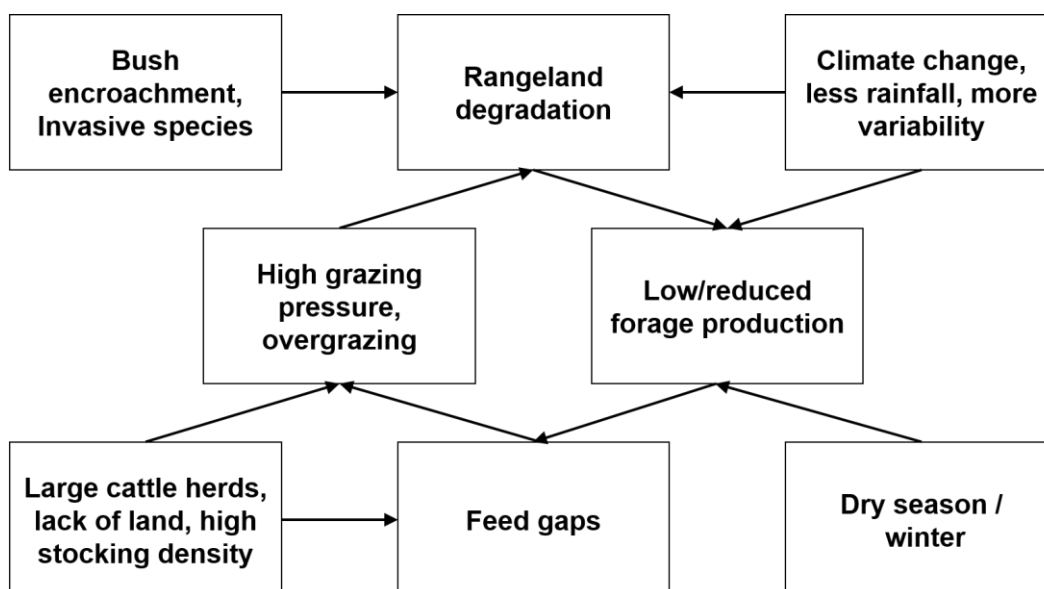


SALLnet: South African Limpopo Landscapes Network Report from the Final SALLnet Meeting – 21 June 2022: Recommendations to address feed gaps and rangeland degradation

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Closing feed gaps and maintaining rangeland health: Problems

- Most smallholder farmers in the Limpopo province experience feed gaps during winter, that is, forage demand by livestock exceeds forage supply.
- Communal rangelands in Limpopo are in poor state. Overgrazing, bush encroachment, soil erosion and drought further degrade the state.
- Feed gaps (forage demand exceeds forage supply) and rangeland degradation (reduction of forage provision and forage quality) amplify each other.



Simplified conceptual model indicating key issues for livestock farmers and major interactions between rangeland degradation and feed gaps. Note that not all interactions are shown, e.g., bush encroachment has several drivers including climate change and overgrazing.



Undernourished cow in Limpopo province during dry season. Picture: Sala Lamega

Potentials to mitigate rangeland degradation and feed gaps:

Farmers need access to knowledge:

- The interaction between farmers, extension service and science is important and generally well received.
- More training and knowledge transfer regarding cattle herd management and rangeland management is required.
- Participatory rangeland management plans to maintain rangeland health needed.
- The farmer-farmer interaction for knowledge transfer is of particular importance.
- Approach and include cattle keepers that do not identify themselves as farmers.

Livestock management and breeding:

- Sell cattle during feed gap times and rebuy young cattle when forage is available again. This reduces the risks of cattle mortality and financial losses to farmers.
- Active fertility management and artificial insemination. Calving times should be controlled and directed to times when enough forage is available.
- Focus on more suitable cattle breeds and on livestock breeding.

Closing feed gaps by acquiring additional forage sources:

- Cooperation between crop farmers and livestock farmers to better use of crop residues and cover crops as forage in mixed cropland-rangeland farming system.
- Storage of forage from summer for the winter season.
- Use of chopped bushes for cattle feed – also as a strategy against bush encroachment.

Improving rangeland health and promoting recovery:

- Temporal resting or rotational grazing to allow alternating areas of rangelands to recover in the beginning of the growth season.
- To avoid accumulation of dead biomass, resting also needs to be limited.
- Reduce bush encroachment.
- Establish small grazing exclosures throughout the rangeland – fenced or by branches of spiny bushes and trees – to ensure seed production of valuable grass species and promote recovery.

Forage supply optimized for farmers' needs and rangeland recovery:

- Farmers need adequate forage supply on time.
- In case of drought, forage supply should exceed the actual drought duration to allow post-drought recovery of rangeland.
- Extended forage supply could be connected to temporal grazing restrictions.