state and customary land. These areas have required PDLA, traditional leaders and government to liaise on the appropriate approach to documentation. For example, there are hundreds of hectares of pre-colonial farms which technically rest in the state system yet have been inhabited exclusively for decades by local communities. In another case, government degazetted tens of thousands of hectares of national forest, but did not clarify whether this land rests with the traditional leaders to allocate or whether it remains state land under the authority of the Ministry of Lands. Finally, a twenty thousand hectare former refugee camp now has overlapping claims of farmers offered five hectare plots, recent opportunistic settlers, and traditional villages whose land rights had never been fully clarified at the time of the establishment of the refugee camp. In each of these cases the PDLA and government are negotiating compromises that protect the rights of current community members while ensuring that these overlapping state and customary claims are recognized by both government and traditional authorities.

In addition to overlaps on land, there are additional overlaps over management authorities in the chiefdom between state management of wildlife and forest resources and community ability to use and benefit commercially from these resources. Communities have few rights to commercialize wildlife or forests. In the case of wildlife, this has led to resentment, when external investors have bought and converted land from customary to leasehold title to establish game ranches. This lack of ability for communities to participate in the ownership of resources on customary land continues to limit rural development options. This work provides a microcosm of the types of challenges likely to face systematic land documentation in Zambia and the resolutions identified jointly between traditional leaders, government and the technical supporters of customary land documentation.

Identification of Tenure Units: Under Zambia's customary land regime, village headpersons have legal authority for allocating land within chiefdoms, and villages are defined at the discretion of the chiefs. Yet few chiefs have a full inventory of villages under their control as villages are often created customarily through break away households or new settlers to an area. Building on an initial list of villages from Chief Sandwe, extension agents on motorbikes spread across the chiefdom's 180,000 hectares to locate each of these villages and identify additional neighboring villages. This process increased the number of self-reported villages to 412 (at least 63 of which are part of the resettlement scheme). This initial rapid survey also collected basic information on village size, headperson name and chief advisor name (Figure 1).



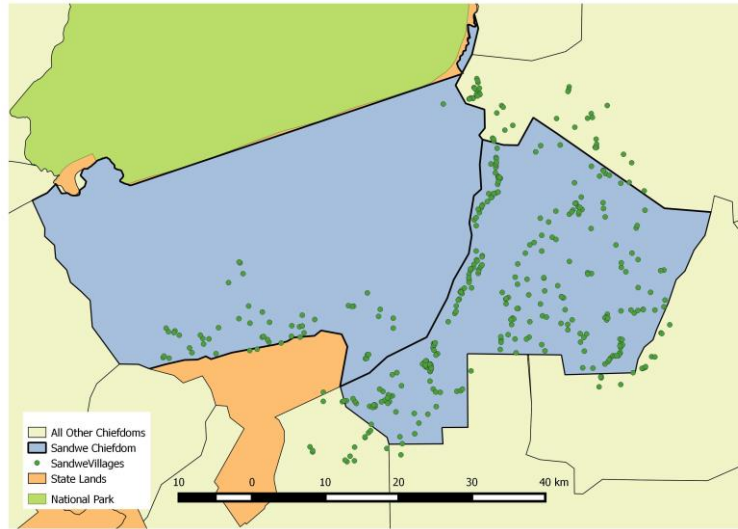


Figure 1: (a) Sandwe chieftom location in context of Zambia. (b) 400+ villages within Sandwe Chieftom. Ultimately the chief and government will need to liaise as to whether each of these are accepted as full village.

Collecting Information on Shared Resources: During a first village meeting, communities undertook standard participatory rural appraisal mapping approach where the village drew their boundaries and resources. A new grid was subsequently established to nest within Zambia’s 1:50,000 topographic map atlas, which, when printed with high resolution imagery including from Quickbird, WorldView-2, and GeoEye through a Digital Globe license, allowed for identification of resource types on the ground by local communities. Bringing these resource maps to communities allowed community members to transcribe their participatory maps onto imagery printed on A1 mapsheets. The collection of spatial data was done based on the needs of the facilitator, including, through drawing on a physical map, collecting boundary points through a walk, drawing polygons on a tablet screen, or for specific locations, collection of point data. The following land uses were catalogued:

- Agriculture,
- Grazing areas/wetland agriculture,
- Graveyard,
- Forest/Bush,
- Hills, which frequently may also include forest/bush or mining or wildlife,
- Settlements,
- Wildlife, or
- Mining.

Additionally options for numerous types of points were also collected. Each resource identified by the community was subsequently labelled and the local tenure and management regime associated with it was collected (Figure 2). Each resource was classified as:

- private,

- community managed,
- communally managed by multiple villages,
- communally managed at an area or chiefdom level,
- open access, or
- government managed.

If resources were communally managed, the villages that engaged in the management were identified, allowing the team to develop maps that effectively demonstrate the area of customary interest of each community. The availability of these tenure regimes may form a basis for documenting and securing both community rights, as well as areas reserved for individualized/family/private rights in the future. While the methodology includes the mapping of household and individualized parcel countries, as well as outreach and communication activities, for the purposes of this paper the methodology ends at this level.

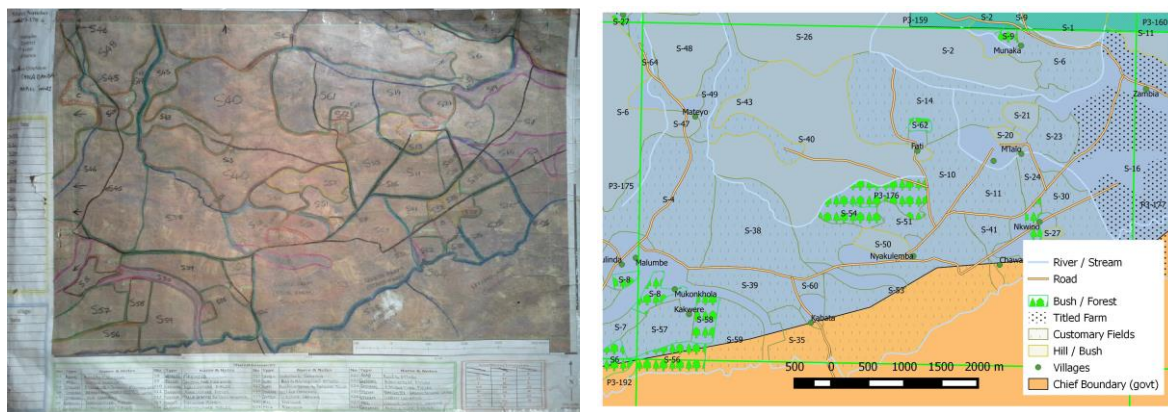


Figure 2: Photos of complete mapsheets marking resource uses and tenure conditions, as well as digitized GIS layer for the same mapsheet. Note discrepancy between customarily recognized chiefdom boundary (blue line at bottom of map) and government chiefdom boundary map (blue and orange).

Limitations: The shared resource mapping approach provided a map of the full chiefdom with the exception of areas beyond the standard use of communities, for example deep inside a mountainous game management area. As a result, some of the uses that are undertaken by only a small proportion of the community may not be captured effectively. Additionally, this approach only allowed for a single layer of information on the primary community resource use to be captured, while in practice there are overlapping tenure regimes, for example where communities have customary use rights in a forested bush, though there is also an overlapping area of mining licenses. An approach that allows multiple layers to be collected concurrently would be necessary to address this constraint. Finally, community representatives were left with the choice of deciding what land use classification should apply to any given area, despite the fact that these classifications are non-exclusive. Government officials, chiefs and chiefs' advisors agreed on the classifications that were included as options, but an area may be considered as "bush" by one person and "forest" by another. Given the scale of the area covered, it was not possible to go through an in depth definition discussion with each of the 429 communities. There were an

estimated 7994 households across these communities, and initial meetings were held with 7115 (3693 men and 3422 women). The use of land-use classification through remote sensing imagery analysis prior to field survey would be one way to identify a number of these resources in advance. However, field meetings would still be required to understand the tenure regimes of each of these areas, including boundaries between communities where the resource is continuous.

LEGAL FRAMEWORK FOR LAND-USES AND TENURE REGIMES IN CUSTOMARY AREAS

Zambia's customary areas are under the management and jurisdiction of the chiefs, their area advisors (indunas) and village headpersons. The law protects the chief's right to administer land in accordance with customary practices, as well as defines the headpersons' responsibilities over land and people within a village. Yet the security of community rights over land and resources within a chiefdom is also framed by the ability of others to access commercial and use rights, in many cases with limited consultation or grievance mechanisms for communities. Some of these overlapping rights date back decades, such as the presence of historical farms, while others are more recent, such as expansion of exploratory mining rights. In each case, the overlapping rights regimes have not been well explained to communities or leaders and the maps are not available in a consolidated local format.

Settlements and Government Infrastructure: While the work focused primarily on mapping natural resource and livelihood uses at the landscape level, the team took advantage of presence within each village to collect point level data on settlements and a range of government and local infrastructure in each village, including the presence of communications (cell phone towers), schools, clinics, electricity, agricultural extension or purchasing sites. It is expected that this information will be valuable for the future government prioritization and communication between chiefs and government on development infrastructure priorities. The process identified 1737 points of interest across the chiefdom distributed between the following classifications (Table 1).

Table 1: Community and Development Infrastructure and comparison with number on Ministry maps

Community Infrastructure	Number from PDLA Mapping	Number in Official Shapefile
<i>Settlements</i>	429	75
<i>Health Facilities</i>	13	2
<i>Schools</i>	22	?
<i>Cellphone Towers</i>	7	?
<i>Boreholes</i>	220	?
<i>Churches</i>	145	?
<i>Meeting Centers</i>	68	?
<i>Agricultural Purchasing Sites</i>	6	?

<i>Hammermills</i>	<i>30</i>	<i>?</i>
<i>Graveyards</i>	<i>72</i>	<i>?</i>
<i>Football pitches</i>	<i>164</i>	<i>?</i>

Open Areas: Open area is a government land classification that refers to land under the exclusive management of chiefs and their subjects. This does not imply that these are “open access” areas. These areas do not have any national interests associated with them. In the case of Sandwe Chiefdom, open areas cover a relatively small portion of the chiefdom. These areas can be allocated by chiefs and headpersons, but it is also the easiest to alienate to leasehold tenure, as they have the fewest number of authorities who would need to sign off on a request for title. Open areas are attractive to private sector farming investment, though there is relatively limited private sector interest in this chiefdom. In recent years, some customary landholders within Sandwe and neighboring chiefdoms have felt their tenure security decline in open areas due to efforts by investors with chiefs’ permissions/agreement to establish game ranches in these areas in Petauke. These threats will only increase with time, as the recent Wildlife Act of 2015 creates for the first time, an opening for game ranches to be established at lower costs without fences, though it is still unclear whether this will be permitted on customary land. The overlapping rights on open areas are among the most difficult to assess because there are no centralized shapefiles and many of the historical records of allocations are no longer available. As a result, even the 1950-1970 topographic maps that present historically allocated or reserved farms, and other previously allocated rights that are currently invisible to government on otherwise open areas.

There is a particular risk that a shared resource mapping process and data gathering process that seeks to place all data in a single location could be used to undermine current customary rights due to new claims on latent statutory rights (for example, where government finds that there is state land that it had lost records of), or the fact that these open areas are the places where it may be easiest for customary rights to be eroded.

Game Management Areas (GMAs): Understanding the tenure dynamics of GMAs is particularly important as they cover over 20% of Zambia’s land surface. In the case of Sandwe Chiefdom, the GMA covers a substantial part of the chiefdom, well over 50%. It is one of the few GMAs in the region that does not boarder the Luangwa River. This may be one reason why it is currently defined as “depleted” (i.e. not having a robust wildlife population) and did not receive any bids for hunting concessions in the 2015 bids for hunting concessions. Despite the limited wildlife within the GMA, it presents some potentially important tourism opportunities, as it is the most proximate South Luangwa GMA to Lusaka.

There are substantial misunderstandings of the rights that local people have within these GMAs. Many people falsely believe that GMAs are state land and that settlements and agriculture are prohibited as the land is reserved for wildlife conservation. In practice, the customary and statutory rights within GMAs vary across the country, as customary rights can be constrained by provisions in the GMA's Game Management Plan (GMPs). However, relatively few GMAs have approved GMPs though the completion of GMPs is reportedly a priority for the Department of National Parks and Wildlife (DNPW). Given limited budgets to develop GMPs and the challenge of reaching the small communities in and around the GMAs: engagement and consent of communities remains a significant challenge. This has come to a head in other GMAs, including in Kafue National Park where villages are routinely evicted and their infrastructure burned, in part over reports that they are engaged in poaching. Yet the historical use rights of some of these communities are contested. As a result, there is a clear need to include tenure consideration and historical use rights into the development of GMPs. The Department of National Parks and Wildlife is reportedly in the process of developing a GMP in Sandwe chiefdom though community members are largely unaware of this development. This may pose longer-term conflicts if for example, the new GMP does not take into account all current occupants of the Sandwe GMAs and their present and future needs.

In practice, rights within GMAs (prior to GMP approval) are similar to rights on open areas. Communities have subsistence rights to forests and forest resources and small scale use rights to agricultural lands under the authority of the Chief. One area that communities do not have rights is with respect to bushmeat hunting, which may be permitted by the DNPW based on permits filed in District municipality. In many cases there is a management void in the GMAs as many chiefs perceive the management of the area to be under the DNPW, which though it may have one or more camps for wildlife rangers, they do not take an active role in activities beyond wildlife poaching monitoring. With the recent Forest Act of 2015 and Wildlife Act of 2015, DNPW rangers have been given rights to monitor for illegal harvesting, and forest guards have been given law enforcement rights over wildlife, though it is not clear that very much active coordination has occurred.

GMA boundaries are ambiguous within the chiefdom, with significant divergence between perceived boundaries by local communities and the government shapefiles. On the relatively populated side of the chiefdom, communities commonly suggest that a secondary stream accounts for the boundary. In the sparsely populated south of the chiefdom, there is no commonly identified boundary for the GMA beyond the knowledge that it starts within the set of hills. Communities commonly cultivate within the arable portion of the GMA though in Sandwe GMA, cultivation is not particularly extensive due to hills. The shared resource tenure mapping will be particularly important in protecting the rights of existing

communities in and around the GMA and can be done through a process associated with the establishment of the game management plans. The land-use mapping approach promoted under this pilot poses some challenges for mapping the GMA, as most of the land areas that are mapped fall within a single set of neighboring mapsheets (5km x 7km). However, the GMA stretches across almost 46 of the community mapsheets (over 150,000 hectares) and communities generally do not know the extent of the total boundaries of the GMA. There is thus a need in the mapping process to be able to map across different scales and to be able to record partial boundaries of a resource.

Resettlement Scheme: Ukwimi Resettlement Scheme was established in 1986 through an agreement between Chief Sandwe and the Vice President's office. The Scheme includes 20,000 hectares of historical customary land and a degazetted Lusandwa Forest Reserve. At present there are numerous government services and offices within the scheme and it is being managed by a local scheme manager. The scheme housed up to approximately 23,000 refugees from Mozambique until through the 1990s, and then again in the early 2000s with 2,000 Angolan refugees when the camp was closed and was to be administered as a farm scheme whereby plots of 5 hectares each would be allocated based on a series

Box 1: Process for acquiring land on leasehold in resettlement schemes:

- Applicant get recommendation from scheme manager or Agriculture manager
- Site plan prepared by Ministry of Agriculture and endorsed
- Fill in application from council or lands department
- Council Secretary signs and endorsed by full council after site plan is approved by Provincial Planning Authority
- Application and attachments submitted to lands department

of conditions (Box 1). If farmers meet these conditions, they can apply to move from an occupancy permit to formal title. Though numerous occupancy certificates have been given and sketches of plots established, none has yet been converted to title. The current challenges facing formalization, include incomplete records on the allocated farms, the presence of numerous opportunistic squatters and overlaps with historical villages that exist within the scheme, but whose rights were never documented.

Additionally, there is a collective action problem in that if the farmers pooled together resources and all had their parcels surveyed systematically, the cost per parcel would be quite small. Despite some efforts neither the farmers nor the scheme managers have been able to organize this investment.

While Ukwimi has been touted globally as a model of an effective refugee resettlement scheme during its years of operation (Jones, 2001) the scheme did not effectively engage with the original customary rights holders in the area. Thus the rights of original customary communities are somewhat ambiguous. At the time of establishment, there were at least 25 customary communities within the scheme area, who were reportedly told that they would be given leasehold title to their customary farmlands. This however, has not occurred and there are now common complaints from community members that their village

boundaries and customary lands are being encroached upon by new settlers. As a result, the existence of these customary villages within the settlement scheme poses a challenge for government to preferentially recognize these rights prior to sorting through the history and rights of the more recent established settlers and individuals who hold farm plots. The use of shared resource mapping can form the basis for these communities to map out their areas of influence, including presumed areas for future allocation. Though the communities operate under the traditional authority of the chief, their land is presumably state land that has not yet been allocated under leasehold titles. There are multiple options for securing tenure of these communities, including individual leasehold titles to areas currently farmed by households, registration of forest areas under the new community forest management regulations, or leasehold title of the communities' whole area under an association leasehold. This final model is being piloted in a number of customary areas where new investments, such as irrigation, are promoting collective titling in the name of a community and its members. Yet, this approach remains relatively untested in Zambia though has worked in a number of other countries in Africa through group ranching, or community conservation areas, as well as in Mexico where with the *ejido* system has created clear governance structures that have worked well in some areas (Jhaveri et al., 2015).

Following the closing of the resettlement area, the scheme management opened up a large portion of the scheme for five hectare farm plots, which were subsequently advertised publically (Figure 3). These plots have been acquired by: individuals who have become resident on the farms (migrating to Petauke from across the country); individuals who act as weekend farmers visiting primarily during the rainy season and cultivating with his/her own family; and absentee landlords who may live further away from the area and may or may not have placed a caretaker on the property. Establishing the rights of these holders of occupancy permits should be relatively straight forward, as their boundaries (or at least total area of farming rights) should be clear, and their paperwork should be held with the resettlement department and/or with the holder of the plot. In practice this adjudication process may be more complicated to carry out. In these cases, it will be up to the scheme managers and staff to examine the documentation and determine whether the conditions of the allocation have been followed, prior to recognizing the rights.

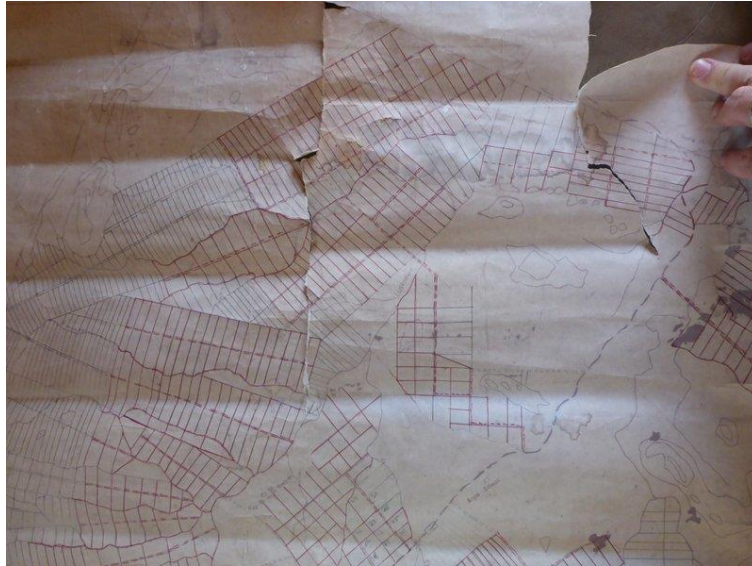


Figure 3: Hand drawing of plots allocated under the Ukwimi Resettlement Area in resettlement office

Given that these letters were offered over a number of years, there is another group of people whose rights will be more complicated to adjudicate, those of individuals who may have illegally bought or sold the occupancy letters, squatters and caretakers on individual parcels, and recent migrants who may have entered the scheme without full and proper consultation. There are reports from the scheme manager that individuals holding occupancy certificates may have sold their permits (which is forbidden) at dramatic mark ups, for example acquiring five hectares for \$1 and selling for \$100- \$1000 to unsuspecting individuals who have never registered their rights formally. In other cases, given that the land was allocated at such a low rate, many landholders never visited their plots and have effectively left them abandoned. Thereafter caretakers have established long-term rights on the land. In these cases, the individuals may be cultivating the land in good faith, but do not have any formal recognition of their rights. Finally, there are numerous reports of friends and relatives of rightful occupants, as well as opportunistic migrants from neighboring Katete District converging on Ukwimi without paperwork due to word of mouth that there is abundant and free land. These settlers are often blamed as the ones who are impinging on the customary villages. Adjudicating the rights of these recent settlers and deciding if any have rights that will be upheld in the long-run will pose a challenge to the scheme manager. Regardless, the areas that these recent settlers are converging on include shared resources, and extend beyond the diagrams that were presented in Figure 3. The mapping of existing shared resources and understanding the rights of customary communities, formal rights holders and recent squatters will be critical for longer-term land use planning and clarification of individual and community rights across the full area.

National Forest: National forests are under pressure across Zambia and in many districts there are active attempts to degazette all or parts of national forests to create space for agricultural expansion. Forest land occurs both on customary land and state land, it is not always clear whether a degazetted forest becomes customary land under the authority of the chief or becomes state land that is available for leasehold title. In some cases the boundaries of the forests are well understood, but there have been efforts by chiefs and headmen to assert authority by allocating land in these areas, as a process towards promoting degazettement. In other areas there has been miscommunication over recent decades. When government reclassified forests as national forests and local forests, some chiefs and communities believed that the creation of “local forests” meant that the management rights had been fully devolved back to the local community, when in fact it simply meant that communities could form structures and apply to the Forest Department for joint forest management rights, none of which occurred in Eastern Province. Finally, in some cases communities simply did not know that a national forest was present in a larger area of bush, and government has not asserted authority over these areas. In each case, significant pressures have been put on forest reserves. USAID has supported the Forest Department in recent years to increase management and place beacons around a subset of priority forests in Eastern Province of Zambia. Regardless there is still limited capacity of the District Forest Departments with only one or two staff in each district to actively manage or patrol forests. This effectively puts much of the national forest estate in the hands of de facto customary management.

Box 2: Forest Concession Permit Conditions:

- Concessions can be allocated for two to five years
- Consider comments from local community in the area, and the social and economic contribution to the local community
- Licensee shall demarcate boundaries but shall attempt to use natural boundaries

Further complicating matters is that the Forest Department has jurisdiction over all commercial uses of forest, even on open areas, GMAs and private forests. The department is thus able to allocate commercial concessions in each of these areas since the lifting of a forest concession ban in July 2016. Associated with this lifting was the auctioning of \$20 million worth of confiscated logs, as well as the clarification that permits for forest concession licenses would only be offered to Zambians (The Nation, 2016). Though presumably the department would not lease concessions to outside investors on private land, it does actively allocate concessions in open areas. GMAs are not explicitly mentioned in the Statutory Instrument on concessions, but current experience suggests that it is possible to establish forest concessions in GMAs. The allocation of forest concessions is supposed to be open and transparent. However, in practice it is not always clear where these concessions are located, and keeping the logging operations within quotas is not particularly easy. There are provisions for consultation of holders of rights, title or interest in forests areas, including local communities, as well as a consideration of the

social and economic contribution of the licensee to the local community, however, it is not clear how in depth this consideration is treated in forest concession areas (Box 2). In Sandwe chiefdom, over the past six months there have been five concessions requested and one approved, all which are found in the GMA, though no maps of these areas are available until licenses are issued.

The mapping of the national forest area and communication with communities on the reality of management on the ground in Sandwe chiefdom is particularly important. In some parts of Eastern Province, National and Local Forests are found primarily on top of hills and are isolated, but clearly identifiable areas. In contrast in Sandwe chiefdom, the national forest is within the larger area of bush across hills and thus more engagement is required to protect and manage this area, including engagement with the few local communities who are resident in the area.

Community Forests: The Forest Act of 2015 creates a new provision for community forest management, which provides opportunities for communities to register their rights to forest on customary land and also to benefit from commercialization of the resources. The statutory instruments are presently under development, however one of the challenges that has plagued community management (for example in the GMA, Community Resource Board structure) has been that elites relatively far from the resource have often claimed the benefits and responsibilities for management while those who are actually in close proximity have limited roles in management. The tenure mapping approach identifies the individual communities with interests in specific areas of forest and thus provides an opportunity to use these documentation of rights as the basis for defining community forest management areas. This concept is being considered with the Finnish-funded Decentralized Forest Management program which is supporting the Forest Department to develop and pilot the Statutory Instruments for Community Forests. This registration of community forests may be the first step in a larger process that allows for mapping and registering rights across the full customary estate, a process that is reportedly envisioned in a Customary Land Administration Bill that is expected in 2017.

Active Leasehold Titled Farms: There are a number of titled farms within the customary estate. While these area usually on the periphery of municipalities or in key farming areas around the country, there are small to medium scale farms scattered across the rural chiefdoms. In some cases these are private company outgrower schemes, as in the case of tobacco further to the east of Petauke, and in other cases they are retired professionals who have returned to their chiefdom of origin. These farms may be hiding in plain sight however, as acquiring documentation from Lusaka or the district municipalities can be exceedingly difficult. In some cases the paperwork is missing, and in other cases the land has only been partially converted to leasehold tenure, for example when an individual acquires the chief's consent and the consent of a local council, as well as potentially a surveyor's plan, but then never carries out full

registration in Lusaka with the Ministry of Lands because this would open the land up to ground rents. Despite the absence of official records on these farms, they are commonly known within the communities and as a result they can be drawn on shared resource maps with relatively high confidence.

Historical Titled Farms: In contrast to the active leasehold farm, there are expanses of farm areas that were either reserved during colonial and early post-colonial times. These areas were reserved for farm land or were abandoned by white colonists or settlers after independence or when Zambia converted freehold title to leasehold title in the 1970s. Central government is often not aware of the location or status of these farms and there is a distinct risk that mapping them in a customary shared resource mapping process could alert government to the presence of these de jure state lands that have been de facto managed by local communities for decades. In many cases, the current occupants are former farm workers or descendants of the farm workers who may or may not have originated from the chiefdom. Given this risk there is a need for government to clarify the status of these historical abandoned farms and preferably return them to the customary estate. Those farm blocks that were never even allocated during colonial times should be clarified as still belonging to the customary estate.

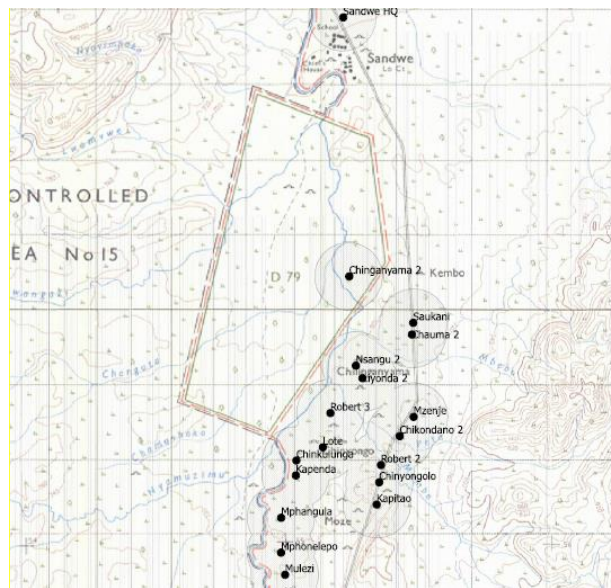


Figure 4: Topographic map from 1971 showing present day customary villages and an approximately 2,000 hectare abandoned farm on state land.

Mining Rights: Mining licenses in Zambia are relatively ubiquitous, though the majority represent exploration license. Even Zambia's flagship National Parks have substantial mining interests within. As with forest concession licenses, mining licenses can overlap with customary areas and the status of the land remains customary, though mining rights are allocated to an owner or company. Sandwe chiefdom includes numerous mining concessions for exploration, prospecting and large scale mining, each of which

can be found within the Game Management Area. Communities have various knowledge of these mining efforts and some community members are hired to work in prospecting or full-scale mining. Despite the areas covered by mining licenses (particularly outside of Zambia's industrial mining region of the Copperbelt) the actual area of impact is generally much smaller, as mining firms have an incentive not to identify the precise area of operations. As a result, the ground-up mapping of resource use and rights provides a more detailed picture of actual operational mining impact in the chiefdom. This scale of resource rights use and mapping is essential for protecting community rights and engaging in a dialogue with the at least 14 different mining interests in the chiefdom (Figure 5).

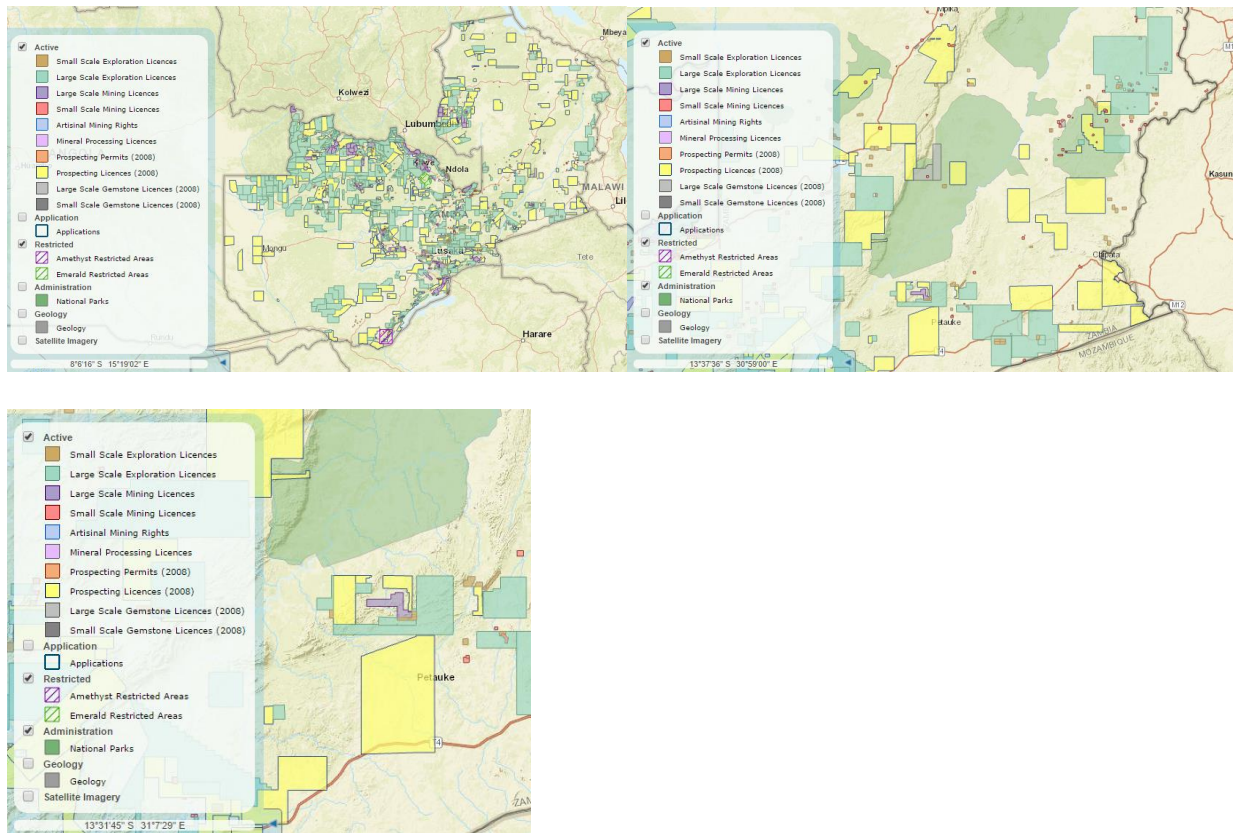


Figure 5: Zambia's mining interests showing a) the extent of mining licenses across the country; b) the extent of licenses within and surrounding Zambia's protected areas (in green); and c) location of 14 licenses within the Sandwe Chiefdom of interest. Source: Flexicadastre.com/zambia : Zambia Mining Cadastre Portal

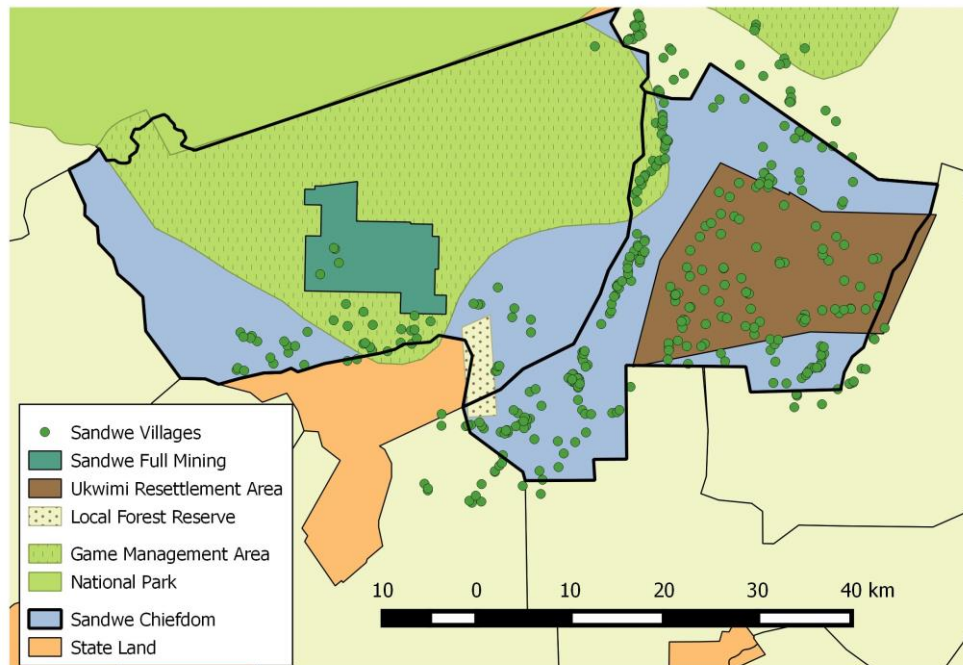


Figure 6: Sandwe Chiefdom overlapping large scale tenure regimes with villages (note: titled farms, historical farms, and mining prospecting licenses are not shown on this map).

Table 2: List of customary resources mapped within Sandwe chiefdom across 165,000 hectares as of 10 February 2017

	Area Covered	Total Cases	Private	Community (restricted)	Communal (shared)	Open Access
Agricultural Fields		350	3%	48%	43%	5%
Settlements		302		91%	9%	
Bush		155	1%	52%	34%	14%
Hills		135		3%	47%	50%
Graveyards		75		32%	56%	12%
Grazing Areas		72		11%	63%	26%
Other		48	19%	13%	25%	44%
Titled land		47	100%			
Woodlot		13		62%	31%	8%
Community Forest		12		100%		
Lake		10	10%	30%		60%
Cultural Site		6			67%	33%
Local Forest		5		20%	40%	40%
Dam		3		33%	67%	

Table 3: Consideration of government sources of spatial information against customary sources of information and the likely difference among the resources that can be used to stimulate discussion over land and resource use.

	Customary Source and Issues	State Source and Issues	Differences and Contestation in Records
Settlements, Government Infrastructure & Agricultural Investments	Customary mapping of individual points of interest. Easily collected and verified	Assembled from a range of ministries on health clinics, schools, etc.	Government records are not centralized and don't tell the story of private service delivery and community developed boreholes, schools and agricultural purchasing sites
Open Areas	Considered standard customary land, with boundaries not well defined.	Based on absence of other documented land rights	Communities feel relatively tenure insecure on these limited areas that are not fully cultivated due to possibility of evictions for private sector investments
Game Management Areas	Boundaries partially known, particularly where there are roads or natural features; Many misperceptions on rules and rights	Government shapefiles	Substantial differences in boundaries, and communities generally think the GMA covers a larger area than it does
GMA Concessions	Generally unknown until camp is built	Assemble records from the DPNW	Communities generally not concerned because these are well within GMA, outside of community interest
National Forest Reserves	Boundaries unknown and undocumented; some knowledge that there may be forest reserve in the area	Government shapefiles	Substantial lack of clarity on location and rights, responsibility and limitations
Forest Concessions	Unknown by local communities	Government shapefiles	Unknown by local communities
Active Leasehold Titles	Generally, known based on current use	Assemble records from district and Ministry of Lands	Unable to compare due to lack of records from District or Ministry
Historical State Farms	Abandoned farms are generally known and can be mapped, but have been used locally Historical farming blocks that were not allocated are unknown	Identified from government maps post-1965	Communities are aware, but government is largely unaware, and could pose tenure insecurity if government reasserts rights.

Mining Rights	Bottom up identification of active mining sites	Assembled from Zambia Mining Cadastre	Community data is more relevant and useful than mining cadaster
Resettlement Scheme	Numerous areas of overlapping rights, conflicts and tenure insecurity, which are complicated to map without individual understanding of rights and evidence base	Resettlement Department for general boundaries; Plots boundaries from hand drawn sketch maps.	Systematic process needed for: 1. Recognizing customary landholders; 2. Examining documentation of current occupiers and deciding on legitimacy

CONCLUSIONS AND OPTIONS FOR SECURING RIGHTS

The range of different land and resource tenure regimes present within customary areas present a complex picture for securing communal resource rights, as well as household or family level land rights primarily for agricultural land. New opportunities are emerging in the legal framework for securing community forest rights and there is some likelihood of the emergence of a Customary Land Administration Bill that will allow for communal resource rights in Zambia to be registered and for individual or groups of communities to gain rights and statutorily recognized management rights.

The ground up community mapping of customary resource rights deployed in Sandwe Chiefdom with the Petauke District Land Alliance, alongside a top down consolidation of statutory rights documentation provides a model for reconciling overlapping customary and statutory rights and the potential impact on communities as well as investment opportunities in Zambia's rural chiefdoms. This approach is viable in rural landscapes where wildlife conservation interacts with mining interests and community livelihood needs; as well as in the peri-urban areas outside of district municipalities. Only when the perceptions of both local actors on the ground and those in government and traditional leadership are brought into a common framework can informed plans be developed in a participatory manner and hopefully implemented. This is particularly important in the context of a number of planning processes that are occurring concurrently in Zambia at present. The renewed interest in completing Game Management Plans across Zambia's numerous GMAs is underway, as is the piloting of community forest management and a new round of forest concession licenses. Investment in Zambia's farm blocks remain a priority for the Zambia Development Agency, but community engagement remains a major stumbling block. The decentralization policy and the Urban and Regional Planning Act of 2015 place new responsibilities with District government and Local Authorities to engage in development within Zambia's customary land mass beyond the traditional focus of Ministry of Health, Ministry of Education, and Ministry of

Agriculture in making isolated inroads into the chiefdoms. Additionally, particularly in the Eastern Province, rural investment in climate change mitigation through improved forest and landscape management will require a landscape-based approach. This focus on planning requires a reconciliation of customary and state knowledge of land uses and land rights. Many of the state sources of information that are described in this paper are already anticipated to be included in Zambia's Land Audit. However, some form of customary ground-up documentation will be absolutely essential in mobilizing effective participatory land use planning.

REFERENCES

Jhaveri, N., Litz, V., Girard, J., and Oberndorf, R. (2015). *Customary Communal Tenure Recognition: Review of Country Experiences*. Washington, DC: USAID Tenure and Global Climate Change Program.

Jones, S. (2001). *Sustainability and institutional perspectives on natural resource planning and management at the Ukwimi resettlement scheme, Zambia*. Third World Planning Review. 2(4). Accessible at: <http://online.liverpooluniversitypress.co.uk/doi/abs/10.3828/twpr.23.4.d2k6262178361478>

The Nation. (2016). Government lifts forest licences ban.
Accessed <https://zambiadailynation.com/2016/07/16/govt-lifts-forest-licences-ban/>