

Strengthening Research and Innovation in Natural Resources and Waste Management in the SADC Region

2022 – 2025



Implementors

- SADC Secretariat
- College of African Wildlife Management, Mweka
- World Wide Fund for Nature
- Community Wildlife Management Areas Consortium
- Southern African Wildlife College
- Skyberry Botswana Proprietary Limited
- REPENSAR
- Zambia CBNRM Forum
- Malawi National CBNRM Forum

Countries

Malawi
Mozambique
Tanzania
Zambia

RINaWa

BACKGROUND

This project responds to the SADC’s regional development agenda and the 2020–2030 Strategic Development Plan which underscores the uptake of research and innovation (R&I) to solve the critical challenges related to Waste Management (WM) and Community-Based Natural Resources Management (CBNRM) within the SADC region. This project therefore, involve application of scientific practices and strategies to improve sustainable utilization of wildlife resources through a Community-Based Natural Resources Management (CBNRM) approach. Further, the project aims to explores novel approaches and processing techniques applicable for solid waste management in the target SADC countries. Collectively, these R&I approaches are meant to contribute to formulation of efficient locally-adapted practices that enhance sustainable resource management.

PROJECT GOAL

- To strengthen and sustain WM and NRM in the targeted countries of the SADC region.
- ### OBJECTIVES
- Research and tertiary education institutions applying up-to date research and training in WM & CBNRM
 - Government entities drafting, implementing and monitoring WM and CNRM policies based on scientifically developed evidence
 - Local and national groupings strengthened to effectively participate in evidence-based decision making in WM and CNRM
 - Value-Chain Actors from the formal and informal sectors applying effective WM and NRM practices
 - Public and private sectors with strengthened collaboration in science-policy-practice interface in WM and CNRM

NEXT STEPS

- Capacity strengthening of research and tertiary education institution on WM and CBNRM
- Design and develop R&I pilot project WM and CBNRM
- Develop R&I guidelines for the SADC region
- Conduct Training Need Assessment for R&I in WM and CBNRM
- Develop curricula for short and long courses on WM and CBNRM
- Conduct conservation education awareness programmes to stakeholders in WM and CBNRM
- Develop regional dialogue platforms for WM and CBNRM in the SADC region
- Conduct training to government, decision makers and other actors regarding on R&I in WM and CBNRM

Study Approach

- Questionnaire survey
- Focus group discussion
- Key informant interviews
- Desk review



Key Findings

Waste Management

An average of 44% of all solid wastes (3.6 million tones) generated in sub-saharan Africa are managed. The remaining 66% of wastes are left unattended/ unmanaged.

Rate of Waste generation and collection

Country	Waste generation		Collection rate	
	Mil tons/year	Kg/capita/day	(%)	Year
Malawi	3.7	0.5	30.0	2019
Mozambique	2.0	0.6-1.0	25.0	2012
Tanzania	7.0	0.5-1.0	32.7	2019
Zambia	2.0	0.49	24.8	2017
Sub-Saharan Africa	3.62	0.46	44.0	2018

Incorporation of science-based agenda associated with waste management in higher learning institution curricula is still at its inchoate stage because of inadequate capacity in terms technical and financial resources.

Participatory science-led WM policies and guidelines for WM from government are existing, however, implementation remains ineffective mainly because of budgetary constraints.

A multiplicity of value chain actors exists in the region demonstrating a higher level of technical innovations dealing with WM, however, technical capacity and and partnership with government entities remain weak.

Some WM Public-Private-Partnership initiatives exist in the region. Whereas these have attracted some government support, implementation of this linkage in real terms appears at best feeble.

Natural Resources Management

The region has demonstrated high terrestrial biodiversity conservation commitment by setting aside an average of 32.7% of the total landmass for conservation. This has exceeded the CBD target of having 27% of terrestrial, inland and coastal areas protected.

Protected area coverage by target country. Countries with an asterisk (*) are landlocked

Area (% country size)				
	Country size (km²)	Terrestrial/Inland waters	Coastal waters/ Ocean	Total
Malawi*	118,480	22.9	-	22.9
Mozambique	799,380	21.6	2.2	23.7
Tanzania	945,087	38.2	3.0	41.2
Zambia*	752,614	37.9	-	37.9
Average		30.1	2.6	32.7

Research and tertiary training institutions specialized in NRM are involved in some sorts of innovations, adoption, dissemination and incorporation science-based sustainable NRM practices.

Significant volume of NRM policies and supporting strategic documents exists but there are some inconsistencies and even contradictions that affect their effective implementations.

The governments-CBNRM partnership appears fairly strong despite diverse variations in collaborative models and varieties of income generation and sharing schemes on the ground.

The value chain actors in NRM appears not so well engaged in NRM activities compared to those in the WM sector despite existence of clear potentials.

Although both governments and private enterprises acknowledge their complimentary PPP roles in addressing NRM issues, in practice far fewer such ventures exist in the NRM compared to WM sector.



OACPS R&I

