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Regenerative rangeland management in practice: Evidence from a commercial cattle farm in central Namibia - A case study

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Abstract

Namibia's commercial farming sector relies on cattle and sheep production from the vast savannah rangelands. However, many farmers face challenges such as rangeland degradation, climate change, and insufficient profitability. Not only farmer-led initiatives but national policy and the Namibian Agricultural Union have advocated for sustainable and/or regenerative rangeland management. But theses approaches do not prescribe certain practices or standard procedures a farmer can just implement and "be regenerative". Scientific knowledge on how farmers operationalise the approach remains limited.

The aim of this case study is to understand how regenerative management is developed and implemented on a 11.000-hectare cattle farm in central Namibia. We conducted in-depth interviews with the farmer couple and practical aspects were demonstrated in farm drives. We present objectives, strategies and practices regarding grazing management and cattle breeding; and we report challenges they experienced while transitioning towards regenerative management over the past decade.

The farmers pursue two interrelated objectives and corresponding strategies: (1) improve forage quality and quantity and overall rangeland ecology through targeted animal impact (i.e. grazing, browsing, trampling, manure distribution) and (2) improve reproduction and (meat) production through improved herd genetics that ensure early mature and locally adapted animals.

To create the envisioned animal impact, the previous grazing scheme has been altered towards a new system rooted in Holistic Grazing Planning™. Additionally, it incorporates ultra-high-density grazing using electro fencing.

To improve the herd genetics, the farmers are shifting from a Bonsmara-dominated herd towards African native breeds (e.g Nguni) but rather they look for a "type" and therefore observe various phenotypical indicators. They select males accordingly, but heifers are actually "selected by the bull", i.e. through early conception.

The system and tradeoffs are managed through (1) functional herd divisions (i.e. certain herds get to graze more selectively to ensure performance or less selectively to ensure animal impact) and (2) targeted interventions at the level of individuals or small groups, guided by continuous monitoring of e.g. dung consistency and vegetation composition.

The case shows how farmers tailored regenerative management to their objectives and site-specific conditions and reveals a knowledge-intensive system shaped by continuous observation, experimentation, and adaptive decision-making.

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