

# **Policy Recommendations for Effective Localised Cooperative Governance Towards Enhanced Catchment Management**

Report to the  
**Water Research Commission**

by

**Sissie Matela<sup>1</sup>, Nicky McLeod<sup>1</sup>, Betty Mubangizi<sup>2</sup>, Kevan Zunckel<sup>3</sup>,  
Samir Randera-Rees<sup>4</sup>, Mzukisi Kuse<sup>5</sup> and Thabang Quali<sup>6</sup>**

*<sup>1</sup> Environmental & Rural Solutions*

*<sup>2</sup> NRF/ SARCHI Research Chair in Rural Livelihoods – University of KwaZulu-Natal*

*<sup>3</sup> Zunckel Ecological & Environmental Services*

*<sup>4</sup> WWF SA*

*<sup>5</sup> Rhodes University*

*<sup>6</sup> CONTRALESA*



**WRC Report No. 3155/1/24**

**ISBN 978-0-6392-0637-0**

**JULY 2024**



**OBTAINABLE FROM**

Water Research Commission  
Bloukrans Building, Lynnwood Bridge Office Park  
4 Daventry Street  
Lynnwood Manor  
PRETORIA

[orders@wrc.poreg.za](mailto:orders@wrc.poreg.za) or download from [www.wrc.org.za](http://www.wrc.org.za)

The publication of this report emanates from a Water Research Commission project entitled *Understanding Effective Governance Practise for Catchment Stewardship in Communal Landscapes* (WRC Project No. C2022/2023-00882).

**DISCLAIMER**

This report has been reviewed by the Water Research Commission (WRC) and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the WRC, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

## Executive summary

Traditional rural governance institutions are well-known and recognised by rural communities as custodians of indigenous knowledge systems and communal resources. The design and demarcation of the original traditional chieftainship boundaries follow very closely along the natural systems such as streams and rivers, ridges and mountain ranges, and resource allocation and utilization by the communities follow very closely along these natural boundaries. Following institutionalisation of the apartheid homeland system these boundaries were modified along more political lines for enhanced service delivery and fenced grazing camp management and became less understood by and relevant for land users. Rangeland and associated water resources protection practices received less attention especially in areas where traditional leadership and their boundaries were not maintained. With the arrival of democracy in 1994, ward boundaries were added which further fragmented the original traditional areas and were even further removed from natural system boundaries.

Establishment of effective catchment management systems which naturally requires a good understanding of natural flow systems has been disrupted due to poor or lack of management systems which guide the use and management of resources especially those utilised by communities who have adopted lifestyles that depend on the quality and distribution of common resources.

There is still some uncertainty regarding what agency would be most effective to lead catchment management along the length of the Umzimvubu River system. While not by any means replacing a statutory catchment management agency (CMA), the Umzimvubu Catchment Partnership (UCP) guided by a Memorandum of Understanding has been very effective in bringing together a diversity of stakeholders and decision makers to develop and implement a working plan based on individual mandates of member organization but identifying the common goal to protect the upper Umzimvubu Catchment and Water Source Area. In this way it has functioned to a degree as a local Catchment Management forum (CMF). Through this partnership, institutions are able to contribute through research, innovation and learning to the conservation of the upper catchment and improved management of water resources in order to benefit the wellbeing of local resident and downstream communities. UCP members believe that shared experience and effective governance can provide lessons that will be drawn upon to develop and institutionalise similar models in other communal landscapes around South Africa.

The major emphasis to date has been on:

- Sustainable restoration and building capacity of local resource users with emphasis on restoring landscapes for community livelihoods, and
- Rebuilding the capacity of indigenous resource governance institutions.

Proper alignment of local resource management systems and institutions, which, even if they do not meet all the criteria for a catchment management forum, can fulfil the mandate for providing effective leadership as a means towards the desired outcome of sustainable management and equitable water access. Recognition of the contribution made by local people is invaluable as it provides the basis for developing systems which frame more inclusive decision making on developing further capacity. Civil-state institutional collaboration and sharing, fostering collaboration between traditional and elected leadership, involvement of elders and promotion of youth participation have been some of the important aspects in the development of systems for sustainability, which are recorded in this project, and which can form a basis for enhanced collaboration.

This report draws on prior findings from reports which form part of this Water Research Commission project, which may contribute to enhanced localised collaboration and effectiveness of natural resource management by Catchment Management Fora.

This page was intentionally left blank

## Contents

1. Introduction.....	1
2. Methodology .....	2
3. Context and Conceptual Framework and Governance .....	4
3.1 Project findings .....	5
3.2 Governance and Institutional Arrangements.....	6
3.2.1 The importance of using Cultural History Activity Theory and the Value Creation Framework .....	7
3.3 Handbook of Citizen Science Tools and Approaches to Support Effective Catchment Restoration.....	8
3.4 Guidelines for Enhanced Communal Landscape Governance.....	10
3.5 Lessons from the Living Catchments Project (LCP) experience .....	10
4. Key Practical and Policy Recommendations from the research findings .....	11
References.....	16
ANNEXURE A: MODULES GUIDING EFFECTIVE PRINCIPLES AND ACTION PRACTISE FOR COLLABORATIVE GOVERNANCE .....	17
ANNEXURE B: MAP SHOWING THE RESOURCE MANAGEMENT STRATEGY ACTIONS FOR THE UPPER UMZIMVUBU CATCHMENT.....	25

## **Acronyms**

ANDM	ALFRED NZO DISTRICT MUNICIPALITY
CMA	CATCHMENT MANAGEMENT AGENCY
CMF	CATCHMENT MANAGEMENT FORUM
COGTA	COOPERATIVE GOVERNANCE AND TRADITIONAL AFFAIRS
CONTRALESA	CONGRESS OF TRADITIONAL LEADER OF SOUTH AFRICA
CSA	CONSERVATION SOUTH AFRICA
DEDEAT	DEPARTMENT OF ECONOMIC DEVELOPMENT, ENVIRONMENTAL AFFAIRS AND TOURISM
DRDAR	DEPARTMENT OF RURAL DEVELOPMENT AND AGRARIAN REFORM
DSBD	DEPARTMENT OF SMALL BUSINESS DEVELOPMENT
DWS	DEPARTMENT OF WATER AND SANITATION
EM	ENVIRONMENTAL MANAGEMENT FRAMEWORK
ERS	ENVIRONMENTAL AND RURAL SOLUTIONS
IDP	INTEGRATED DEVELOPMENT PLAN
LCP	LIVING CATCHMENTS PROJECT
MLM	MATATIELE LOCAL MUNICIPALITY
MNP	MEAT NATURALLY PTY
MTTMPA	MALOTI THABA TSA METSI PROTECTED AREA
MTTMVA	MALOTI THABA TSA METSI VOLUNTARY ASSOCIATION
NEMA	NATIONAL ENVIRONMENTAL ACT
NEMPAA	NATIONAL ENVIRONMENT MANAGEMENT PROTECTED AREAS ACT
NGO	NON-GOVERNMENT ORGANISATION
PAMP	PROTECTED AREA MANAGEMENT PLAN
SANBI	SOUTH AFRICAN NATIONAL BIODIVERSITY INSTITUTE
SDF	SPATIAL DEVELOPMENT FRAMEWORK
SME	SMALL AND MEDIUM-SIZED ENTERPRISE
SPLUMA	SPATIAL PLANNING AND LAND USE MANAGEMENT ACT
SWSA	STRATEGIC WATER SOURCE AREAS
UCP	UMZIMVUBU CATCHMENT PARTNERSHIP
VCF	VALUE CREATION FRAMEWORK
WWF	WORLDWIDE FUND FOR NATURE

# 1. Introduction

This research project aimed to document and understand the experiences of civil-state institutional collaboration processes towards sound catchment stewardship in the communal landscape of the upper Umzimvubu River catchment through a social learning lens, focusing on the Maloti Thaba Tsa Metsi Protected Area (MTTMPA) journey, and including lessons from other catchments through the SANBI Living Catchments Project (LCP). The work was spearheaded by a diverse consortium of stakeholders with deep-rooted experience in the region. This consortium included an academic from the University of KwaZulu-Natal School of Management, IT & Governance, a PhD. student from Rhodes University, along with crucial conservation and implementing NGOs Environmental & Rural Solutions (ERS) and WWF-SA. Additionally, the group comprised a consulting expert from Zunckel Ecological & Environmental Services (ZEES) and a member of the Congress of Traditional Leaders of South Africa – (CONTRALESA) who provided practical and extremely valuable traditional governance information.

The primary objectives of this project were threefold:

- a) *To document and understand the unique collaboration between civil and state institutions, specifically the Umzimvubu Catchment Partnership Programme (UCP) and Maloti Thaba Tsa Metsi Voluntary Association (MTTMVA);*
- b) *To share and disseminate best practices for community-based sustainable resource management and water supply options, drawing mainly from experiences in this catchment in the context of other catchment experiences;*
- c) *To effectively empower local multi-stakeholder institutions to manage water and biodiversity stewardship in communal tenure areas.*

This report serves to consolidate the project's key findings and recommendations, outlined in sections related to the completed deliverables and products, to comprehensively distil **potential policy recommendations for effective localised civil-state and local-traditional cooperative governance, to guide enhanced development of Catchment Management Forums (CMF)**. This is particularly relevant at the time of writing, as the new NWRS3 (National water Resource Strategy 3) refers to "Strengthen the existing CMFs in the local communities by reconstituting and restructuring them as Catchment Stewardship Forums (incorporating users and beneficiaries in line to the guiding principles".

The status of CMFs in the country is very uncertain. Although not recognised as statutory bodies, they are suggested to be, in the 2004 DWS Guidelines for CMAs, the local representative voice feeding into Catchment Management Agencies (CMAs) which are legally obliged to manage South Africa's Water Management Areas. The process of CMA and CMF development has been very dynamic and complicated. An excellent guideline developed by AWARD in 2014 is probably the definitive framework for the functioning of CMFs (A WARD, 2014). **The aim of this report is to distil guiding principles for strong, representative, inclusive governance in communal landscapes, which may be applied to CMFs as well.**

Although the Umzimvubu Catchment Partnership (UCP) is not a formally established CMF, it is acknowledged as such by the Department of Water and Sanitation's (DWS) Institutional Development Directorate through its presence in their CMF database, and the policy uptake opportunities are recognised. It is important to note that the UCP is not a statutory body or legal entity, but effectively functions as an inclusive representative platform positively influencing water related activities. The UCP is not governed by a Board but is a collective of interested and affected parties with deep rooted experiences and interests in the catchment, who see value in and agree on the importance of working together to manage water resources sustainably.

Much of the impactful implementing work, around which enhanced governance has focused, has been fostered by civil and state members of the UCP and serves as a learning platform for improved landscape

management and enhanced livelihoods. Much of the UCP's collective effort has been grounded in local implementers, and the resident presence of Environmental and Rural Solutions (ERS) since 2002 has provided a foundational influence and a significant hub of the implementation, convening and learning process for the UCP since 2013. ERS is a member of this research team and has provided overall project management and experiential input.

As far as catchment management forums and adapting the systems developed for the upper Umzimvubu Catchment so that they work beyond what was developed by the UCP partners, the report will share a summary of the structures, goals and processes undertaken by and with the various stakeholders. The important outcome is ensuring that the beneficiary stakeholders have the capacity, resourcing and willingness to manage their own resources sustainably, which would come about if there were direct tangible benefits or returns they receive from the effort put in. These are not necessarily financial, but more importantly take the form of improvements in water access, increased rangeland quality and livestock production, access to markets, recognition and participation in planning and implementation, and inclusion in decision making forums, etc.

## 2. Methodology

The methodology for this research was anchored in a combination of two principal frameworks: the Value Creation Framework (VCF) and Cultural History Activity Theory (CHAT), complemented by the Change Lab approach for data collection and analysis. Consultations were conducted through two main processes. In the intricate exploration of human activities and their interplay with cultural and historical nuances, the Cultural History Activity Theory (CHAT) stands out as a profound theoretical framework. This theory delves deep into understanding how various factors, such as societal norms, historical contexts, and cultural tools, collectively shape and mould human cognition and behaviour. On the other hand, the VCF enabled the documentation of 'value creation stories' pertinent to understanding the governance and institutional arrangements in the catchment. With these two theoretical frameworks, the research team were able to achieve their intended objectives, with regard to navigating institutional dynamics.

This WRC-funded project has explored the work done in the Upper Umzimvubu Catchment and the lessons emerging from a decade of collaborative facilitation by UCP partners working closely with local communities, from which the concept of the 50 000 ha Maloti Thaba Tsa Metsi (MTTM) Protected Area, along the Eastern Cape Drakensberg watershed, was derived, as well as a governance entity to function as a management authority for the proposed MTTM Protected Area.

The research included analysis of proceedings of the Maloti Thaba Tsa Metsi Voluntary Association (MTTMVA) stakeholder sessions, which have been hosted by the UCP stewardship technical support team approximately every quarter for over 4 years. These sessions were crucial for procedural, consultative, and reporting purposes during the preparation for the protected area declaration process and the establishment of the Voluntary Association. Additionally, the research incorporated special focus group sessions, organised and facilitated specifically for the study by the project team with stakeholder groups identified during the analysis of the MTTM process.

Engagement with land rights' holders and frequent feedback sessions related to the stewardship of this area resulted in the development of a 'wish list' of needs by the six Traditional Areas' communities and leadership, with local UCP partners, specifically ERS. Most of the issues have been used as a guideline for projects to build resilience and respond to real life needs such as spring protection and rangeland restoration. These projects / activities have been supported by a variety of donors and are anchored around the protection of a core area with a buffer zone of settlements, in an attempt to secure the integrity and the natural resources of the upper catchment, while ensuring that land users derive benefits from the improved stewardship of these resources.

In collaboration with crucial MTTMVA and UCP leadership, the project team successfully collated, analysed, and shared the research findings. The VCF offered a holistic perspective, serving as an evaluative tool and a guide for the research, leading from immediate initiatives to long-lasting community transformations. The VCF framework enabled the team to dissect and understand how collaboration and shared activities within these communities and networks create value for all participants including leadership, different sectors of the local rural communities, selected groups such as the youth and livestock farming residents. This approach ensured the effective and transparent dissemination of both interim and final results to stakeholders, promoting iterative feedback and maintaining transparency throughout the study.

Furthermore, the project utilised the Change Lab method as a significant data collection and analysis tool in the exploration of human activities and their interplay with cultural and historical nuances. This method involved the use of teams or work units including community elders, youth living in the communities and herders. It began with identifying and understanding current problems, which served as a basis for discussions and actions in the expansive learning process. Assisted by a formative interventionist researcher (the PhD candidate on the team), the Change Lab process involved producing mirror data as tools for double stimulation, catalysing discussions, and voluntary action. This approach efficiently traced the origins of current challenges by reflecting on past experiences and modelling past activity systems, thus providing a comprehensive and dynamic understanding of the social learning processes within the project.

Informal unstructured discussions with practitioners have formed a valuable component of this learning, where it has been endeavoured to ground and highlight the report with practical insights.

This research received ethical clearance from the University of KwaZulu-Natal Reference number HSSREC/00004561/22.



*Figure 1: Regular conversations between stakeholders, including traditional leaders, local NGOs and the Department of Agriculture have helped to collectively tackle threats and challenges like livestock theft in the area, illustrating an outcome of improved governance through better communication, inclusivity and collaboration.*

### 3. Context and Conceptual Framework and Governance

The conceptual framework of this study focused on the dynamics of communities on communal lands in catchment stewardship and governance, particularly in the context of South Africa's Integrated Water Resource Management (IWRM) and the establishment of Catchment Management Agencies (CMAs). Despite challenges in implementation, grassroots forums like the UCP, constituted in 2013 with a basic Memorandum of Understanding, have blossomed into what can be considered as a model for collaborative catchment management.

The six traditional authorities of Mzongwana, Makhoba, Sibi, Nkosana, Moshesh and Bakoena, as permanent residents and custodians of most cultural practices and land management in the rural areas of the Upper Umzimvubu Catchment (please refer to the map in annexure b), are expected to lead the communities in their jurisdiction and perform functions such as land allocation, dispute resolution, land use and environmental management and preservation of culture and heritage. All stakeholders have derived an understanding that conservation with production that targets people's livelihoods, has better potential of success than conservation that excludes local people, their systems and needs. The UCP has navigated many challenges and managed to unite a spectrum of organisations, fostering co-learning and collaboration which catalysed the creation of the Maloti Thaba Tsa Metsi Voluntary Association (MTTMVA). The partnership is continuing to welcome new members with vested interests in sustainable landscape management for community livelihoods.

The traditional leadership and communities of the communal lands in the upper Umzimvubu River catchment play a crucial role in catchment stewardship. This means continuous and intricate negotiations are needed for affecting some of the changes to continually build a system that puts the resource users at the centre of decision making. Post-apartheid changes in South Africa introduced municipal governance systems to these areas, leading to a coexistence of traditional leadership and elected councillors. The municipal systems introduced planning instruments such as Integrated Development Plans (IDPs), Spatial Development Frameworks (SDFs) guided by the Spatial Planning and Land Use Management Act 16 of 2013 (SPLUMA), and which are meant to facilitate the planning and implementation of development initiatives. This dual governance structure impacts the management and sustainability of communal lands which are common-pool resources (CPRs). It is not clear on the ground if the two systems are integrated and support each other or if they operate side by side. Contrary to Hardin's (1968) "tragedy of the commons", Ostrom's research shows that communities can effectively manage CPRs for sustainable use (Ostrom, 1990). This project sought to determine what the best structure should be for the management of communal lands. Existing traditional social systems and dynamics allow free and easy interaction between the different tiers of governance and the community utilizing traditional forums such as the *imbizo/pitso* (community gathering). Family hierarchies, gender roles, economic standing and cultural norms still dictate behaviour, relations and societal expectations.

The management of communal lands faces challenges due to population growth, climate change, poverty, and land degradation. The coexistence of traditional authority and local government structures, both recognised as governance structures in the same landscapes, presents an opportunity and challenge for ecological sustainability and requires strong community identity and collective action for successful management of shared resources.

In addition to the above duality, governance in communal lands is a complex mix of political, social, economic, and administrative elements. It involves organising and working with various community groups with differing needs and aspirations. The heterogeneity of users, such as livestock farmers and grazing associations, crop farmers, and water users, requires a nuanced approach to governance. Effective governance in communal landscapes must navigate the challenges of shared resource management while capitalising on the community's capacity to work towards a shared vision. This involves understanding and

leveraging the interplay between political, social, economic, and administrative factors that shape communal land management.

In catchment governance, the Water Service Authority (WSA), usually represented by the District Municipality, plays a crucial role. WSAs are responsible for ensuring efficient, affordable, and sustainable access to water services. These authorities are pivotal in managing and distributing water resources. Their responsibilities include sourcing and treating raw water to a potable standard, maintaining water quality, and ensuring community delivery. Effective governance requires coordination among various stakeholders, including local and traditional leaders, to manage water resources equitably and sustainably.

The Water Service Authority is central to effective catchment governance, managing water services, and making decisions impacting water availability and sustainability. Catchment governance requires collaborative efforts and coordination among stakeholders, including local and traditional authorities, for sustainable water resource management. Various challenges confront these authorities, including societal complexity, limited integration between WSA and resource users, diverse and conflicting interests, limited resources, climate change impacts, and community engagement issues. Addressing these challenges necessitates collaborative governance frameworks, integrated planning, effective stakeholder engagement, and resource allocation. Key to all of this is to get the WSAs to recognise the importance of investing in catchment management towards providing an assurance of supply, both in terms of quantity and quality, and then to leverage this investment.

### 3.1 Project findings

- **Recognising land rights holders' interests**

Recognising the value of indigenous, local, and traditional knowledge systems and practices; including indigenous peoples' holistic view of community and environment; is a major resource for adapting to climate change. Local Authorities and chiefs in these traditional areas have understood the importance of and supported conservation efforts in the area. Using methods like the co-created approach to spaces, local non-governmental organisations have been instrumental in working with the resident communities to recognise and re-introduce the traditional rangeland rotation management system (*maboella*) with the assistance and guidance from Traditional Authorities, building on indigenous knowledge systems and practices. This has shown that effective functional systems are those that have stood the test of time, spearheaded by livestock owning communities and guided by traditional rules and norms.

- **Engagement of local traditional authorities**

The importance of community leadership engagement: MTTMPA stakeholders learned the importance of involving communities in its initiatives and of allocating tasks to traditional leaders. This has helped to build trust and engagement with local communities and has ensured that the initiatives are relevant and responsive to local needs and priorities. Considering their recognition of the value of the upper Umzimvubu Catchment, traditional leaders were invited, with the Ecochamps, to an event in Pretoria to foster collaboration in research and education between the governments of the Netherlands and South Africa. Such events increase their profile and motivate the community leadership to continue their contribution towards building knowledge in the catchment.

- **Effectiveness of civil-state institutional collaboration processes towards sound catchment stewardship in a communal landscape**

Government departments at different levels have participated and contributed to the growth and effectiveness of the UCP. According to independent findings in Snorek et al. (2022), the departments, who in their different capacities participate in catchment management, appreciate the flexibility of the UCP and

they feel motivated by the collaborative nature of the forum, and that is why they continue participating and inviting colleagues to be a part of the UCP.

- **Maloti Thaba Tsa Metsi institutional journey**

One of the important lessons was the need to clearly define boundary issues through engagement with Traditional Authorities and their stakeholder communities. This has helped to clarify land ownership and user rights and has enabled the MTTMVA to work more effectively with local communities and other stakeholders to achieve its goals. Chieftainship boundaries are very important, even if the proposed protected area will be managed jointly and as one protected area. Land ownership in communal lands can be complex, especially with the absence of title deeds and the need to navigate government departments to secure the rights to land.

The value of learning exchanges cannot be underestimated as these opportunities expose community members to existing similar and relevant initiatives and promote conversations with like-minded people from other communities. This helps to foster learning and collaboration among communities and has enabled the MTTMVA to build on the experiences of others to improve the impact of its own initiatives.

### 3.2 Governance and Institutional Arrangements

The discussion on governance and institutional arrangements focuses on the crucial role of effective governance in the conservation, preservation, and sustainable use of communal landscapes. These landscapes are integral to many nations' ecological infrastructure, and community-led conservation initiatives have gained increasing importance in recent years.

A critical case study in this context is the Maloti Thaba Tsa Metsi Voluntary Association (MTTMVA), which emerged from the UCP and was established in 2013. MTTMVA represents community interests in conserving natural and cultural assets in their areas, emphasising resilience through sustainable resource use and local capacity building in integrated resource management.

To understand governance and institutional arrangements in the catchment, the research team examined the factors contributing to successful cooperative resource governance in the MTTMPA landscape, which led to vibrant participation from community leaders and the creation of a protected area spanning six Traditional Authority areas. Key factors include community leadership's engagement, invasive plant species management, and improvement in water availability, which have resulted in enhanced land cover, better grazing resources, and increased livestock farmer incomes. Youth involvement in providing research backup and extension services was also noted.

Interviews with traditional leaders, government officials, and non-government personnel provided valuable insights into watershed management and governance in communal landscapes. These engagements highlighted significant issues, opportunities, and effective practices in governance frameworks, suggesting enhancements for governance procedures in community settings.

This report serves to consolidate the key outcomes and recommendations outlined in detail in deliverable 2, which captures the progression and development of the Maloti Thaba Tsa Metsi Voluntary Association (MTTMVA), charting its growth and the evolution of its institutional frameworks. It offers a detailed narrative of MTTMVA's formation, its structural dynamics, and the pivotal networks that have been instrumental in its establishment. The report delves into the nuances of institutional arrangements, dissecting how MTTMVA integrated social and cultural values into its formal resource management strategies. It underscores community-based institutions' vital role in fostering development and mediating conflicts. Additionally, it explores the broader spectrum of institutional influences, including legal frameworks, cultural norms, political structures, and economic systems, that shape and guide community-based institutions. Specific

aspects of MTTMVA's operational framework are also discussed in Deliverable 2, including its decision-making protocols, membership criteria, and methods for resolving disputes, all of which are pivotal to its function as a voluntary organisation.

Key impediments identified include:

- Unresolved land claims are leading to land invasions and unplanned developments, thus precipitating conflict situations. In addition, there is no clarity on which authority is responsible for allocating land as all communal land fall under the national Department of Agriculture, Rural Development and Land Reform;
- Slow allocation of land due to land disputes;
- Land for development of human settlements inappropriately allocated in sensitive areas such as wetlands due to poor consultation between the designated responsible authorities.
- Slow adoption of government planning instruments due to poor consultation between traditional and local government structures is a major hindrance.

### 3.2.1 The importance of using Cultural History Activity Theory (CHAT) and the Value Creation Framework (VCF)

1. CHAT proved instrumental in identifying and addressing the contradictions (tensions and conflicts) present within and between activity systems:
  - For instance, it highlighted conflicts between traditional practices deeply rooted in the community's history and the emerging needs of modern conservation efforts and deliberate joint governance with elected structures. By bringing these contradictions to light, CHAT opened pathways to explore and develop solutions that were respectful of the community's cultural heritage while steering towards sustainable environmental practices.
  - This approach ensured that solutions were culturally sensitive and historically informed and fostered a sense of ownership and acceptance within the community, paving the way for more effective and sustainable ecological management.
2. CHAT was instrumental in surfacing the various voices situated in the activity systems, so as to highlight the importance of a multi-voice approach in working towards a common aim:
  - The multi-voice approach is important because those with formal or Western education can merge their knowledge with those who might not have formal education, but who are literate and possess local ecological knowledge and indigenous knowledge, enabling enriched ecologies of knowledge. This is why the UCP is an important platform in the upper uMzimvubu catchment, as it assists with the cross pollination of various knowledge types.
  - The emphasis of CHAT is different to the foci of traditional Western social science that is typically characterized by point-in-time actions and/or attributes of individuals (or sets of aggregated individuals) failing to include factors such as culture, history, economics, or material things (Foot, 2014). By utilising CHAT, the team was able to factor in the culture, history and socio-ecological nuances unique to the catchment.
3. The VCF model notably illuminated the different strata of value generation. This was important because interventions influence stakeholders differently and value accretion will be expressed in different ways by parties involved:
  - In this regard, the research team examined the factors contributing to the successful cooperative resource governance in the MTTMPA landscape, leading to vibrant participation from community leaders and creating a protected area spanning six Traditional Authority areas.
  - This approach started with the immediate benefits of various catchment activities (such as water related trainings, nature-based awareness campaigns, community outreaches, skills development, etc.) and extended to the potential value, encompassing the knowledge and skills acquired through these actions.

This framework enabled the research team to track the evolution and growth of the Maloti Thaba Tsa Metsi Voluntary Association (MTTVA). As MTTVA's knowledge and skills developed through various case studies, they manifested as applied value, evident in the changes in community practices, including the formation of MTTMVA. The process progressed to the realisation of value, symbolising the attainment of the community's specific objectives. Ultimately, the transformative value was evident in long-term community alterations, a sign of the lasting influence of the collective endeavours.

4. The VCF served as a tool to capture stories of learning and value emerging from the Maloti Thaba Tsa Metsi Voluntary Association (MTTVA). In addition to its function as a framework to monitor and assess social learning, the VCF also functions as a way to capture stories (narratives) of change, which assist in reflecting.
  - These narratives were more than mere accounts; they were powerful illustrations of how specific activities undertaken during the research, such as community meetings or conservation practices (results), translated into real value for the stakeholders.
  - These stories served as living examples of the framework's impact, illustrating the practical application of theoretical concepts in real-world scenarios.
  - Value creation must be approached through the lens of personal and collective narratives. Narratives provide a perspective on what learning occurs (or does not occur) and thus what value is created (or not) (Clarke et al., 2018). This is why there were various means of data collection, such as individual interviews and focus group discussions, so as to surface the personal and collective narratives.

### 3.3 Handbook of Citizen Science Tools and Approaches to Support Effective Catchment Restoration

The handbook's development (Matela et al, 2024) was guided by the philosophy of the Umzimvubu Catchment Partnership and local implementing partners, i.e. respect, inclusion, participation, constant learning, and collaboration. Utilising the partnership's strategic plan and theories of change, the approach to developing the handbook focused on co-creating better practices through enhanced decision-making. This was achieved by integrating scientific research with practical, on-the-ground experiences, particularly in rangeland restoration and alien plant clearing.

A critical element in the handbook's development, and the successful application of the 'tools' and approaches was the use of 'Ecochamps' – youth members from local communities – who played a vital role in applying various tools and interventions across the catchment area (see map in annexure B), providing multi-directional learning and feedback between key landscape players including their resident and neighbouring communities, themselves as an NGO-supported youth group, other local implementers, leadership and external supporters like research institutions. Their involvement exemplifies a shift towards an experiential/action learning approach, diverging from purely research-driven frameworks.

The handbook collates a variety of tools and approaches used within and potentially available to the upper Umzimvubu and other catchments, organising them within the landscape's socioeconomic, cultural, and environmental context. These tools range from scientifically tested protocols to more informal, locally developed approaches that have emerged organically through practice and are much more participatory in nature.

Testing and assessing these tools involved reflection and adaptation, ensuring their relevance and effectiveness in fostering landscape restoration and good governance. The methodology encompassed brainstorming sessions, network consultations, literature reviews, and the application of citizen science methodologies.

This handbook also captures the complexities of governance in rural landscapes, emphasising the need for holistic decision-making and resource management approaches. It provides a repository of knowledge, best

practices, and lessons learned from extensive experience in rural landscape governance. Its primary aim is to serve as a simple yet comprehensive reference guide for communities and agencies, facilitating navigation through the complexities of decision-making, resource management, and stakeholder engagement in rural contexts.

A significant focus of the handbook is on applying tools and interventions through the agency of the 'Ecochamps' (see Figure 2 below). These young village-based individuals are instrumental in extending the reach and impact of various state and corporate-funded job creation programs focused on youth. Their experiences have been integrated into the handbook to provide a practical perspective on resource management and biodiversity conservation in communal tenure areas. The Ecochamps have been equipped with the capacity to communicate essential principles and conservation issues to a broad range of stakeholders at different levels.

The handbook targets groups and organisations recognised as primary custodians, informants, and users of resources in the upper Umzimvubu Catchment. Its insights and information are also valuable to a broader audience interested in sustainable resource management beyond this specific area.

The handbook outlines a self-application/self-help stewardship approach, drawing on a suite of tools designed for local land users and decision-makers. It is the culmination of extensive community engagement and the application of sustainable participatory development interventions in the upper Umzimvubu river catchment.



*Figure 2: young people from villages in the catchment are mentored and trained in a range of landscape intervention, facilitation and monitoring skills and have shown to be a powerful instrument for more effective liaison, engagement, and impact, simultaneously developing their own careers in the green economy and boosting their self-esteem and income generating capacity. These Ecochamps are using a scientifically rigorous, citizen science-adapted protocol for veld monitoring linked to Conservation Agreement compliance with rested areas by farmers who are members of Rangeland Associations.*

### 3.4 Guidelines for Enhanced Communal Landscape Governance

The primary challenges in communal landscapes as experienced by project team members and staff from ERS, who have worked intensively in the landscape since 2002, as well as other UCP stakeholders, include maintenance issues, resource allocation, conflicting user preferences, and sustainability concerns. These landscapes often suffer from misuse and neglect, leading to degradation, biodiversity loss and diminished user trust. Balancing diverse interests and fostering community ownership through dialogue is key to resolving these challenges.

Governance in rural communal landscapes often involves traditional structures, which play a crucial role in sustainable common resource management despite challenges within the tenure legislation. These traditional structures must coexist and collaborate with elected bodies for effective governance, and tensions are often evident. The integration of Rangeland Associations has promoted accountability and linked conservation actions with livelihood improvement.

In resource conservation, there's a growing recognition of the economic benefits of rangeland conservation in communities like the upper Umzimvubu Catchment. Improved land management leads to increased productivity and income from livestock, demonstrating a direct link between conservation and economic benefits.

The Water Service Authority, mandated in most cases to the District Municipality, is central to effective water supply, under the provisions of various legislation including the Municipal Services Act. The DWS is the sector regulator under the National Water Act and various related legislation and regulations. WSAs are not necessarily involved in catchment governance, but rather in managing water delivery services, and making decisions impacting water availability and sustainability. As key end-point water providers and tariff collectors they are a critical player in effective catchment governance that requires collaborative efforts and coordination among stakeholders. Multi-actor stewardship approaches emphasise the role of Water Service Authorities and district municipalities in catchment management, advocating for collaborative governance that includes local and traditional authorities. It calls for understanding the dependencies of local communities on ecological resources and the potential conflicts in their use, suggesting resilience-building strategies in ecological systems and community livelihoods.

Legislation and policy analysis reveal the importance of understanding the frameworks governing land and water rights and how these interact with local customs and laws. Key legislations are crucial for decision-making and resource management. Effective catchment management requires applying these laws to support community-driven resource stewardship and landscape restoration.

The stakeholder engagement process in the catchment governance utilised CHAT (Cultural History Activity Theory) and VCF (Value Creation Framework) methodologies. CHAT focuses on tool-mediated actions by collective actors, encompassing socioeconomic relations within and between institutional contexts over time. It aids in understanding and explaining social phenomena from real human practices. VCF offers an evaluation template for social interventions, assessing their impact based on the value placed by relevant actors. These methodologies provide insights into how different stakeholders learn to collectively manage water resources and engage in catchment governance and planning.

The lessons from this section are unpacked in detail in the Guidelines report from this project (Matela et al, 2023) and provide a foundation for this report's focus on policy recommendations.

### 3.5 Lessons from the Living Catchments Project (LCP) experience

The South African National Biodiversity Institute (SANBI), together with Department of Science and Innovation (DSI) and the Water Research Commission (WRC), formulated the Living Catchment Project concept in 2018, which is largely focused on enabling enhanced water governance through improved multi-stakeholder collaboration across the built and ecological infrastructure nexus, provides further opportunities

to strengthen relationships and share lessons learnt. Participation as one of the four catchments in the LCP has provided credibility to UCP as a nationally recognised catchment convenor. This national platform, together with the active convening of Water Source Partnerships by WWF, has huge potential to influence state approaches to collaboration, such as the Working For programmes under DFFE Natural Resource Management Programme, as well as regional CMFs.

The UCP has been established and has grown organically, not prompted by government but rather by the need to work together under a common vision, through recognizing each other's complementary strengths and weaknesses. The DWS recognises the UCP as a Catchment Management Forum (CMF), albeit not officially established by DWS processes. During one conversation earlier this year, an official from the Institutional Establishment section of DWS asked: how do you manage to bring people together so effectively? This has been attributed to the UCP's very inclusive approach, respecting and acknowledging the spectrum of stakeholders in the catchment, and providing space for them to link, learn and share.

The independent AWARD summative evaluation commissioned by WWF in 2022 of their investment in ERS as a catchment convenor highlighted the extent to which the UCP forum plays a vital role in bringing stakeholders together for common goals. Feedback from respondents included appreciation for the welcoming, informal, transparent learning environment, where all people and organisations and the land are equally respected, and civil society and the state can work respectfully together.

Some lessons from the LCP experience regarding collaboration which are relevant for this research include:

- **Unencumbered core funding for convening and operational coordination of the partnership has been shown to provide a strong foundation for agile, effective collaboration and all the emergent properties it catalyses.** External support for facilitation needs to allow for innovation, response, proactive action and 'filling the gaps' where the state is restricted in terms of action and resourcing.
- **The inclusion of community members and traditional leaders during the planning process of catchment-based events and field-based learning exchanges is essential** if they are to be meaningful interactions which help build governance capacity.
- **Youth involvement in engaging with biodiversity issues in an active, capacitated manner through the Ecochamps approach, citizen science activities and building respectful, reflective relationships has real potential for being a game changer for rural areas located in Strategic Water Source Areas.** Youth have huge potential to be change makers, especially if aligned with, endorsed by and in support of Traditional Authorities, and we need to find ways to capacitate them beyond matric outside of, and complementary to, the formal tertiary sphere.
- **The willingness of Community leaders and community residents and interest groups to commit their resources such as time, voluntary work and effort for improvement of their area and water security in forming sub-CoPs (Communities of Practise) reveals the value of collaborative governance and ongoing, intentional social learning.** An example of this includes the community under leadership of their headman who took the initiative and approached ERS for assistance to capture a spring above the community and connect it to the existing reticulation system. Another village requested help with tools for maintaining areas cleared under a corporate-funded alien clearing project. It is evident that communities have begun to shift their behaviour towards taking action around water security, and also reveals the catalytic power of collaboration between communities, local leadership, and NGOs.

#### 4. Key Practical and Policy Recommendations from the research findings

The summarised findings above have been distilled into four simplified 'modules' shown in Annexure A. These modules distil the approach for the Handbook of Citizen Science Tools and Approaches to Support Effective Catchment Restoration and can guide effective inclusion and engagement of stakeholders in fully representative platforms which can provide strong governance for enhancing resource access and

management in communal landscapes. The principles in the modules could also be applied to the formation of CMFs. These modules are based on lessons derived from case studies undertaken during the research process, as well as reflection on the LCP learning experience and the collation of the handbook. They are described in Annexure A.

The following are the key policy recommendations that are based on the lessons learned from over a decade of catchment restoration work in the upper Umzimvubu catchment:

- **Relationship building, trust and credibility.**

UCP has maintained consistency, transparent communication, reliability and a respect of cultural norms and practices (Snorek et al, 2022). While strong relationships with the different departments is important, it was realised early on that it is important to build trusting relationships with persons in institutions rather than rely on the institutions themselves. The risk of high staff turnover within institutions always poses a risk to this, and creating a mandate backing up the collaboration is essential.

The UCP is a functional water source partnership because it is diverse in terms of membership, functional in meeting and record-keeping, inclusive of youth, and representative of most of the natural resource users in the upper catchment (Kotschy and Pollard, 2022). Other important characteristics which have been part of the UCP journey and are recommendations are creativity, flexibility, and trust, which help form a special relational character that keeps people engaged.

The fact that local government partners and Traditional Authorities have been drawn in and become key players in the partnership is unusual compared to most other places around the country (Kotschy and Pollard, 2022) and fosters better planning and more impactful outcomes. Kotschy also found that the establishment of the Maloti Thaba Tsa Metsi Protected Area would never have been possible without the strong support and involvement of the six Traditional Authorities along the watershed. The local and district municipalities, on the other hand, are important for embedding the work within formal planning processes (e.g. Integrated Development Plans, Spatial Development Frameworks and Local Economic Development Plans).

Snorek et al (2022) found that a care-based, servant leadership style, moral and trustworthy practice, reflexivity, and sensitivity were found to be important for promoting collaboration and trust.

Kotschy also refers to another paper which included the UCP as a case study, Cockburn et al. (2019), where it is proposed using the term “relational hubs” rather than “bridging organisations” to emphasise the role of practitioners as people in building human-to-human and human-to-nature relationships, which in turn enable stewardship practice.

- **Representation**

Based on the UCP experience of inclusivity and broad representation, membership of a CMF needs to aim for a wide diversity of contributing stakeholders who affect and are affected by the state of the catchment, as well as involving decision makers. Our experience is that successful local fora should be led by agile and well-grounded civil society / NGOs, along with local government departments who provide institutional context and mandate for catchment management. More and more research institutions have contributed to the UCP experience as repeat visitors and contribute significantly by bringing innovative thinking. Enhanced and regular participation by local CBOs can be better fostered through support for resources for travel and overheads. The Umzimvubu Catchment Partnership as a representative collective has shown capacity to cover most essential technical disciplines important to catchment management but would need a solid and dedicated participation for regular local stakeholder representation. Business representation must be encouraged, especially from commercial agriculture, which can be challenging when businesses are owned and operated by people from outside the area who do not have a long term vested interest in building sustainability locally.

- **Inclusivity**

The issue of inclusivity has been one of the foundational building blocks of the UCP and is recommended for the enhanced function and impact of successful catchment fora. Being intentionally aware of who is *not* in the room, and actively seeking their participation as valued role players is vital. Stakeholders, that is community leaders, community members, youth, and the different institutions regardless of background and affiliation, participate in the formulation of decisions including identification of community needs. It is believed that inclusivity promotes equity, formulation, process buy-in and implementation of sustainable solutions for which most people take ownership.

In conclusion, we have distilled the following policy recommendations which are applicable to communal landscape governance and restoration efforts through active engagement:

- (i) ***Support sustainable livelihoods for local people through adaptive consultative planning and involvement of land users***
  - a. Management of alien vegetation using innovative approaches, with long term aftercare plans including rangeland management with links to biomass and livestock value chains.
  - b. Management of key catchment areas for freshwater conservation for people and nature – securing reliable domestic supplies, exploring social ecological linkages through ecosystem service reviews and identifying innovative finance opportunities for water replenishment.
  - c. Inclusive planning – The implementation work evolved through a deeply participatory and inclusive process, building on long relationships of trust between ERS and traditional leaders, to understand core problems and drivers, and co-create solutions which catalyse multiple benefits across a socio-ecological spectrum.
  - d. Monitoring recovery: soil stability, vegetation recovery, biodiversity improvements, increased biomass and cover, reduced soil erosion, improved water quality and base flow volumes.
- (ii) ***Foster community-led conservation through intentional engagement:*** Emphasise the role of community-led organisations like MTTM VA in managing and preserving communal landscapes, fostering youth participation in conservation efforts.
  - a. Conservation Agreements are a means of ensuring that commitments are made and upheld by local authorities and land users and to ensure that benefits accrue both for the people and the landscapes. They are voluntary agreements and adherence is monitored by the land users in conjunction with support agencies like NGOs. The basic principle of the approach is the recognition of the importance of alignment between application of conservation measures and benefits for the users of landscapes. Incentives are mutually agreed on and can be withheld as a consequence of non-compliance with conditions of the Agreement.
  - b. Implementation based on inclusive planning was found to be more effective and impactful through participatory approaches, for example involving farmers in planning rotational rest systems through recognition and use of revived traditional rangeland management system, and involvement in veld monitoring exercises.
- (iii) ***Intentionally and actively engage youth in all processes as agents of change and sustainability for building resilience and capacity into future generations:***
  - a. Involvement and capacitation of rural youth as agents of change has proven to be a very effective approach, building self-esteem of a sector largely excluded from tertiary education access and with a desire to be more influential in a better future for the country. Several state and corporate programmes have recognised the importance of this, and programmes such as Yes4Youth, FirstJobs, Social Employment Fund, YOMA and others are gaining resources and traction.
  - b. The ERS Ecochamps, which emerged from various programmes as well as a Presidential Employment Stimulus Fund, have become an essential part of the local NGOs team and form part of the programme staff. They have become vital ambassadors for outreach and

communication as well as amplifying implementation and engagement depth and reach, as shown in Figure 3 below, where two graphs depict the spread of time spent by ERS Ecochamps on supporting the range of programme themes being implemented by ERS and other local UCP partners in the upper Umzimvubu catchment.

- c. This involvement of young people is multi-fold in its benefits, providing mentoring and exposure to the green economy for otherwise marginalised youth, a much needed stipend for rural households, as well as amplifying the impact of local agencies and their activities. Involvement of local leadership structures in their selection increases success of engagement through their being endorsed by and supportive of local traditional governance efforts.

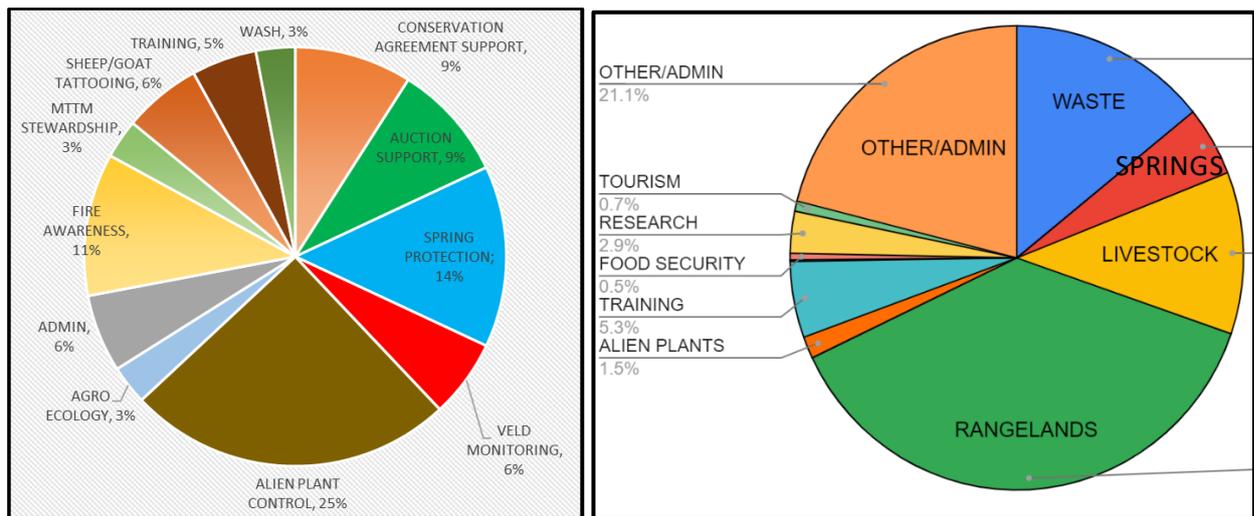


Figure 3: Above left shows a 6-month period from October 2021 to March 2022, while above right shows October 2022 to March 2023, where rangeland support became a much greater focus as Rangeland Associations grew in number and membership, and alien plant clearing projects received limited funding support. More than 14 000 people were reached by these young agents of change with the endorsement and support of Traditional Councils and Ward Committees in their respective areas of operations. "OTHER/ADMIN" refers to mentoring, training and work planning. (Source: ERS, 2023)

- (iv) **Enhance governance frameworks:** Strengthen cooperative governance by focusing on community engagement, resource management, and integrating traditional governance with exposure to modern systems. Recognise and include that traditional rural communities residing in or close to upper catchment areas have built a knowledge base on how to utilise the different catchment resources and the timing for use and protection of such resources.
- (v) **Value social and cultural aspects:** Incorporate social and cultural values into resource management plans, ensuring these align with traditional community practices and beliefs which will entrench sustainability.
- (vi) **Develop collaborative decision-making:** Create inclusive institutional arrangements within community-based organisations to facilitate collaborative decision-making and resolve conflicts.
- (vii) **Acknowledge broader institutional influences:** Recognise the impact of legal, cultural, traditional, and political systems on community-based resource management.
- (viii) **Acknowledge and leverage handbooks and toolkits** as guides for effective governance, holistic resource management, and landscape stewardship, focusing on participatory and experiential learning approaches. South Africa has a wide range of excellent tools well aligned with global trends and the Sustainable development Goals (SDGs).

- (ix) **Address prioritised challenges and foster resilience:** Tackle governance challenges like societal complexity and climate change impacts and build community resilience through adaptive strategies and stakeholder engagement. Identification of issues and co-creation of strategies and actions to address them has proven extremely successful in the UCP context.
- (x) **Monitor and safeguard ecosystem health:** Regularly assess and protect water quality, ecosystem health, and biodiversity, utilising the wide range of monitoring, evaluation and learning tools available, many of which include citizen science methodologies and indigenous knowledge for sustainable resource use. The EGS mapping tool described in section 8 of the Guidelines produced by this project (Matela et al, 2023) is a great way to gauge and share perceptions and create a baseline from which to track change. Monitoring should not just be for data collection, measurement and reporting, but should be used for learning and accountability for enhancing impact.
- (xi) **Establishment of a research and knowledge hub:** developing protocols for inclusive participatory learning and capturing lessons learnt to guide future work and contribute to sustainable catchment management through consulted participation by the different interest groups. The unpublished 'UCP Knowledge Hub and Research Protocol Concept' drafted by Mubangizi and McLeod in 2023, is provides a working framework to:
  - a. *Guide implementers, authorities, donors and land users to more effectively assign resources;*
  - b. *Develop and implement a feedback mechanism for sharing lessons and growing the impact of the catchment work;*
  - c. *Involve local residents and land users/custodians, especially the youth as citizen scientists and create tertiary opportunities for local learning;*
  - d. *Foster a co-creation approach for monitoring impacts and ensuring that actions really do benefit livelihoods and landscapes.*



*Figure 4: UCP field learning exchanges have proven to be a highly effective and practical means for engaging a diversity of stakeholders in informal, outdoor 'safe spaces' where open discussions and participation are encouraged. Seeing is believing, and the opportunity to engage with land users and local leadership is a valuable experience for policy makers and urban dwellers who appreciate being immersed in a communal landscape. Likewise, the chance for local residents to engage with outside perspectives is equally enriching, increasing exposure to other paradigms and building relationships which boost active learning and good governance approaches.*

## References

- Clarke, L., Galvin, C., Campbell, M., Cowan, P., Hall, K., Magennis, G., O'Doherty, T., Purdy, N., & Abbott, L. (2018). Assessing the value of SCOTENS as a cross-border professional learning network in Ireland using the Wenger-Trayner value-creation framework. *Oxford Review of Education*, 1-17.  
<https://doi.org/10.1080/03054985.2020.1835624>
- Daka, A, & Tamira, S. (2019). Rural communities, development policies and social sciences practice: Advocacy for a citizenship of research in Sub-Saharan Africa. *Open Journal of Social Sciences*, 7: 51-62.  
<https://doi.org/10.4236/jss.2019.79005>
- Du Toit, D., Weston, D., and Riddel, E. (2014). Catchment Management Forums: A Guideline for Developing Charters of Agreement. Association for Water and Rural Advancement. <https://award.org.za/wp/wp-content/uploads/2020/05/AWARD-GUIDELINE-Catchment-Management-Forums-Developing-Charters-2014-v2.pdf>
- Eaton, W. M., Brasier, K. J., Burbach, M. E., Whitmer, W., Engle, E. W., Burnham, M., Quimby, B., Kumar Chaudhary, A., Whitley, H., Delozier, J., & Fowler, L. B. (2021). A conceptual framework for social, behavioral, and environmental change through stakeholder engagement in water resource management. *Society & Natural Resources*, 34(8), 111-1132.
- Foot, K. (2014). Cultural-Historical Activity Theory: Exploring a Theory to Inform Practice and Research. *Journal of Human Behavior in the Social Environment*, 33(8): 1-34.
- Matarrita-Cascante, D., Sene-Harper, A and Ruyle, L. (2019). A holistic framework for participatory conservation approaches. *International Journal of Sustainable Development & World Ecology*, 26 (6):484-94.  
doi:10.1080/13504509.2019.1619105.
- Grey, S. (2014). Indigenous Knowledge. In: *Encyclopedia of Quality of Life and Well-Being Research* (pp.3229-3232). Michalos, A.C. (Editor). Publisher: Springer.
- Hardin, G. (1968). The Tragedy of the Commons. *Science* 162: 1243-1248.
- Kotschy, K. and Pollard, S. (2022). Final Report Mid-Term Evaluation of WWF-SA's Eastern Cape Drakensberg Water Source Areas Work, WWF, unpublished.
- Matela, S., McLeod, N., Mubangizi, B., Zunckel, K., Randera-Rees, S., Kuse. M., and Quali. T. (2024). Handbook Of Tools For Communal Catchment Restoration. Water Research Commission. Project C2022/2023/00882.
- Matela, S., McLeod, N., Mubangizi, B., Zunckel, K., Randera-Rees, S., Kuse. M., and Quali. T.G (2023) Guidelines for enhanced communal landscape governance. Water Research Commission. Project C2022/2023/00882.
- Mubangizi, B.C. and McLeod, N. (2023). UCP Knowledge Hub and Research Protocol Concept: Enhancing Life in the Umzimvubu Catchment. Umzimvubu Catchment Partnership, unpublished.
- Ostrom, E. (1990). *Governing the Commons*. Cambridge University Press, New York.
- Reed, M. S., Vella, S., Challies, E., de Vente, J., Frewer, L., Hohenwallner-Ries, D., Huber, T., Neumann, R. N., Oughton, E. A., & del Ceno, J. S. (2018). A theory of participation: What makes stakeholder and public engagement in environmental management work? *Restoration Ecology*, 26(S1), S7-S17.  
<https://doi.org/10.1111/rec.12541>
- Wenger, E., Trayner, B., & De Laat, M. (2011). Promoting and assessing value creation in communities and networks: A conceptual framework. Centrum.
- Wenger-Trayner, B., Wenger-Trayner, E., Cameron, J., Eryigyit-Madzamuse, S., & Hart, A. (2017). Boundaries and boundary objects: An evaluation framework for mixed methods research. *Journal of Mixed Methods Research*, 13(3), 321-338. <https://doi.org/10.1177/1558689817732225>
- Wenger-Trayner, E., & Wenger-Trayner, B. (2020). *Learning to make a difference: Value Creation in social learning spaces*. Cambridge University Press.

## ANNEXURE A:

# MODULES GUIDING EFFECTIVE PRINCIPLES AND ACTION PRACTISE FOR COLLABORATIVE GOVERNANCE

### **MODULE #1 – Inclusive community engagement:**

This module guides considerations for empowering communities to take ownership of the development of their land for conservation, and is based on inclusive engagement. The module highlights the importance of protection and how it can benefit the community in the long run. This section aims to help build capacity within the community while ensuring effective community engagement that values the input of communities during the development process. The themes below provide a clear structure for communities to understand and learn about landscape governance processes.

#### **1. Building Trust and Engagement:**

- i. Emphasise building community trust by understanding all needs and engaging in meaningful discussions.
- ii. Advocate for group and one-on-one discussions to ensure that the pace of engagement aligns with the community's comfort level and ensures inclusivity.
- iii. Establish a local office for trust and accessibility. Create safe spaces for honest discussions
- iv. Maintain long-term relationships and commitment with partners and stakeholders.
- v. Foster trust between traditional authorities and stakeholders. Same for local authorities
- vi. Develop a sustainable communication strategy/network beyond the project duration.

#### **2. Multidimensional Engagement:**

- i. Highlight the multidimensional nature of community engagement, considering various aspects such as institutional arrangements, historical context, and political configuration.
- ii. Encourage a holistic approach to community engagement that addresses complex institutional arrangements and power dynamics.
- iii. Establish personal connections and gather feedback from community members.
- iv. Conduct stakeholder forum meetings to engage a broader range of stakeholders.
- v. Outreach to villages through regular community forums for informed and involved participation.
- vi. Conduct interviews with traditional authorities to incorporate their perspectives.
- vii. Emphasise the importance of involving the community in developing the vision and name of the protected area.
- viii. Strengthen community ownership and alignment by ensuring the initiative reflects their needs, priorities, and cultural values.

#### **3. Navigating Complex Institutional Arrangements:**

- i. Guide navigating complex institutional arrangements that result from historical forces such as colonialism, apartheid, and post-apartheid reforms.

- ii. Help communities understand the rules and regulations that govern land use, resource management, and community engagement in their region.
- iii. Recognise and include all affected tribal authorities, including headmen and women, to ensure the initiative is inclusive and aligned with the needs and priorities of all stakeholders.
- iv. Engage and collaborate with tribal authorities to promote a sense of ownership and active participation.

#### **4. Co-Management of Natural Resources – Collaboration and Resource Management:**

- i. Highlight the need for co-management of natural resources, moving from top-down planning to collaborative decision-making processes.
- ii. Encourage communities to actively manage their resources and partner with voluntary associations like MTTMVA.
- iii. Align incentives with identified needs and a shared vision.
- iv. Foster collaboration among different actors involved in landscape governance.
- v. Share resources, knowledge, and expertise for comprehensive responses.
- vi. Simplify decision-making processes for integrated resource management.

#### **5. Addressing Power Dynamics and Building Relationships:**

- i. Address power dynamics within communities, including the influence of traditional authorities, local elites, and municipal councillors. This requires a lot of listening, sensitive facilitation and courageous conversations, in an adaptive iterative process with safe spaces.
- ii. Provide guidance on navigating power relations and building relationships with key stakeholders, including traditional authorities and state institutions.

#### **6. Managing Competing Interests:**

- i. Acknowledge the existence of competing interests between traditional authorities and neighbouring communities. Unpack and discuss them with sensitive facilitation and time for listening and sharing to see one another's perspectives.
- ii. Provide strategies for effectively managing and mediating conflicts that arise from competing interests, ensuring the interests of the broader community are considered.

#### **7. Effective Communication and Information Sharing:**

- i. Use effective communication channels like SMS, WhatsApp groups, and appropriate tools.
- ii. Adapt to preferred languages of communication for inclusivity and comfortable participation.
- iii. Facilitate open in-field learning exchanges for knowledge sharing and on-the-ground impacts, creating safe spaces for courageous discussions.
- iv. Keep messaging simple and engage with community leaders regularly through 'howzit' meetings
- v. Deploy and mentor a cohort of resident youth 'eco-champs' who can provide multi-directional learning, between their communities, themselves, implementers, leadership and external supporters like research institutions.

## **MODULE #2: Understanding the Complexities of communal land:**

The second module seeks to provide an understanding of the complexities surrounding communal land and how these complexities can inform the development of a single management authority for a protected area for multiple communities. The guidelines in this section emphasise the importance of voluntary organisations, constitutions, co-management agreements, alignment with objectives and values, trust-building, and effective implementation of management plans.

### **1. Establishing a Voluntary Organisation as a management authority:**

- i. Advocate for establishing a voluntary organisation, such as the MTTMVA, to serve as the management authority for the protected area.
- ii. Ensure representation from each affected community involved, providing a comprehensive structure encompassing all traditional authorities in the target area.
- iii. Maintain mentorship, inspiration and guidance to prevent fatigue and loss of interest

### **2. Developing a Constitution:**

- i. Emphasise the importance of developing a constitution to govern the operations of the voluntary organisation.
- ii. Outline the constitution's powers, responsibilities, decision-making processes, and membership criteria to clarify and establish a legal framework.

### **3. Facilitating Co-Management Agreements:**

- i. Highlight the role of the constitution in enabling the voluntary organisation to enter into co-management agreements with service providers.
- ii. Define the criteria for selecting service providers, outline the responsibilities of each party, and establish processes for monitoring and reporting progress.

### **4. Ensuring Alignment with Objectives and Values:**

- i. Emphasise the need for the constitution to ensure that co-management agreements are aligned with the broader objectives and goals of the voluntary organisation.
- ii. Provide a framework for resolving disputes and conflicts, ensuring legal enforceability and compliance with national and local laws and regulations.

### **5. Building Trust and Confidence:**

- i. Highlight how a well-written constitution helps build trust and confidence among potential institutional partners and service providers.
- ii. Ensure that the constitution provides clarity and certainty to stakeholders, helping to establish strong and effective institutional partnerships.

### **6. Guiding Implementation of Management Plans:**

- i. Outline how the constitution supports the implementation of the Protected Area Management Plan (PAMP) by providing a framework for engaging with service providers and stakeholders.
- ii. Define responsibilities, objectives, and goals related to specific issues, such as managing and clearing invasive alien plants, and establish processes for monitoring and reporting progress.

## **7: Clarifying Land Ownership and Boundaries**

- i. Clearly Define Boundary Issues: Highlight the importance of defining boundaries to avoid conflicts and establish a clear understanding of land ownership and use rights.
- ii. Navigate Complexities of Landownership: Address the complexities of landownership in communal lands, providing strategies and steps for working with communities and local authorities to secure land and resource rights effectively.
- iii. Enable communities to decide on the protected area's boundaries, empowering them to take control and ownership of the project and their land.
- iv. Foster a participatory approach to decision-making that considers biodiversity objectives and community aspirations.

## **8: Effective Community Engagement and Representation**

- i. Prioritise Community Engagement: Emphasise the importance of involving communities throughout initiatives, including participatory approaches, inclusive decision-making, and incorporation of local needs and priorities.
- ii. Establish Community Representative Structures: Highlight the value of establishing representative structures that ensure community voices are heard, guiding their creation, roles, and mechanisms for effective communication and feedback.
- iii. Emphasise the importance of involving the community in developing the vision and name of the protected area.
- iv. Strengthen community ownership and alignment by ensuring the initiative reflects their needs, priorities, and cultural values.

## **9: Collaboration, Resource Sharing, and Learning Exchanges**

- i. Promote Resource Sharing: Highlight the benefits of sharing resources within organisations and among stakeholders to maximise impact and resource utilisation.
- ii. Facilitate Learning Exchanges: Showcase the value of learning exchanges and knowledge sharing among communities, offering guidance on organising exchanges, facilitating collaboration, and fostering collective learning.
- iii. Facilitate learning exchanges with existing stewardship communities and other areas facing similar challenges to share knowledge, best practices, and lessons learned.
- iv. Ensure the initiative benefits from the experiences and expertise of others.

## **MODULE #3: Ensuring Informed decision-making:**

The third module aims to ensure that communities can make informed decisions regarding developing a management plan for multiple communities over time. This involves providing the necessary information and resources to the community to make informed decisions and to ensure that the community is fully aware of each option's potential benefits and drawbacks.

### **1. Coordination and Integration of Efforts:**

- i. Emphasise the need to coordinate and integrate the efforts of multiple organisations and communities involved in the management plan.

- ii. Highlight the importance of aligning goals, priorities, and management interventions across the catchment to ensure a unified and practical approach.

## **2. Collaborative Process and Stakeholder Engagement:**

- i. Promote a collaborative process that brings stakeholders together to share perspectives and experiences and work towards a common vision. The UCP as a voluntary platform of stakeholders with a common vision is an excellent way to do this, through a Memorandum of Understanding.
- ii. Encourage meaningful stakeholder engagement through workshops, interviews, and visual representations to capture their understanding, needs, and obligations. Learning exchange which are fairly open / and unstructured can foster great engagement.

## **3. Mapping and Visual Representation:**

- i. Utilise visuals, such as drone and ground footage, to map the extent of the area and highlight the different traditional authorities and ecosystems within it.
- ii. Showcase biodiversity features and illustrate the challenges, such as erosion and improper use of fire, to raise awareness and foster a deeper understanding of conservation needs.
- iii. Develop hand drawn visual maps, through interactive well facilitated processes which bring the quiet voices in too, depicting how people view and use their surrounding resources as a basis for identifying areas for attention and where action can be realistically taken.

## **4. Assessing Community Needs and Obligations:**

- i. Conduct interviews and consultations with herders, stock owners, land users, and traditional healers to understand their needs, obligations, and the consequences of actions or inaction in maintaining the resources.
- ii. Incorporate the perspectives and aspirations of community members to inform decision-making and ensure sustainable resource management.
- iii. Facilitate workshops to develop a comprehensive and desired Protected Area Management Plan PAMP considering appropriate land uses.
- iv. Encourage stakeholders to collaborate and contribute to a shared vision for the area's management.
- v. Strengthen community ownership and alignment with their needs, priorities, and cultural values.

## **5. Determining Appropriate Land Uses:**

- i. Foster discussions and stakeholder collaboration to determine appropriate land uses that align with local needs, priorities, and ecological considerations.
- ii. Ensure land use decisions are based on a holistic understanding of the landscape and its resources.

## **6. Ongoing Capacity Building Sessions:**

- i. Conduct ongoing capacity-building sessions with all traditional authority representatives to ensure they have the necessary knowledge, skills, and resources to participate effectively in the initiative.
- ii. Provide training, workshops, and resources tailored to the specific needs of traditional leaders to enhance their understanding and involvement.

## **7. Effective Communication with Traditional Leaders:**

- i. Establish good communication channels to ensure that traditional leaders are fully engaged and involved in all initiatives.

- ii. Regularly update and engage with traditional leaders to keep them informed, seek their input, and align their vision with the initiative.
- iii. Recognise the autonomy of individual traditional authorities while fostering a sense of collective identity and shared challenges.
- iv. Ensure that all stakeholders are aligned and working towards a common goal while respecting each traditional authority's unique perspectives and roles.

**8. Flexibility and Adaptation to External Challenges:**

- i. Develop a well-defined process and clear vision to navigate challenges, such as the COVID-19 pandemic or other external factors and ensure continued progress.
- ii. Maintain flexibility and adaptability to address unforeseen circumstances while staying true to the initiative's objectives.

**9. Clear Framework and Guiding Regulations:**

- i. Use a clear and simplified framework guided by relevant regulations, such as the National Environmental Management: Protected Areas Act (NEMPA), to ensure all stakeholders are on the same page and working towards the shared vision.
- ii. Provide guidance and support in understanding and implementing regulatory requirements.

**10. Strengthen the Role of Traditional Authorities:**

- i. Recognise the role of traditional authorities as advisors and aim to strengthen this role through co-management agreements with other stakeholders.
- ii. Incorporate indigenous knowledge and cultural sensitivity through the involvement of traditional leaders in the initiative's activities.

**11. Utilise Current Land-Use Activities for Livelihood Pursuits:**

- i. Understand the current land-use activities and explore opportunities to make them feasible livelihood pursuits within the initiative.
- ii. Promote sustainable land management practices, such as range land management, to enhance conservation and community well-being.

**12. Interpretation of Technical Terms using Local Languages:**

- i. Emphasise the importance of interpreting technical terms using local languages to ensure all stakeholders can understand and actively participate in the governance process.
- ii. Respect and integrate indigenous knowledge systems into the initiative's communication and decision-making.

**13. Recognition and Inclusion of Affected Tribal Authorities:**

- i. Recognise and include all affected tribal authorities, including headmen and women, to ensure the initiative is inclusive and aligned with the needs and priorities of all stakeholders.
- ii. Engage and collaborate with tribal authorities to promote a sense of ownership and active participation.

## **MODULE #4: Responsiveness to community ideals**

This section aims to build an understanding of the different ideals, to guide an effective response to real needs.

### **1. Empowerment and Capacity Building:**

- i. Highlight the importance of empowering communities to take control of their natural resources and manage them sustainably.
- ii. Advocate for capacity building and training sessions to provide community members with the necessary skills and knowledge for effective resource management.
- iii. Conduct ongoing capacity-building sessions with traditional authority representatives.
- iv. Establish effective communication channels with traditional leaders to keep them engaged and informed.

### **2. Mapping and Managing Water Sources:**

- i. Emphasise the significance of mapping potential spring water sources for sustainable natural resource management.
- ii. Promote the importance of water source management and its connection to the environment's overall health and community livelihoods.

### **3. Sustainable Livestock Management:**

- i. Advocate for supporting communities in adopting sustainable livestock management practices that balance community needs and environmental considerations. Value chains linked to landscape restoration outcomes are powerful incentives.
- ii. Advocate for livestock management techniques that promote responsible grazing, herd health, and sustainable land use.

### **4. Visual Communication and Outreach:**

- i. Utilise visuals, such as maps, videos, and still footage, to effectively communicate the objectives and activities of voluntary associations or governance initiatives.
- ii. Highlight the achievements and efforts in alien plant control, livestock management, and water source mapping to inspire and engage communities.

### **5. Community Engagement and Participation:**

- i. Stress the importance of community involvement in decision-making processes related to natural resource management.
- ii. Encourage active participation and collaboration between communities, voluntary associations, and relevant stakeholders to ensure a sense of ownership and shared responsibility.

### **6. Supportive Services and Advice:**

- i. Advocate for providing communities with natural resource management planning, livestock and range management advice, and other relevant support services.
- ii. Highlight the importance of tailored guidance and advice based on local needs and priorities.

### **7. Develop a Wishlist Matrix to Highlight Community Needs:**

- i. Create a wish list matrix to identify and prioritise the needs of different land rights holders within the protected area buffer. Revisit it to check or modify priorities
- ii. Use the Wishlist matrix as a guiding framework for local implementing NGOs in strategic planning, fundraising, and decision-making related to spring protection, wattle clearing, and livestock support activities

#### **8. Facilitate Community-Led Participation and Empowerment:**

- i. Ensure that the active implementation process involves facilitated, community-led participation and empowerment.
- ii. Engage communities in decision-making processes, such as identifying springs for protection and providing appropriate livestock husbandry support.
- iii. Conduct facilitation activities through long-term, credible, locally-based agents rather than short-term or external consultants with limited connection to the area and communities.
- iv. Build relationships with local facilitators who deeply understand the context, culture, and needs of the communities.

#### **9. Link Livelihood Impacts to Ecological Security:**

- i. Implement restoration projects that create job opportunities and allow communities to benefit from the landscape directly.
- ii. Highlight the connection between ecological security, such as habitat restoration, and visible livelihood impacts, such as income generation and improved well-being.
- iii. Equip underprivileged communities with the necessary resources and support to develop small, medium-sized enterprises (SMMEs) aligned with sustainable practices.
- iv. Offer training, access to capital and markets, mentoring, and other support mechanisms to help communities become self-sustainable and economically empowered.

#### **10. Maintain Relationships and Capacitate Communities:**

- i. Continuously maintain established relationships with communities and stakeholders involved in the governance process.
- ii. To prevent loss of momentum and faith in the vision, provide ongoing capacity-building initiatives to empower communities and keep them engaged, even during challenges like the COVID-19 pandemic.

ANNEXURE B:

MAP SHOWING THE RESOURCE MANAGEMENT STRATEGY ACTIONS FOR THE UPPER UMZIMVUBU CATCHMENT

