



Factsheet # 16

Awareness Vs. Application:



Rangeland management and Restoration in Namibia's eastern communal areas

Challenge

- Semi-arid communal rangelands are often extensively degraded, which is frequently attributed to the ongoing practice of continuous grazing.
- Therefore, there is a general perception that communal farmers have limited awareness of sustainable management practices.
- Experts often encourage communal farmers to adopt a range of proactive management strategies, including:
 - **natural regeneration** such as stocking rate adjustments, fencing/resting, and planned grazing with combined herding (no active intervention)
 - **active restoration** such as bush control, reseeding and construction of erosion control structures.
- However, implementation and long-term success may be constrained by socio-economic, environmental and political limitations specific to these areas.

Approach

To align rangeland interventions with community needs, we held group discussions with farmers across four communal settlements in the Okakarara Constituency: Ohamuheke, Ovitatu, Omboronde and Ozongarangombe.

Farmers were asked about techniques they actively use, have attempted and were presented with feasible expert recommendations to assess awareness.

The discussed techniques were then grouped into 12 management groups and evaluated against three criteria: awareness, adoption success and the limitations hindering effective implementation.

High awareness, but low co-operation

- Communal farmers possess a high awareness of proactive management and restoration techniques (~90%) (**Fig. 1**).
- Most adopted interventions are concentrated near homesteads or in personal camps (~56%), where farmers have greater control over management decisions and no co-operation from other community members is needed.
- In the open communal rangeland, where co-operation is needed, only a few techniques (~17%) such as bush control (mechanical), fencing (camps and cattle posts) and seasonal grazing (free roaming) have been temporarily implemented across a limited number of villages, with successes remaining short-lived.

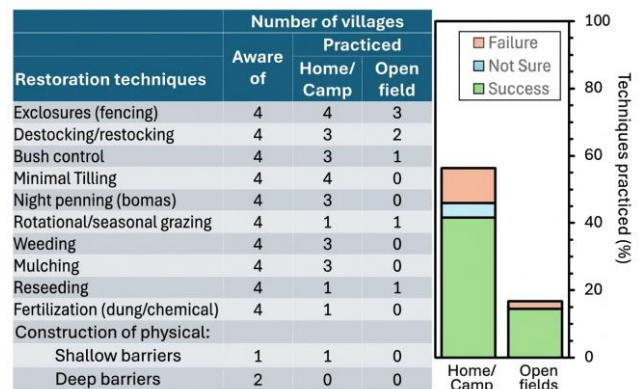


Fig.1: Rangeland management techniques discussed with communal farmers, and the number of settlements (max. 4) in which they are aware of or had been/are currently practiced (Table-left). Mean percentages across the four settlements of the 12 techniques to which villages practiced and where - either near homesteads/personal camps or in the open communal rangeland, along with associated success rates (Graph-right).

Limitations for the implementation of restoration techniques

Limits associated with restoration techniques	What this means in practice
Limited technical capacity and weak coordination between local institutions	Without adequate knowledge, collective action and long-term training from extension services, the scaling up of techniques from homesteads to open rangelands is constrained
Labour intensive and time consuming	Households with the elderly or younger inhabitants may struggle to contribute to the efforts
High costs	Fencing material, tools/machinery, repairs and herders are expensive; poorer households may be excluded
Social inequity and demotivation	Unfair distribution of labour and costs lead to disputes, perceived injustice and deliberate withdrawal
Policies and regulations	Restrictions on fencing and bush control limit what farmers can implement
Cultural and social factors	Reluctance to destock due to livelihood dependence and perceived low livestock prices
Environmental limits	Unpredictable rainfall, high temperatures and sandy soils limit water retention resulting in poor, slow and inconsistent outcomes

Practical and Policy Implications

- **Co-design interventions with farmers.** Audit existing knowledge and practices BEFORE introducing new techniques to ensure local alignment.
- **Consider existing realities.** Take socio-economic, environmental and policy limitations into account BEFORE implementation to help prevent poor outcomes.
- **Strengthen supportive policies.** Adapt existing policies aiming at exclusivity of land access, as well as on bush thinning and fencing, to formally recognize and empower community-led management.
- **Empower farmers.** Provide external support to bridge knowledge and local structural gaps while maintaining community decision-making authority.
- **Leverage existing cooperation.** Use existing collective action, like cattle post movements as entry points to formalise and regulate communal management, to ensure restoration implementation in the open communal rangelands.

Key Findings

- Communal farmers recognise feasible practices, yet multiple constraints hinder their implementation, which in turn reduces farmers' willingness to engage in the **collective action** necessary for success.
- Proactive management strategies are more successful in areas close to homesteads, where rangeland health and livestock distribution can be easily monitored.
- Local co-operative structures exist, but individual farmers, and these institutions lack structural know-how in order to start implementation.

Authors

Sihlangene N. Moyo & Meed Mbidzo, Department of Natural Resources Sciences, Namibia University of Science and Technology (NUST), Namibia.
Contact: sihlangenelimoyo@gmail.com
Mark C. Bilton, Bilton Environmental Resources / NUST, Namibia.
Contact: mcbilton.ecology@hotmail.com

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The NamTip Project

The collaborative German-Namibian research project "NamTip – A Namibian Perspective on Desertification Tipping Points in the Face of Climate Change" aims to better understand the development of ecological tipping points in dryland rangelands by assessing desertification and woody plant encroachment processes. It also explores management options for preventing such tipping points and restoring degraded rangeland ecosystems.

www.uni-potsdam.de/en/namtip

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Project Lead

Prof. Dr. Anja Linstädter
E-Mail: anja.linstaedter@uni-potsdam.de



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