What will it take to recover Namibia’s degraded rangelands?

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The extent of rangeland degradation is well known: economic, ecological, social.
Management based on Principles of Sustainable Rangeland Mgt
(Nat. Rld Mgt Strategy: JPC, MAWF)

- Know the natural resource and indicator plants
- Ecologically sensible farm planning (camps)
- Effective recovery of per. grasses after grazing
- Adaptive forage management (stocking rates)
- Rangeland rehabilitation and restoration
- Drought provision
- Monitoring and recording
- Condition of top layer of soil
- Preserve underground water resources
Rangeland rehabilitation and restoration

- **Thinning** of invasive bush to natural density (2 x mm rain/yr)
- Utilize wood and create jobs!
- Explosion of grass production BUT ...
- ... inferior species composition
- Sow desirable perennial grasses in ("dung seed cakes")
- Protect sown-in grasses from grazing until established (combine with bush control, place cakes under canopies)
- Change veld management to avoid cyclical degeneration: ...
- Allow perennial grasses to **recover from grazing to seed-set**
- ... requires **rotational grazing** (preferably 3-6 camps/cattle herd)
- Additionally, whole growing season’s rest every 3-5 years
- Make increased use of browsers (e.g. Boer goats, Damara sheep)
- Occasional hot fire to prevent bush thickening (once/15-20 yrs)
Grazing management

- Know the indicator grasses, e.g. *Schmidtia pappophoroides*

- Allow indicator grasses to recover from previous grazing to seed-set before being grazed again

- Rehabilitate the veld at every opportunity: de-bush, sow desired grass species in

- Keep soil covered and in “seedbed” condition; prevent local aridification
Input from the expert audience:

“What **will** it take to rehabilitate Namibia’s rangelands?

- In commercial and communal areas?
- At macro level (e.g. policy framework, global climate change)?
- At micro level (e.g. ecological factors)?

*Thank you!*
SUGGESTIONS BY 13TH NRF, 28/10/09

Put the plug back in the bath – conserve wettest areas first

Avoid dogmas: Focus on outcomes, don’t prescribe methods. **Measure** outcomes.

Control of Bush encroachment: mechanical control: crude (-) vs local-impact (+)

  roll-down bush: requires follow-up

Move focus from plant to soil

Restoration is costly (money and time): to tap development funds requires operational policy (NRMPAS) – how can we expedite policy acceptance by Cabinet?

Make economic use of encroacher-wood; can pay for bush control

Too little R&D capacity in MAWF; Namibia. Research needed on causes of BE – how to prevent repeat BE

Sustainable harvesting of bush to produce bio-energy

Teach animals to eat more bush

BE control is species-specific: e.g. DCIN not light-inhibitor, facilitates grass growth under canopy, gets out-competed by grasses after + 20 yrs

Raise Awareness on sustainable rld mgt – it’s a new concept

Build capacity to apply sust. Rld mgt; certified training courses; accredited body (GSSA?); renewable certificates linked to being “allowed” to farm
Conservation of indigenous preferred grass species: establish a seed industry – new business opportunity

Ch. 3 of NRMPAS

Environmental history: matched, fixed-point photographs; early traveller’s/missionary/hunter’s reports

Interventions have to be socially acceptable; rld science is inter-disciplinary

Small-scale mgt of “independent” units looses landscape perspective; non-adaptive

Expand commercial-area conservancy concept from sharing hunting rights to managing rangelands at landscape level; “abuse” communal conservancies for rld mgt

Systems have to adapt to changing environment
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