



The National Programme for Integrated Catchment Management in Lesotho

Operational Plan 2022



ReNOKA is a national programme and citizen movement for the restoration of land and water in Lesotho and the Orange-Senqu basin. Support for ReNOKA is provided through a partnership between the Government of Lesotho, the European Union (EU) Delegation to the Kingdom of Lesotho and the German Federal Ministry for Economic Cooperation and Development (BMZ). The EU provides € 27.5 million financial contribution through the 11th European Development Fund with Lesotho, while BMZ provides € 6 million contribution through its Transboundary Water Management Programme in the SADC Region. The Government of Lesotho provides LSL 80 million in parallel financing. The EU and BMZ contributions are implemented through a technical assistance project “Support to Integrated Catchment Management in Lesotho” by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

For more information contact

Makomoreng Fanana
 National ICM Coordinator
 ICM Coordination Unit
 Ministry of Water
 Government of Lesotho
 Email: makomoreng.fanana@renoka.org

This publication was produced with the financial support of the European Union (EU) and the German Federal Ministry for Economic Cooperation and Development (BMZ). Its contents are the sole responsibility of ICM Coordination Unit in the Government of Lesotho and do not necessarily reflect the views of the EU or BMZ.

Lesotho, Maseru – February 2022

Contents

Foreword	02
What is ReNOKA	04
 Change Area 1: Catchment Management	06
 Change Area 2: Policy & Governance	16
 Change Area 3: Finance & Investment	24
 Change Area 4: Skills & Knowledge	32
 Change Area 5: Awareness & Behaviour Change	38
 Change Area 6: Data & Monitoring	46

Foreword

6 December 2021

Dear colleagues and friends,

2021 was an important year for the protection of Lesotho's catchment areas that are so vital for our lives, livelihoods and development. In the presence of His Majesty King Letsie III and the Honourable Prime Minister Dr Moeketsi Mojoro, the Kingdom of Lesotho launched its national programme on integrated catchment management under the name ReNOKA – we are a river.

During the ReNOKA launch, several government Ministries signed a partnership declaration, committing to coordinated action and cooperation for the restoration of land, water and the long-term prosperity of all communities. Important partners from civil society, under the Lesotho Council of NGOs, from the private sector, like Letšeng Diamonds, and from our Southern African region, led by the Orange-Senqu River Commission, have committed themselves to support ReNOKA.

Together, we believe in a multi-stakeholder process which promotes the integrated, sustainable, and risk-informed development and management of water, land, and related resources in Lesotho's catchment areas. This belief is reflected in the document that you are holding in your hand.

This belief is reflected in the document that you are holding in your hand. In November 2021, ReNOKA stakeholders and partners came together in 11 work sessions across Lesotho, to map the goals, proposed activities and resources that each of us contribute to make ReNOKA a reality. Together, we discussed, listened to each other, and identified the best ways to work jointly on our shared vision.

The result is this ReNOKA Operational Plan for 2022 that for the first time provides a comprehensive mapping of activities of government departments, civil society organisations, private sector, regional institutions and international partners to advance climate resilience and the restoration of land, water and livelihoods in Lesotho's catchment areas. In this process, we worked together across institutional boundaries to ensure we use our resources effectively, reduce overlaps and redundancies, and make an impact for all Basotho and for the entire Orange-Senqu river basin.

As the National ICM Coordinator, I will work tirelessly with my unit to guide and facilitate the implementation of this plan across its six change areas, monitor its progress and support all ReNOKA partners.

I thank you all for your commitment to ReNOKA.

Makomoreng Fanana
National ICM Coordinator
Ministry of Water



His Majesty King Letsie III, during the ReNOKA launch event in Ha Koporale in April 2021



Operational planning workshop with stakeholders in Hlotse in November 2021



ReNOKA operational planning session on data and monitoring in Maseru in November 2021



What is ReNOKA

Lesotho's river catchments are vital for livelihoods, the economy and environment

Lesotho is considered the water tower of Southern Africa. It supplies 40 percent of the annual run-off of the Orange-Senqu river despite occupying only three percent of the basin's territory. Lesotho supplies water for agriculture, industry and households across the basin area, which is one of Africa's most important economic centres. Domestically, aquatic ecosystems in Lesotho are directly responsible for 22% of GDP and 30% of employment.

However, Lesotho's river catchments are facing severe land degradation, which is an existential threat to water security for Lesotho and the Orange-Senqu basin, and to the livelihoods of the rural population in the catchments of Lesotho. Healthy catchment and wetland ecosystems are required to absorb rainfall and release water gradually into rivers and streams. Degraded catchments, in turn, worsen flood and drought events, soil erosion and siltation.

To combat these challenges, the Kingdom of Lesotho has embarked on a national movement for integrated catchment under the name ReNOKA ('we are a river'). ReNOKA represents a network of individuals, communities and professionals that are stronger together, fluid and growing, dedicated to the restoration of water, land, and the long-term prosperity of all communities in Lesotho.

ReNOKA vision, objectives and principles

The vision for ReNOKA is: "We believe that benefits of integrated catchment management in Lesotho for today's and future generations can only be achieved through coordinated action and cooperation that empower and support partnerships between all stakeholders. The integrated, sustainable and risk-informed management of Lesotho's catchment areas will lead to the conservation of biodiversity, land, and water resources and advance climate resilience. It will contribute to improved urban and rural livelihoods, water quality and economic development in the country, the Orange-Senqu basin and the entire Southern African region."

ReNOKA objectives: The population of Lesotho benefits from water availability and quality for all domestic, rural, industrial, or agricultural users; sustainable water and land management; the reduction and reversal of land degradation and soil erosion; and contributions to advance the resilience to climate change impacts.

ReNOKA principles: Cooperation and coordinated action among government bodies, private sector, civil society, communities and international partners to promote coherence and synergies in the implementation of policies and practices. It shall increase civic participation, guarantee equal and balanced use of resources and strengthen transparent and empowering governance.

Change that ReNOKA aims to achieve

Catchment Management

Restoration of degraded watersheds through emergency rehabilitation measures and the implementation of catchment management plans. These plans address the human causes of degradation such as unsustainable land use patterns, advance climate resilience and provide livelihood opportunities for local communities.

Policy & Governance

Relevant policies and legislation are updated and harmonised to ensure effective management of catchment areas. Guidelines for catchment planning and for the implementation of soil and water management, as well as clearly defined institutional mandates, ensure a coherent and integrated approach across institutions.

Finance & Investment

Suitable financing mechanisms ensure that funding is available for the implementation of catchment development and rehabilitation measures at the right levels of government. Investments from international public and private institutions complement national funding arrangements.

Skills & Knowledge

Resource users and professionals have the skills they need to contribute to sustainable management of land, water and environmental resources. This ranges from practical trainings on innovative agricultural methods to dedicated graduate courses at the National University of Lesotho.

Awareness & Behaviour Change

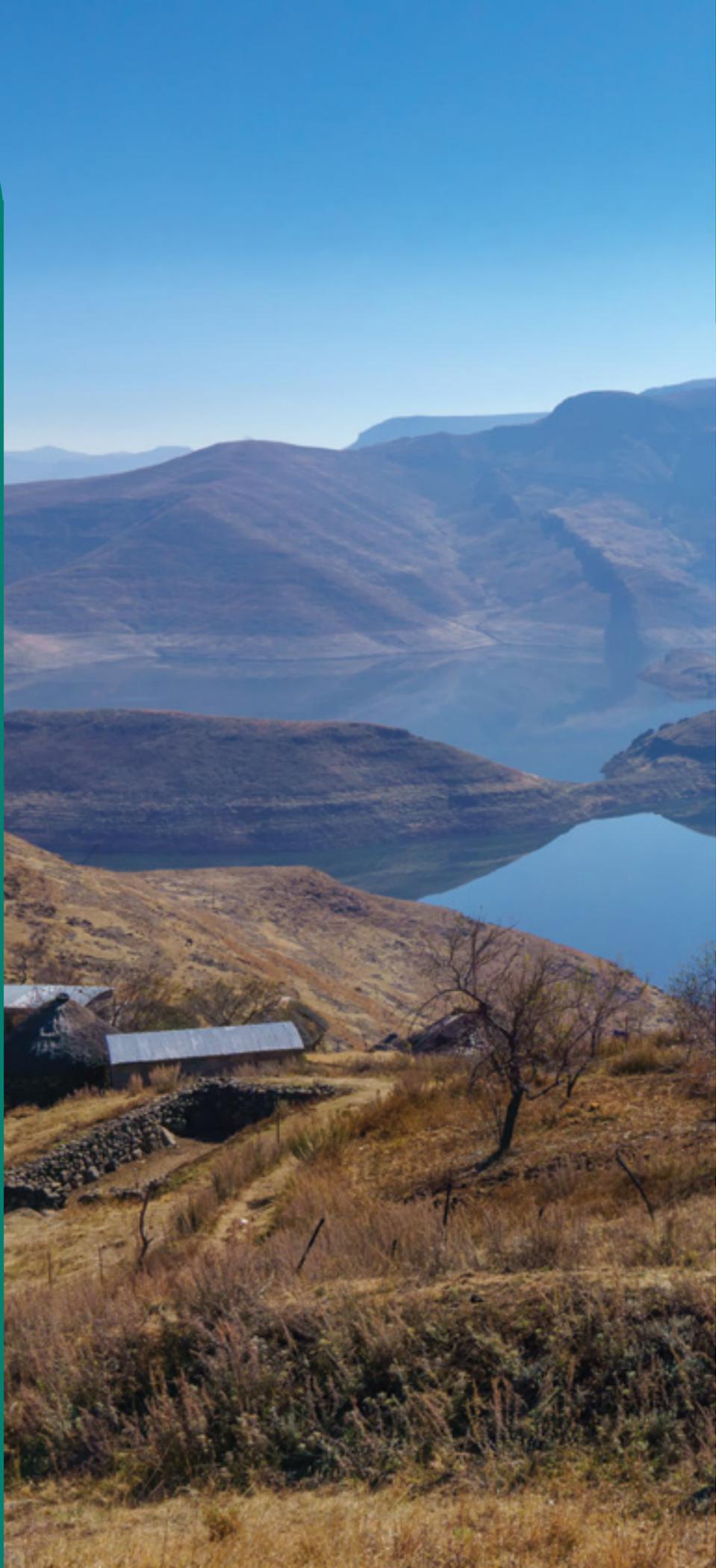
Reducing catchment degradation depends on citizen awareness and adoption of more sustainable behaviours among land water users. This is promoted through targeted communication approaches and interventions ground in behavioural insights.

Data & Monitoring

Data and evidence inform decision making, learning and innovation for integrated catchment management. The aim is that better data leads to the creation of evidence on effective approaches and methodologies, optimising the allocation of resources to those catchment areas and local communities that are successful in implementing integrated catchment management.



Catchment Management



About the Change Area



Introduction

Water security in Southern Africa depends on healthy catchments of major river basins. Lesotho's contribution to the annual run-off of the transboundary Orange-Senqu river is 40 percent from a land base of only three percent. It secures access to vital water for millions of citizens, farmers and businesses downstream. However, the upstream catchments are under constant stress from land degradation, soil erosion and the impacts of a changing climate. This is caused by population growth, poverty and food insecurity, which increases subsistence farming and forces people into previously uninhabited areas like wetlands and mountain slopes.

Catchment degradation in Lesotho's catchments costs an estimated 4.6 percent of annual Gross National Income (US\$ 108 million). The country loses two percent of topsoil to erosion every year as a result of degradation, and this reduction in arable land leads to food insecurity.

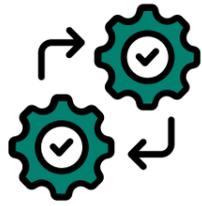
Healthy catchments and wetland ecosystems are required to absorb rain and slowly release water during the dry season, but degradation causes flooding and silting up of dams. Floods and droughts are further aggravated by climate change.

The return on investment from action against land degradation is estimated at US\$ 6 for every dollar invested.

The Change

The ReNOKA programme aims for integrated catchment management through a multi-stakeholder process. It promotes the integrated, sustainable and risk-informed development and management of water and land resources in Lesotho's catchment areas.

This will improve livelihoods and economic development and benefit the entire Southern African region. Our evidence-based and integrated approach should help the people of Lesotho to benefit from improved land management, reduced soil erosion, a sustainable supply of water, and greater resilience to climate change.



The Approach

ReNOKA is committed to a participatory approach, and our work is evidence-based and socially inclusive. We discuss and agree plans and priorities with our stakeholders, and we facilitate engagement with government. Our approach is for catchment management to be coordinated at national, regional and community level, and executed according to national guidelines to ensure a coordinated, coherent and uniform approach by government and development partners.

We aim for a national integrated water resource management strategy to set national priorities and guide transboundary water management, and six integrated catchment management area plans to guide development in the Upper, Middle and Lower Mokokare catchments, the Makhaleng catchment and the Upper and Lower Senqu catchments.

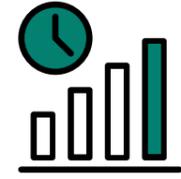
We support the improvement and enforcement of standards, guidelines and regulations in other sectors to enable integrated catchment management. This may include improved standards for road design to incorporate safe disposal of stormwater, and development of capacity to enforce regulations on use of wetland areas.

To maximise return on investment, our focus must be on addressing root causes and directing investments to upslope areas to mitigate erosion, protect wetlands and manage grazing areas. We prioritise interventions where degradation threatens existing agricultural livelihoods, water infrastructure and rural water security.

The ReNOKA scaling-up strategy aims to make institutions operational in catchments where major water resource investment and development is imminent. ICM catchment offices will be established in each of Lesotho's six main catchments.

ReNOKA identifies and addresses gaps in skills and integrates human capacity development into all aspects of catchment management. It strengthens financial management in local institutions and aligns donor support to Lesotho's own priorities.

Status End 2021



River catchment management is not institutionalised in Lesotho, and so requires a fundamental realignment of institutions and governance structures. National structures are in place, but Lesotho's 2007 IWRM Strategy is outdated. Institutions at catchment level do not exist, and structures at watershed and community level are only now being established.

Guidelines for integrated catchment management are required for planning by responsible institutions, and management plans are urgently needed at main catchment level to inform transboundary water resource management and identify priority interventions.

Current catchment rehabilitation efforts tend to treat symptoms and not causes, but the scale of degradation in Lesotho requires systematic and comprehensive preventative measures.

Extensive degradation often results from small disturbances in fragile landscapes. For example, one road culvert discharging stormwater on a mountain road can cause a donga system that stretches for many kilometres, and uncontrolled grazing by small herds can result in loss of rangeland and invasion by woody vegetation across entire mountainsides.

Proposed Activities for 2022

Planned Activity	Lead Institution	Milestones and Timeline	Contributions and Synergies	Budget Source	Comments
National Level					
ICM Scaling Strategy	ICU	Scaling strategy agreed by end of March 2022		EU/BMZ (implemented by GIZ)	
National consolidation of wetland mapping	ICU, MoW	October 2022	LHDA mapping of strategic wetlands	EU/BMZ (implemented by GIZ)	Implemented through a catchment planning consultancy
Development of catchment management guidelines	ICU	October 2022		EU/BMZ (implemented by GIZ)	Implemented through a catchment planning consultancy
Construction of animal drinking points	Department of Range Resources Management	Feasibility study & community sensitisation prior to implementation	ICM water resource assessment studies	WAMPP	
Protection, mapping & demarcation of wetland areas	Department of Range Resources Management	10 Wetland areas demarcated by end November 2022	ICM Landcover database, national consolidation of wetland mapping	None at present	
Establishment of grazing associations for rangeland management	Department of Range Resources Management	40 Grazing associations and 70 Rangeland Management Plans by June 2022	Integration of GAs with Village Watershed Teams in ICM implementation areas	WAMPP (proposed)	ICM VWTs are formed of existing GAs and/or water committees
Regeneration of Landscape and Livelihood (ROLL)	Ministry of Forestry, Range, Soil Conservation	Eight years, effective from December 2021	Alignment of ROLL and ICM financing mechanisms; ROLL coalitions and ICM VWTs	IFAD, OPEC Fund, GEF, FAO	
Wool and Mohair Promotion Project (WAMPP)	MFRSC and MAFS	TBC	Alignment of rangeland management plans and ICM catchment management plans	IFAD, ASAP, OPEC Fund, OFID, LNMWGA and Government of Lesotho	
Formation of Catchment Planning Unit-Maseru	ICU	CPU formed, capacity building and involvement in ICM planning first quarter 2022	MoAFS, MFRSC, MoLG, MoE	EU/BMZ (implemented by GIZ)	CPU serves parts of Central Mohokare, Makhaleng and Upper Senqu Management Catchments
Upper Mohokare Catchment Management Area					
Market-Driven Irrigated Horticulture (MDIH) feasibility studies	AECOM (Feasibility Study consultant), LMDA, MCC	Studies completed mid-2022	LMDA and ICM collaboration on establishment of ICM institutions, and development and implementation of ICM plans in the Upper Mohokare Catchment	MCC	
Development of an Upper Mohokare Integrated Catchment Management Plan	ORASECOM, ICU, LMDA	Upper Mohokare ICMP by October 2022	South Africa Orange WMA, LMDA, MCC; Scaling up of ICM to areas with planned investment in water infrastructure	GoL National contribution to the Second Lesotho Compact with MCC	LMDA and MCC calls for the development and implementation of management plans for sub-catchments 6, 61, 72 and 51
ICM visioning and planning (7-9, TBC)	Community Watershed Team with ICU and CPU, supported by CRS	March 2022		EU/BMZ (implemented by GIZ)	Transect walks, bio-physical assessments, identification of measures
Local Council ICM Action Plans – Menkhoaneng and councils covering sub-catchments 6, 61, 72 and 51	ICU, CPU Leribe	May 2022	LMDA, MCC	EU/BMZ (implemented by GIZ)	
Phase A Emergency Rehabilitation Measures – Lot 1	ICU	January – May 2022		EU/BMZ (implemented by GIZ)	

Proposed Activities for 2022

Planned Activity	Lead Institution	Milestones and Timeline	Contributions and Synergies	Budget Source	Comments
Middle Mohokare Catchment Management Area					
Metolong Dam profiling and environmental flow releases	Department of Water Affairs and WASCO	TBC	ICM national synthesis of EFlow determinations	Government of Lesotho	
Rehabilitation of irrigation scheme, Berea District (Mapoteng)	Department of Crops	Feasibility study to be completed in 2022	Coordination between ICM, Department of Crops, CoW	SADP/World Bank	
Lower Mohokare Catchment Management Area					
ICM visioning and planning	Community Watershed Team with ICU, supported by CRS	March 2022		EU/BMZ (implemented by GIZ)	Transect walks, bio-physical assessments, identification of measures
Local Council ICM Action Plans – Metsi-Maholo, Mamants'o	ICU, CPU Mafeteng	Council ICM Plans by May 2022	LMDA, MCC	EU/BMZ (implemented by GIZ)	
Phase A Emergency Rehabilitation Measures – Lot 3	ICU	January – May 2022		EU/BMZ (implemented by GIZ)	
Covid Relief Cash for Work – Maliepetsane (2 sites)	MFRSC	Completed December 2021	ICU	GIZ GIDRM	
Covid Relief Cash for Work – Setibing (1 site)	MoW	Completed December 2021	ICU	GIZ GIDRM	
Covid Relief Cash for Work – Qeme (3 sites)	MoW	Completed December 2021	ICU	GIZ GIDRM	
Makhaleng Catchment Management Area					
ICM visioning and planning	Community Watershed Team with ICU, supported by CRS	June 2022		EU/BMZ (implemented by GIZ)	Transect walks, bio-physical assessments, identification of measures
Phase B Emergency Rehabilitation Measures – Ha Moitsupeli	ICU	Planning and implementation January – May 2022		EU/BMZ (implemented by GIZ)	Best practice watershed
Local Council ICM Action Plans – Kubake, Manonyane, Likolobeng	ICU, CPU Mafeteng	Council ICM Plans by October 2022	Coordinate development of Likolobeng plan with Upper Senqu / Senqunyane	EU/BMZ (implemented by GIZ)	
Development of a Makhaleng Integrated Catchment Management Plan	ORASECOM, ICU	Makhaleng ICMP by October 2022	South Africa Orange WMA; Scaling up of ICM to areas with planned investment in water infrastructure	EU/BMZ (implemented by GIZ)	
Phase A Emergency Rehabilitation Measures – Lot 4	ICU	January – May 2022		EU/BMZ (implemented by GIZ)	
Covid Relief Cash for Work – Puete wetland	ICU, supported by CRS	Completed March 2022		GIZ GIDRM	

Proposed Activities for 2022

Planned Activity	Lead Institution	Milestones and Timeline	Contributions and Synergies	Budget Source	Comments
Upper Senqu Catchment Management Area					
Rehabilitation of irrigation scheme, Marakabei	Department of Crops	Feasibility study to be completed in 2022	Coordination between ICM, Department of Crops, CoW	SADP/World Bank	
Rehabilitate marginal lands, degraded rangelands and gullies in LHWP catchments	LHDA	Catchment rehabilitation measures as defined by LHDA. Completed by March 2022	Align ICM plans with LHDA catchment management interventions	LHDA	
LHDA Rangeland Management Program	LHDA	Formation of grazing/herder associations and development of range management plans	Align ICM plans with LHDA range management support interventions	LHDA	
ICM visioning and planning (Khubelu)	Community Watershed Teams with ICU and CPU, supported by CRS	February 2022		EU/BMZ (implemented by GIZ)	Transect walks, bio-physical assessments, identification of measures
Local Council ICM Action Plan – Seate and Mphokojane (Khubelu)	ICU, CPU Mafeteng	Council ICM Plans by October 2022		EU/BMZ (implemented by GIZ)	
ICM visioning and planning (8) (Senqunyane)	Community Watershed Team with ICU, supported by CRS	June 2022		EU/BMZ (implemented by GIZ)	Transect walks, bio-physical assessments, identification of measures
Local Council ICM Action Plans – Tenesolo, Makeoana, Likolobeng (Senqunyane)	ICU, CPU Thaba Tseka	Council ICM Plans by October 2022	Coordinate development of Likolobeng plan with Makhaleng / Makhalaneng	EU/BMZ (implemented by GIZ)	
Covid Relief Cash for work - Ha Koporale	ICU, supported by CRS	Completed March 2022		GIZ GIDRM	
Lower Senqu Catchment Management Area					
Construction of clean portable water supply system. Climate smart agriculture	UNCDF LoCAL and Ministry of Local Government and Chieftainship	5-year Climate change adaptation plan developed. Annual Action Plan for 4 community councils in Mohale's Hoek	LoCAL and ICM – possible model for financing ICM Community Council Action Plans Common approach to development of Action Plans	UNCDF	
Market-Driven Irrigated Horticulture (MDIH) feasibility studies	AECOM (Feasibility Study consultant), LMDA, MCC	Studies completed mid-2022	LMDA and ICM – establishment of ICM institutions and development of ICM plans in the Upper Mohokare Catchment	MCC	
Rehabilitation of irrigation scheme, Quthing District (Seaka)	Department of Crops	Feasibility study to be completed in 2022	Coordination between ICM, Department of Crops, CoW	SADP/World Bank	
Upper Seapala Sub-catchment IWM Master Plan and Community Action Plans	Ministry of Forestry, Range, Soil Conservation	IWM Master Plan finalized October 2022 and Community Action Plans December 2022	ICU	UNDP	
ICM visioning and planning (Maletsunyane)	Community Watershed Team with ICU and CPU, supported by CRS	February 2022		EU/BMZ (implemented by GIZ)	Transect walks, bio-physical assessments, identification of measures
Local Council ICM Action Plans – (Maletsunyane)	ICU, CPU Mohale's Hoek	Semonkong February 2022 Makhoalipane February 2022 Qhoasing May 2022 Senqunyane April 2022		EU/BMZ (implemented by GIZ)	
Covid Relief Cash for Work - Ha Lesala	ICU, supported by CRS	Completed March 2022		GIZ GIDRM	



Policy & Governance

About the Change Area



Introduction

Many analyses regard the root cause of environmental degradation in Lesotho to be ineffective governance of land and water resources.

More effective policies and governance are needed for the sustainable implementation of integrated catchment management.

This includes the regulation of land and water use, and the coordinated implementation of catchment management interventions across departments and sectors.

Strong local government institutions are required to set the right priorities for local watersheds, in consultation with land and water user associations.

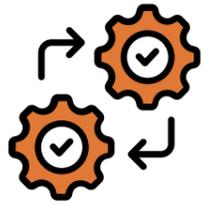
Lesotho's administrative and river catchment boundaries do not overlap, so each catchment includes several districts and community councils. Coordinating institutions are therefore required to develop catchment management plans with rehabilitation measures that consider the implications of upstream and downstream activities, as well as catchments' geophysical characteristics.

The Change

ReNOKA aims to improve the governance of natural resources in Lesotho's catchment areas. Harmonisation of laws and policies, development of effective institutions for catchment management, and the establishment of common guidelines and standards, will enable the development of an integrated planning approach at catchment level.

A revision of Lesotho's water and environmental legislation will provide a mandate for integrated catchment management, harmonise existing policies and support relevant ministries with the development of regulations, standards and permitting systems.

The process will consolidate the fragmented mandates and responsibilities of line ministries and authorities. It will enable the effective enforcement of regulations for use of land and water resources, and ensure water and land management plans are aligned with catchment boundaries.



The Approach

Integrated catchment management requires a change process where existing institutions and mandated authorities agree to plan together and coordinate the implementation of their mandates at catchment level, supported by ad hoc coordinating institutions.

For the ReNOKA movement to succeed, stakeholders from government and non-government institutions must agree on an institutional arrangement for catchment planning and management that includes clear mandates, roles and responsibilities.

Based on an analysis of the existing policy framework in Lesotho, laws and regulations need to be aligned to the integrated catchment management mandate. This includes the harmonisation of sectoral legislation for environmental management, agriculture, water resources, forestry, range and soil conservation. It must also consider the revision of permitting, fines and payment for ecosystem schemes.

A roadmap for policy reform should be agreed among stakeholders, and should set out priorities for the revision of policies, laws and regulations.

As local government is central to catchment management, Lesotho's decentralisation agenda should be advanced by enabling councils to pass bylaws and strengthen their financial management.

Dedicated catchment management institutions foreseen in Lesotho's Long-term Water and Sanitation Strategy, such as Catchment Planning Units and Catchment Management Joint Committees, will be established within the prevailing legal framework, with clear roles and responsibilities.

Community participation needs to be strengthened. Planning processes at catchment and local level will be supported through existing institutions.

Status End 2021



Lesotho's long-term water and sanitation strategy describes the six major river catchments and institutions mandated for integrated catchment management. This is an important starting point for the further institutionalisation of integrated catchment management in Lesotho.

Several legislative review processes are ongoing, providing opportunities to base catchment management principles in law and policy.

The introduction of a new Local Government Bill will empower local government institutions. Principles of integrated catchment management have been incorporated into a Range Management Bill, the draft Soil and Water Conservation Policy, and in the draft Irrigation Policy.

A number of core institutions have been established, including the National Integrated Catchment Management Committee at ministerial level, the National ICM Coordination Unit, the National Technical Secretariat, Catchment Planning Units and Catchment Management Joint Committee.

At community level, Community Watershed Teams have been formed out of existing associations of land and water users. A technical working group has reviewed the Draft Catchment Planning Guidelines for Lesotho and the Compendium of Soil and Water Conservation Measures, which offers quality standards and guidance on the implementation of catchment management.

To further advance integrated catchment management in Lesotho, the legal status of institutions and their mandates must be confirmed, and agreement reached to review critical legislation regulating land and water resources.

Terms of reference for catchment management institutions must be finalised, and local level planning needs to be piloted.

The capacity of technical institutions, local authorities and communities must be developed so they can contribute to planning and implementation of integrated catchment management.

Proposed Activities in 2022

Planned Activity	Lead Institution	Milestones and Timeline	Cooperation and Synergies	Budget Source	Comments
Review of Key Policies and Acts					
Technical assistance for review of the Water Act 2008 and drafting of new Irrigation Act	MCC, LMDA, Ministry of Water, Ministry of Agriculture and Food Security	Ongoing throughout 2022 with associated capacity building	ICU GIZ	MCC EU/BMZ (implemented by GIZ)	Other donors wish to cooperate. Request from Commissioner of Water
Agreement on policy reform priority for ICM implementation: 1. Anchoring ICM institutions & mandates 2. Harmonisation of existing policies & Acts 3. Provision of technical assistance for review	ICU GIZ	Jan-March 2022 - Stakeholder engagement with key stakeholders April 2022: Policy reform roadmap agreed	Ministry of Water, Ministry of Finance (MoF), Ministry of Environment Tourism and Culture, Ministry of Local Government and Chieftainship Affairs (MoLGCA)	EU/BMZ (implemented by GIZ)	Policy at zero draft should be considered Payment for ecosystem service polices could be included or the principle mainstreamed in relevant legislation
Ministry of Forestry, Range and Soil Conservation: Review of 1. Rangeland Management Act & Development of regulations 2. Review of Soil & Water Conservation Policy 3. Review National Forestry Policy	Dept. of Range Dept. of Soil & Water Conservation Dept. of Soil and Water Conservation	New Act approved by Parliament New Policy approved and gazetted Revised Policy approved and gazetted	ICU GIZ Wool and Mohair Promotion Project (WAMPP) MCC LMDA MAFS	WAMPP UNDP	The rangeland management bill was taken to Cabinet on the week of Nov. 15
Review of Public Finance Management Act	MoF	New Act approved by Parliament	MoLG&C MoDP ICU GIZ		This act is relevant to strengthen local government through fiscal decentralisation
Review of Chieftainship Act & Regulations	MoLGCA	Approval process initiated	ICU GIZ	MoLGCA Pending annual budget	
Development of Supporting Instruments					
Establishment of a task team for support to policy revision & regulatory instruments	ICU	Task team is formed	Key departments	EU/BMZ (implemented by GIZ)	
Land use plans, formalisations of land registration, Development of National Spatial Development Framework & planning guidelines	LMDA MoLGCA Chiefs, community Councils, District Planners	Begins mid 2022 Collection & updating of existing data Planning Guidelines		GoL	
Declaration of wetlands as protected areas	LHDA DWA ICU	Establishing and gazetting of protected areas in the headwater of LHDA			Additional establishment & gazetting of protected areas requires ICM finances – need to coordinate with Dept. of Environment on their biosphere programme. Action on wetland should be closely coordinated between Dept. Of Environment, Dep. Of Range Resources Management & Dept. Of Water
Development of standards & guidelines: aquatic ecosystems, in-stream flow requirements, discharge standard	DWA & MFRSC			GoL	
Preparation of National Adaptation Plans (NAPs) & Nationally Determined Contributions	Lesotho Meteorological Services (LMS)	NAPs & NDCs			
Development of Grazing Management Plans (holistic rangeland management)	Dept of Range Resources Mngt. (DRRM)	Finalize grazing management plans in 70 GA- June 2022	ICU	WAMPP	
Demarcation of new Municipal Council	MoLGCA	Hlotse & Maputsoe integrated into Municipal Council by June 2022		GoL	
Drafting of Community Council Bylaws & development of guideline	ICU MoLGCA GIZ	Draft by-laws submitted to MoLGCA Guideline developed	DRRM MCC IFAD	EU/BMZ (implemented by GIZ)	

Proposed Activities in 2022

Planned Activity	Lead Institution	Milestones and Timeline	Cooperation and Synergies	Budget Source	Comments
Institutional Development and Institutional Strengthening					
Establishment of Sebapala IWM Technical Planning Secretariat and Stakeholder Coordination Forum/ Team	MFRSC	IWM Technical planning Secretariat and Stakeholder Coordination Forum/Team in place by December 2022		UNDP	The composition of such a team could align with that of the Catchment Planning Units (CPUs)
Operationalisation for National Technical Secretariat for ReNOKA	ICU, GIZ	Bimonthly meetings Two field excursions to implementation areas		EU/BMZ (implemented by GIZ)	
Agreement on legal and institutional mandates for ICM incl. anchoring in policy instrument	ICU	February – April 2022	Key Ministries	EU/BMZ (implemented by GIZ)	
Establish ICM Institutions at subnational level	ICU, GIZ	Roles and responsibilities are defined and approved (CPUs, CMJCs, CWTs) Institutions participate in planning process		EU/BMZ (implemented by GIZ)	-1 seat in each CPU to be allocated to CSOs
Develop functional and organisational structures for Local Councils	Department of Decentralisation	New structures in place by October 2022		GoL	
Establishment of Conservation Associations or Range Management Associations	LHDA	Established RMA and Registered constitution with Law office or RMA in place. March 2022.	MFRSC	LHDA	



Finance & Investment

About the Change Area



Introduction

Integrated catchment management builds on a governance structure that can sustain key functions like the coherent planning, implementation, monitoring and reporting at national, river basin and local community levels. This requires financial sustainability and investments. But catchment planning and rehabilitation are currently underfinanced, and responsibilities and budgets are fragmented across different government ministries.

ReNOKA has identified a need for revenue generation and cost-recovery mechanisms to fund permanent institutional arrangements for coordination and catchment management. This could be achieved through provisions from the national budget, as well as from permitting and legislation enabling these institutions to charge for their services, reducing reliance on donor funding.

A financing mechanism is needed for implementation of catchment management activities, and to address shortcomings such as weak local capacity in accounting and financing.

There is also a need for fiscal decentralisation and the capacity for catchment-level institutions to collect fees for water use and ecosystem services.

The Change

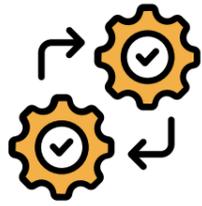
ReNOKA's goal is the creation of a sustainable financing mechanism for integrated catchment management institutions, and for implementation of catchment rehabilitation.

This will enable institutions to be financed through a sector approach coordinated by the Government of Lesotho, and will allow for cost recovery and revenue generation to cover operational costs.

Strong business cases will demonstrate the returns from investment in catchment management to ensure sustainability of water and other natural resources, and will help to attract funding from public and private partners.

A long-term financing mechanism will ensure the implementation of catchment management plans, with contributions from the private sector, international partners and national and local council budgets.

Local government institutions will be strengthened in their financial management capacity, to issue local payment schemes for ecosystem services, and to fund projects for local catchment management. This will benefit the livelihoods of community stakeholders, as well as ecosystem restoration and climate resilience.



The Approach

A priority for ReNOKA is the development of a revenue generation mechanism to cover the ongoing costs of catchment management institutions, to be achieved through a coordinated approach to catchment management funding through the annual budget cycle.

This will be initiated through a study of potential revenue sources. ReNOKA aims to strengthen permitting and charging legislation through the development of regulations. Also required is an assessment of sector opportunities and constraints to improving financial incentives for catchment management.

Financing for local institutions will be established in the short- to medium-term, alongside capacity building to develop local officials' financial and management skills. A financing mechanism for local institutions may be created through performance-based grants to contribute to community council budgets.

A pilot of the overall planning and financing approach will be required to assess successful implementation. The Ministry of Local Government and Chieftainship will play a role in providing training and capacity building for community councils and local institutions.

An integrated catchment management fund will allow for the mobilisation of finance from international partners in line with catchment management plans, creating a long-term pipeline of bankable catchment management projects that include contributions from the private sector.

A technical working group of government, civil society and the private sector will steer the establishment of these mechanisms, supported by a feasibility study for the establishment of decentralised catchment management area funds. The Metolong Water Supply System may serve as a potential pilot study for this purpose.

A strong business case for the financing mechanism will enable stewardship approaches by identifying the return on investment linked to catchment management activities.

Status End 2021



A study on the economic and social value of water was completed in 2021. This has allowed for the development of a stewardship approach to catchment management, facilitated by engagement with the private sector, government and civil society. Private sector engagement has allowed ReNOKA to map private sector upstream and downstream dynamics for sub-catchments.

Performance-based grants to Local Councils were successfully piloted in Lesotho and have provided an avenue to strengthen local financial management capacity for integrated catchment management.

Several reviews are ongoing in related to financial management for ICM.

Proposed Activities in 2022

Planned Activity	Lead Institution	Milestones and Timeline	Contributions and Synergies	Budget Source	Comments
National Level					
Establishment of Finance & Investment Technical Reference Group to guide implementation of activities under this change area	ICU, GWP	Establishment of reference group by 1 st quarter 2022	WB, IFAD RoLL programme	GWP (via EU/BMZ implemented by GIZ)	This group guides the various activities / studies, concepts proposed here (advisory role) Stakeholders will be included from the onset on development of financing mechanism to ensure ownership
Design of procedures for establishment of Business Environment and Technical Assistance (BETA) funding	LMDA MCC	June 2022 through Program Year-3	MAFSA	MCC	The aim is to provide technical assistance and capacity building to GOL & private sector actors to create an environment conducive to business formation, formalisation, and financing with special focus on the horticulture sector
Advance ICM governance and accountability system – Establish the framework conditions for local councils to manage financial contributions (LoCAL model) in line with catchment management area and sub-catchment planning processes	ICU, GIZ LoCAL, MoLG&C, MoF	Framework conditions established in 2 districts for 6 councils until 10.22; 6 micro-projects with a clear climate adaptation function are selected out of the ICM planning process and designed for implementation in the funding cycle 2023	LoCAL, UNCDF	EU/BMZ (implemented by GIZ)	Driven by GoL through Technical reference group. Private sector to be included in the design of financing mechanism
Assessment of investment climate & development of Lesotho Water Investment Plan	ICU, GWP	Pipeline of bankable investments, Investment climate analysis	NCCC, SADB, MTEC, LMS Readiness Project-GEF		Stronger linkages can be established with MTEC and their GEF supported project
Development of WB Country Partnership Framework - for next 5 years	World Bank	Published in June 2022, with focus on climate resilience, private sector development, human capital development			Link with MTEC/ Dep Environment for GEF focus point and activities on natural capital accounting
Study on public financial management/finance incentives for ICM	World Bank, ICU				
Development of the ROF financing mechanism	IFAD, Ministry of Forestry	Financing mechanism design by end of 2022	ICU, GIZ	IFAD	
GIS decision support system for ROI on ICM measures	WB, ICU				
Review of Public Finance Management Act	MoF, MoDP	Reviewed Act	MoLG&C	GoL	Crucial to foster fiscal decentralisation

Proposed Activities in 2022

Planned Activity	Lead Institution	Milestones and Timeline	Contributions and Synergies	Budget Source	Comments
Local Level					
Conduct feasibility study for decentralised financing mechanism and revenue sources for recurrent expenditure- conduct basic training on financing mechanism	MoLG&C ICU, GIZ	Final concept to be tested & assessment of revenue sources. Trainings are carried out in selected catchment areas	LoCAL UNCDF	EU/BMZ (implemented by GIZ)	Alignment of the mechanism to ICM planning processes is crucial
Performance based grants top up in community councils in support to climate resilience	LoCAL UNCDF MoLG&C MoF NCCC	8-10 project implemented through the grant.	ICU, GIZ	UNCDF	Projects will be implemented through the support to the community councils that were part of the pilot in the first year however different villages will benefit from implementation
Explore interest with private sector cooperation in implementation areas	ICU, GIZ	Establishment of one private sector partnership	IFAD	EU/BMZ (implemented by GIZ)	This activity also has relevance at the national level where issues of sustainability and networks for private sector engagements established
Transboundary Level					
Social & Economic value of water: the economic value of ecosystem services preventing siltation- Cost/benefit analysis with ORASECOM	ICU, GIZ, ORASECOM, MoW, LHDA, TCTA	Study/ cost benefit analysis, Transboundary technical working group	SWPN South Africa, SADC Water	EU/BMZ (implemented by GIZ)	The scope of this study could be extended to cover natural capital accounting
Good practices from transboundary IWRM flagships on ecosystem-based and/ or nexus approaches are implemented and documented for upscaling and/ or investment promotion through 3 knowledge products.	SADC Water Division	Document at least 2 lessons learnt and good practice on selected topics		BMZ TWM-SADC (implemented by GIZ)	



Skills & Knowledge



About the Change Area



Introduction

More than 80 percent of the population in Lesotho is dependent on agriculture and natural resources for their livelihoods. This makes skills and knowledge of land and water users an essential element for the sustainable management of Lesotho's catchment areas.

Conserving natural resources and managing catchments requires many different stakeholders to understand and embrace the social, economic and environmental benefits.

But knowledge of integrated catchment management and a clear vision of its potential is currently limited in communities, organisations and government. There is also a shortage of administrative, technical and project skills required to develop and implement catchment management plans.

Community councils on the frontline of catchment management are generally not familiar with policies, rules and regulations; and lack the technical background and support to take informed decisions to guide effective implementation.

However, with the relevant skills and knowledge, the Basotho will benefit from better water quality and availability for domestic, rural, industrial and agricultural use. This will help to achieve sustainable land and water management, reduced land degradation and a measurable impact on climate change.

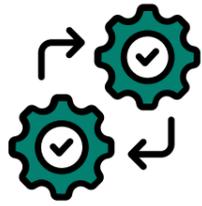
The Change

ReNOKA aims to develop a better understanding of the problem of land degradation and its impact on catchment systems. We also promote skills for the sustainable use of catchment resources, ranging from practical training for land and water users to academic programmes which develop water resource management skills among public and private sector professionals.

Skills and knowledge are relevant to all of ReNOKA's change areas. We are working to create a society that exchanges information about challenges and solutions, and is educated and equipped to adapt to current and future challenges.

We aim to expand understanding of river catchments and their management among all Basotho by incorporating concepts into the national education system.

The result should be land and water users implementing catchment management as a means of improving their own livelihoods and futures, with trained educators sharing knowledge, and decision makers guiding implementation based on evidence within well-understood legal frameworks.



The Approach

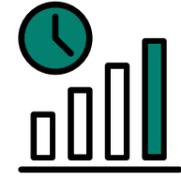
Implementation of integrated catchment management starts with piloting projects, then scaling up innovations and consolidating best practices. It requires development of skills, knowledge and capacity in ReNOKA change areas, building on existing capacities and filling gaps through regional and international expertise. This will lead to the institutionalisation of effective and sustainable catchment management.

ReNOKA priorities for human capacity development have been identified as technical knowledge for implementation of river catchment management, management and coordination, and cooperation and information exchange between stakeholders.

This prompted the development of a ReNOKA skills and knowledge strategy which promotes professional training, institutional development and creation of opportunities for information exchange, such as internships, study tours and site visits.

Target groups for the strategy include herders, watershed teams, chiefs, data collectors, councillors and council secretaries, government Ministries, media, implementation partners, young professionals, educators and educational institutions.

Status End 2021



The skills and knowledge strategy was developed to guide human capacity development in support of ReNOKA. Community engagement is ongoing and includes training for resource user groups.

Training of trainers has been conducted with 13 community watershed teams, and national resource management training for 77 new village watershed teams. ReNOKA has identified 28 lead farmers who can each transfer skills to up to 20 smaller farmers.

A Memorandum of Understanding has been signed with the National University of Lesotho.

Proposed Activities for 2022

Planned Activity	Lead Institution	Milestones and Timeline	Contributions and Synergies	Budget Source	Comments
Professional Trainings					
Professional short courses	ICU supported by WaterNet	1. Priority needs assessment 2. Quarterly short courses	NUL	EU/BMZ (implemented by GIZ)	Incl. transboundary IWRM lessons learnt
Regional training opportunities	ICU supported by GWP SA	1. Final list of trainings 2. Implementation of trainings	NUL	EU/BMZ (implemented by GIZ)	Incl. transboundary IWRM lessons learnt
CD for water quality analysis	DWA, MoH		Agric. Res., Soil & water conser., NUL	GoL	COW & land use planning critical.
Capacity building on GIS	ICU	1. Manual (Jan.) 2. Train 8 GIS specialists, 6 data scientists & 10 IT specialists (Mar.)	FAO, DRG	EU/BMZ (implemented by GIZ)	To inform land cover map usage and updating
Catchment planning and assessments	EU/BMZ (implemented by GIZ)	Training Materials developed during piloting	MoFRSC, NUL	EU/BMZ (implemented by GIZ)	
Reports with climate and water resources assessment tools	DWA and LMS	1. Statistics used on climate reports 2. CC monitoring (IAEA) & 4 new hydrometric stations	Agric. Research, DMA, NUL DoG & Dpt. Soil Science	GoL	
PR trainings in catchments	EU/BMZ (implemented by GIZ)	3. Teams set-up 4. PR Products for catchments	NUL FoA / IEMS	EU/BMZ (implemented by GIZ)	
CD on IWM	MoFRSC	Trainings finalized by December 2022	DWA, RWS, WaterNet	UNDP	
CD on sust. NRM	MoFRSC, MoAFS		NUL	UNDP/ Small grants	
Farmer and CWT trainings	CRS	1. Smart agriculture 2. NRM 3. Organisation Development	LCE, MoAFS, NUL, Rural Water Supply	EU/BMZ (implemented by GIZ)	
Institutional Strengthening					
Strengthening of tertiary education for ICM	NUL supported by WaterNet	1. Support academic coordinator 2. Post.-Doc. Programme 3. ICM post graduate programme 4. ICM in undergrad. programmes		EU/BMZ (implemented by GIZ)	
Curriculum development and rollout for basic education	GEM, LANFE, NUL	1. ICM model development 2. Capacity building 3. IEC material development 4. Strengthening of environment clubs	LCE, LDTC	EU/BMZ (implemented by GIZ)	Futher models for other education levels
Promote learning and skills development to herders	LANFE, GEM, NUL	1. Establish Herder Learning centres 2. Roll out trainings 3. Strengthen grazing associations	LDTC, Range	EU/BMZ (implemented by GIZ)	
Design of education and training for families in irrigation schemes	AECOM, LMDA, MCC FAO/ GEF/ MoAFS/ LCE	Finalisation of Market-Driven Irrigated Horticulture (MDIH) feasibility study. Mid-2022		MCC	Proposed livelihood projects in catchment communities
Conduct baseline assessment	LHDA	Assessment reports for erosion features and rangelands. March 2022		LHDA	
Exchange Formats					
Provision of scholarship and internship opportunities	NUL supported by WaterNet	1. Provision of Postgraduate Scholarships 2. Internships for Postgraduate Students	NMDS	EU/BMZ (implemented by GIZ)	
Learning exposure visit to East Africa for directors	ICU supported by GWP SA	5. Learning outline 6. Exposure visits conducted		EU/BMZ (implemented by GIZ)	Local exchanges to be developed
Representation in international platforms for showcasing	ICU supported by GWP SA	1. World Water Forum – Dakar 2. World Water Week – Stockholm 3. COP 27 - Sharm el Sheik		EU/BMZ (implemented by GIZ)	



Awareness & Behaviour Change



About the Change Area



Introduction

Better management of Lesotho's catchments depends on changed behaviour by all who benefit from them. This requires strategic communication and dynamic messaging to raise awareness with target groups and stakeholders including farmers, herders, communities, civil society, the private sector, traditional authorities, development partners and government policy makers.

Awareness and behavioural change are cross-cutting issues that will help to determine the success or failure of integrated catchment management in Lesotho. The long-term impact of human behaviour on land and water resources is currently not well understood, and sustainable water management practices need to be embraced by all levels of Basotho society.

The Change

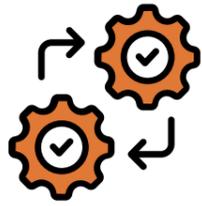
ReNOKA aims to create broad awareness and understanding of integrated catchment management, climate change, the responsibilities of land and water users and sustainable environmental practices. This is recognised as a necessary step towards changed behaviour and cooperation between stakeholders.

The aim is for all authorities and stakeholders to have a shared vision and to coordinate activities that address their land and water resource challenges.

Communication campaigns and credible champions should promote ReNOKA values and interventions that promote positive behaviour change.

The end result should be better management of river catchments and water resources, improved livelihoods, sustainable agricultural practices and rehabilitated river catchments that stimulate job creation in sectors such as tourism.

ReNOKA also aims to encourage young people to embrace and participate in natural resource management.



The Approach

Our aim is to grow ReNOKA as public movement and identify best practices in integrated catchment management, and to identify and create a network of transboundary champions. ReNOKA's approach is informed by insights into what motivates human behaviour, and what is most likely to stimulate change. We use evidence to support messaging and propose interventions that are tailored and targeted for different audiences.

Social and behaviour change interventions aim to understand what drives individual and collective behaviour, and the potential barriers and incentives to change. This understanding then informs the design of ReNOKA communication campaigns aimed at protecting land and water resources in Lesotho. The implementation phase is then supported by skills development, and closely monitored to determine the impact and sustainability of activities.

ReNOKA seeks to encourage and showcase stakeholders who are successfully implementing integrated catchment management. For ReNOKA to achieve its goal as a citizen-driven movement, there needs to be a platform for communities to showcase how they contribute towards the sustainable management of natural resources.

There is an opportunity to adopt best practices and lessons from past projects, programmes and interventions in the land and water sectors. Different target groups require different channels of communication, including social media, TV, radio and print. This should be combined with community engagement formats as varied as sunshine cinemas and theatres, hiking or public litter collection events. Storytelling, theatre and games can be used to reach children and young people in particular.

It is important to engage ReNOKA champions, such as community leaders and traditional authorities, as well as ordinary citizens who act as changemakers in their communities.

Status End 2021



ReNOKA has created increased media awareness of climate change and environmental issues, and arts have proven effective in reaching local communities to raise awareness of sustainable land use. The development of the ReNOKA brand, communication platforms and a behaviour change and advocacy strategy has improved the delivery of campaign messages.

Popular traditional musicians were shown to be effective in the Responsible Herding campaign under the Participatory Initiative for Social Accountability (PISA) programme aimed at local communities.

To advance coordinated messaging and public engagement going forward, communication needs to be centrally managed, but with decentralised nodes empowered to share information at a grassroots level. There is a need for a national communication strategy that enables stakeholders to communicate a single coherent message, and to be aware of what other stakeholders are doing. This can be supported by a community of practice enabled by an online platform.

The bigger picture of catchment management needs to be communicated, including how ReNOKA is relevant to the wider Orange-Senqu Basin. This will be best achieved through a communication strategy at the transboundary level. It will be important to avoid multiple organisations communicating different messages to the same communities, as it causes fatigue and reduces the impact of interventions.

Communities should be given the opportunity to communicate their challenges and successes, and to share information with other stakeholders. Working with primary stakeholders such as herders as ambassadors, and providing a platform to share what they understand as best practices, will be critical to the success of integrated catchment management in this target group

Observations from field trips and local community engagements have pointed towards the use of direct engagement and interactions as the most effect means of delivering awareness-raising messages to communities.

Proposed Activities in 2022

Planned Activity	Lead Institution	Milestones and Timeline	Cooperation and Synergies	Budget Source	Comments
Target Group Communication at Catchment Level					
Behavioural change communication	Busara Centre for Behavioural Economics	<ul style="list-style-type: none"> Definition of scope and problem statement established Design and testing - Successful completion of design workshops with all stakeholders plan Over a period of 18 months 	Behavioural change communication	Busara (via EU-BMZ implemented by GIZ)	
Encourage destocking and advice on alternative means of earning a living.	Department of Livestock in collaboration with Department of Marketing	Over a period of 12 months	Skills and knowledge training	MFRSC	Define land management stakeholders
Raise awareness on water use management and conservation	Department of Water affairs	Core activities of the department	Awareness raising of commemorative days e.g. World water day	MoW	
ReNOKA national & regional campaigns implemented	ICU	<ul style="list-style-type: none"> 1 thematic campaign at national level in Lesotho 6 localised campaigns in individual catchment areas 1st quarter monitoring and evaluation review of campaigns conducted Over a period of 12 months 	Synergies with MFRSC, MoW, WFP, BUSARA,	EU/BMZ (implemented by GIZ)	Marketing and communications firm to be contracted
Joint awareness activities of ReNOKA stakeholders	GWP/SARDC, FAO, ICU, MFRSC, CRS, World Vision, RSDA	<ul style="list-style-type: none"> Hold awareness raising activities on different media platforms & community involvement through lipitso (31 December 2022) National Awareness campaigns around commemorative days e.g. World Wetlands Day; World Water Day; Land cover Atlas Awareness ReNOKA "Day". Community focused theme-based awareness campaign activities 	Synergy with WFP on media trainings using WFP (IACOV compact 2) media toolkit	EU/BMZ (implemented by GIZ)	<p>Diversify ways of awareness raising such as using conservation music and learning by demonstration activities e.g. Small grants program</p> <p>To establish - Communications Coordination group established and functional including hosting activities such as; Action oriented research Host symposium</p>
Hold environmental and conservation awareness campaigns	LHDA	78 environmental awareness campaign incl. school visits, Four (4) radio programmes & 20 workshops Meetings held with various stakeholders March 2022	In Implementation	LHDA	
Develop shared multi-media platform. E.g. Google drive under different organising. Establish an ICM data hub under ICU	ICU	2022	Proposed	ICU	A common portal for all ICM players to easily access resources and keep abreast on various programmes implementing ICM
Publication of ICM knowledge products	ICU	Various publications will be developed as per the outputs/change areas of the action	Planned	EU/BMZ (implemented by GIZ)	

Proposed Activities in 2022

Planned Activity	Lead Institution	Milestones and Timeline	Cooperation and Synergies	Budget Source	Comments
Communication at National and Regional Level with Focus on Decision Makers					
Develop a public awareness campaign on Rangeland Management Act	MFSRC		Cross cutting	MFRSC	
ReNOKA National & Regional Campaigns implemented	ICU	A rolling campaign on the core principles of ReNOKA and communication of progress and results rolled out	Cross cutting	EU/BMZ (implemented by GIZ)	Marketing and communications firm to be contracted
Transboundary Awareness Campaign implemented	ICU, CoW, ORASECOM SADC		Synergies with awareness raising and skills and knowledge change areas	EU/BMZ (implemented by GIZ)	Marketing and communications firm to be contracted
Development of bulk water supply systems	LLWDP/ EU/WB	Coordinated awareness and behavioural change communications	Planned	EU	
Promotion of Climate Smart Agriculture Technologies		Over a period of 12 months all District Agriculture Offices will be sensitized about CSA technologies	Planned		
Promote alternative livelihoods initiatives within the LHWP catchments (fodder production, agro-business)	LHDA	Alternative livelihoods identified and implemented. March 2022	Planned	LHDA	
Promotion and awareness raising of ReNOKA at catchment level	ICU	Sensitisation of local authorities, MPs on the laws governing ICM Study tours to degradation hotspots in the country for Senate members and MPs to appreciate the need for ICM & Env. Protection Create visibility for ReNOKA through various C&V media mediums and merchandise	Planned	EU/BMZ (implemented by GIZ)	



Data & Monitoring



About the Change Area



Introduction

A lot of information is required to plan and execute catchment management, including how water is used, the geography and geology of an area, connections between water bodies, how water flows, land use, land degradation, and climate change risks and adaptations.

Planning requires the best scientific data, and the interpretation of that data. It then needs to be communicated in a language and format appropriate to different audiences.

Data and monitoring systems guide decisions by policy makers, planners and land users. They can help farmers to plant crops and to find grazing land, and enable catchment planners to identify the causes of decreased river levels.

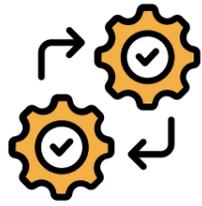
Data can support medium- to long-term planning for investments in agriculture which depends on irrigation, or in public infrastructure such as dams. It can also help land owners to manage invasive species. Data also shows local and national government where to prioritise resources, and it enables a baseline against which progress can be monitored.

The Change

Our aim is for reliable data to guide the sustainable management of Lesotho's catchments. Reliable information systems help to identify priority issues and to design the most effective and economical interventions.

Monitoring can provide evidence of what works, define the socio-economic benefits of catchment management, and inform future investment decisions. Data can also help to create scenarios for the long-term availability and distribution of water resources as a consequence of climate change and shifting land use.

Sources of data include earth observation tools like satellites and drones for land cover information, hydrometric tools to assess water availability and distribution, and climate data for seasonal forecasting.



The Approach

We aim to make the right data available to guide catchment planning. This includes the use of semi-automated earth observation tools to map land cover, detect changes, map trends, and quantify differences on the earth's surface. It also includes information on water quality and distribution, ground water, and river flow; as well as assessment of climate risk and vulnerability, and data on land use and socio-economic patterns.

Through ReNOKA, we aim to improve the governance and management of data. We are developing capacities for the secure collection, analysis, use and distribution of data and its use to increase public awareness.

Data should be made available to as many people as possible, in appropriate formats and through user-friendly platforms and products.

Status End 2021



Experts from multiple government departments collaborated to complete profiles of river sub-catchments with biophysical, socioeconomic, administrative and stakeholder data.

The Land Cover Database for Lesotho is being updated through a collaboration with the UN's Food and Agriculture Organisation (FAO), using innovative machine-learning approaches and the latest earth observation tools to allow for a semi-automatic detection of changes to Lesotho's land cover, and to track the health of critical ecosystems.

A reference group has been established to coordinate the establishment and management of data for integrated catchment management in Lesotho, aiming to improve the quality of data, governance and the use of data, and evidence for decision making.

A research and data management partnership has been formed with the National University of Lesotho, and research projects are underway on indigenous knowledge and lessons from past natural resource management projects.

Priorities to achieve ReNOKA's vision for data and monitoring include improving stakeholders' collaboration for the management of data. Policies are being created for data sharing within and between departments, including terms of access.

We would like to increase awareness of senior leaders and decision makers about the role and value of data and monitoring for catchment management.

A technical partner should be identified to assist the Data Reference Group with assessment of user needs, and to conduct ICT capacity mapping and dashboard development.

Data management skills and knowledge will be enhanced during 2022, and a consolidated land and water database will be created using common meta-data standards.

Clear policies on data sharing and access will be established, and there will be a methodology for annual updates to the Lesotho land cover atlas.

All stakeholders involved in managing data for integrated catchment management will decide on a coordinated way of working, building on established groups like the Committee on Environmental Data Management.

Common government standards will guide the collection and verification of high-quality data, and there will be protocols for its responsible use.

A prototype will be developed for a national data system for integrated catchment management, and all data and related processes will be fully owned and managed by the Basotho people, with support from international partners where requested.

Proposed Activities in 2022

Planned Activity	Lead Institution	Milestones and Timeline	Contributions and Synergies	Budget Source	Comments
Capacity and Human Resource Development					
International Partnership Building	ICU GWP	<ul style="list-style-type: none"> GIS, data scientists and catchment planners (10) in line ministries and institutions participate in an international exchange on data and monitoring 	GMES & Africa	GWP (via EU/BMZ implemented by GIZ)	Research institutions, NGOs,
National Partnership Building	ICU	<ul style="list-style-type: none"> Building land cover analysis capacity at NUL 20 students and 2 lectures capacitated on land cover analysis 	NUL	FAO (via EU/BMZ implemented by GIZ)	Research institutions, NGOs, and
Capacity Building Program on Data & Monitoring	ICU MCC LMDA DWA	<ul style="list-style-type: none"> Identify capacity needs (01/22) Define training schedule Capacity building on main river basin water management plans and establishment of data hub 	FAO GWP	EU/BMZ (implemented by GIZ)	Land cover analysis, water resource management, conservation measures, rehabilitation measures, monitoring, modelling and data collection.
National Data System Development					
Harmonisation of data sharing protocols	ReNOKA Data Reference Group	<ul style="list-style-type: none"> Review current data sharing protocols Align with international protocols Standardisation of data formats for ease of integration Draft national data sharing legislation Implement as directive or regulation 		EU/BMZ (implemented by GIZ)	Cross-ministerial assessment
Establish National Data System	ReNOKA Data Reference Group ICU	<ul style="list-style-type: none"> Assess existing roles and mandates, and lessons from past and present data systems (e.g. SEDAMA; LESIS). Identification of data silos Integration of data to a shared database Digitalisation of paper-based/analogue data system 	MCC/LMDA	LMDA	There is financial and technical support for climate and water data hub
Maintenance & Technical Upgrade of Monitoring System(s)	MAFS DWA DMA LHDA LMS DRRM BOS	<ul style="list-style-type: none"> Revive monitoring components (maintenance, upgrade, extent) <ul style="list-style-type: none"> Procurement and installation of 48 automatic rainfall stations and 25 automatic weather stations, new hydrometric stations, and new monitoring boreholes Upgrade MESA network to GMES & Africa (Global Monitoring for Environment and Security and Africa) standard Procure and install High Performance Computer (HPC) to enable Nowcast based, Medium, Short term and seasonal forecasting Procure/install forecasting tools (2- way VSAT- Satellite Distribution System (SADIS) and Monitoring for Environment and Security in Africa (MESA - SYNEGIE) 	LMS EWS II project WFP see also: Activity 1.1 Intern. Partnership Building	CoW WFP	
Use Case Championship and Awareness Raising Campaign	ICU	<ul style="list-style-type: none"> Launch "Data-Use Challenge" Implement Awareness Raising Campaign 	DRG NUL Innovation Hub ICU	EU/BMZ (implemented by GIZ)	
Construction & Accreditation of a DWA Laboratory	DWA	<ul style="list-style-type: none"> Development of laboratory services (business driven) Construction & procurement of lab equipment Accreditation 	DWA	DWA	Funding model to be developed
Land Cover Monitoring					
Landcover Atlas 2021	FAO	<ul style="list-style-type: none"> Atlas 2021 printed and distributed 		FAO (via EU/BMZ implemented by GIZ)	
Annual Landcover Assessment	FAO			FAO (via EU/BMZ implemented by GIZ)	
Establish NRM Drone Unit	TBD	<ul style="list-style-type: none"> Procure equipment and train operators Develop sustainable business model through public and private partnerships Conduct <ul style="list-style-type: none"> National forest inventory Erosion, soil loss and sedimentation survey Rangeland health assessment Impact analysis of mining and prospecting activities 	NUL Dept. of Soil and Water Conservation Dept. Land Management Dept. Forestry Dept. of Range Dept. of Geological Survey/Mining	FAO-GIZ (via EU/BMZ implemented by GIZ)	



renoka
We are a river

www.renoka.org
hello@renoka.org



@renoka_movement



Renoka Movement



Renoka Movement



Renoka Movement

