

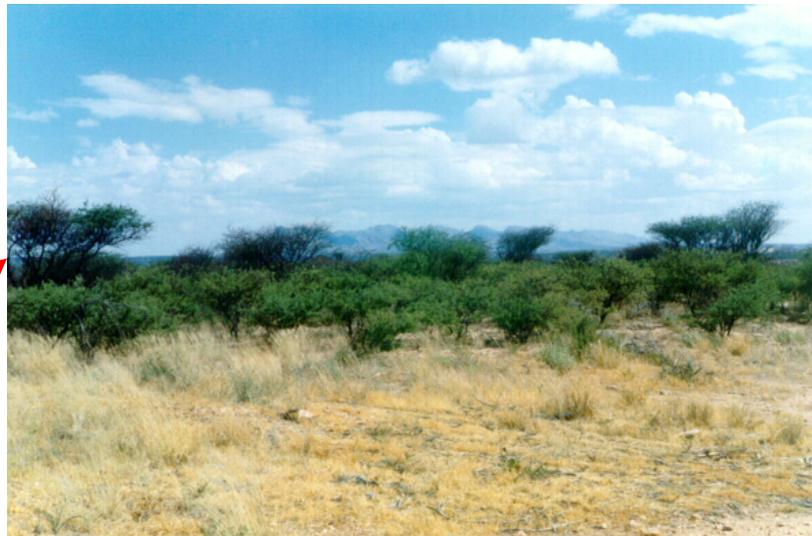
# What will it take to recover Namibia's degraded rangelands?

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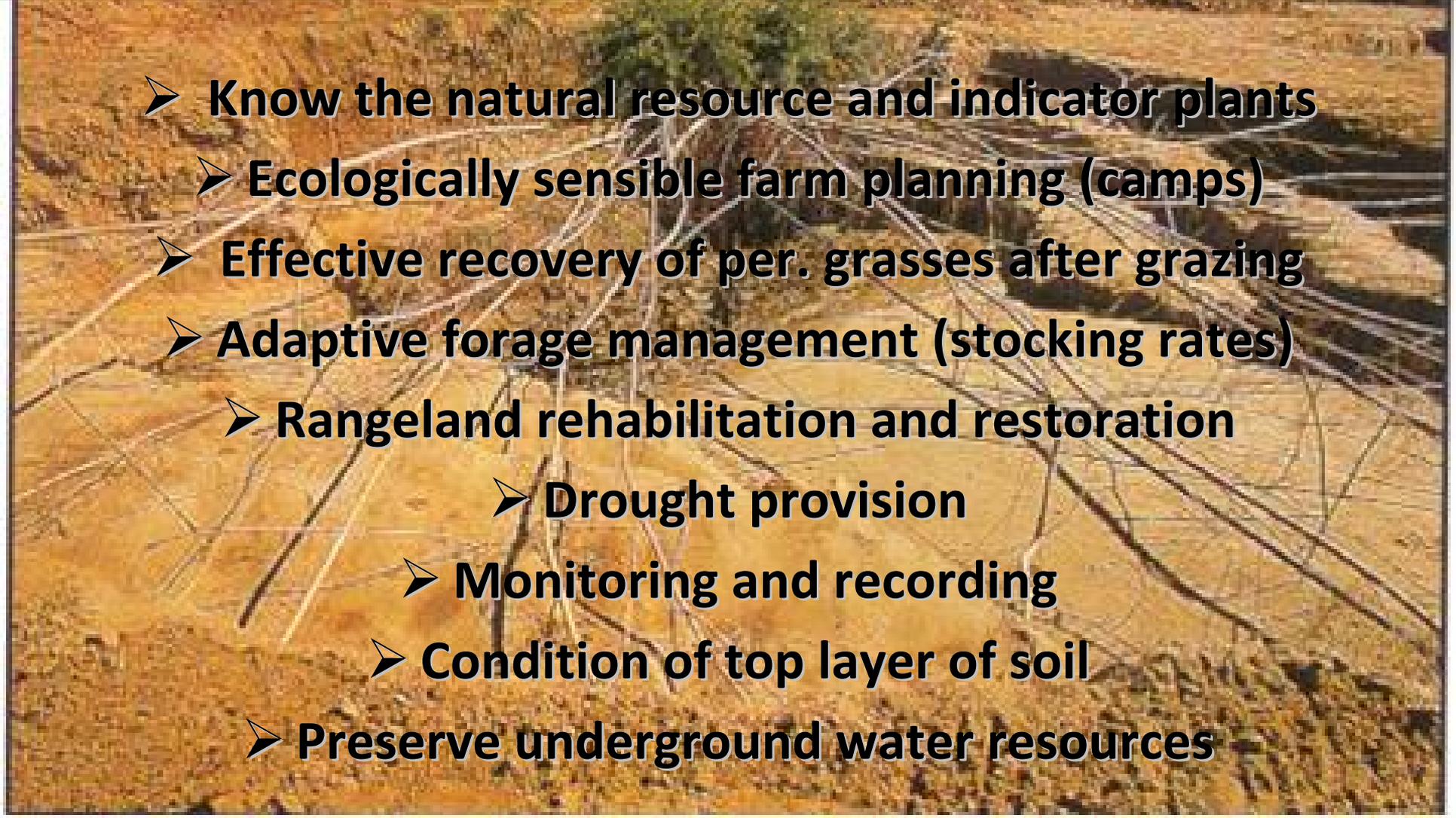


# The extent of rangeland degradation is well known:

economic,  
ecological,  
social



# Management based on Principles of Sustainable Rangeland Mgt (Nat. Rld Mgt Strategy: JPC, MAWF)

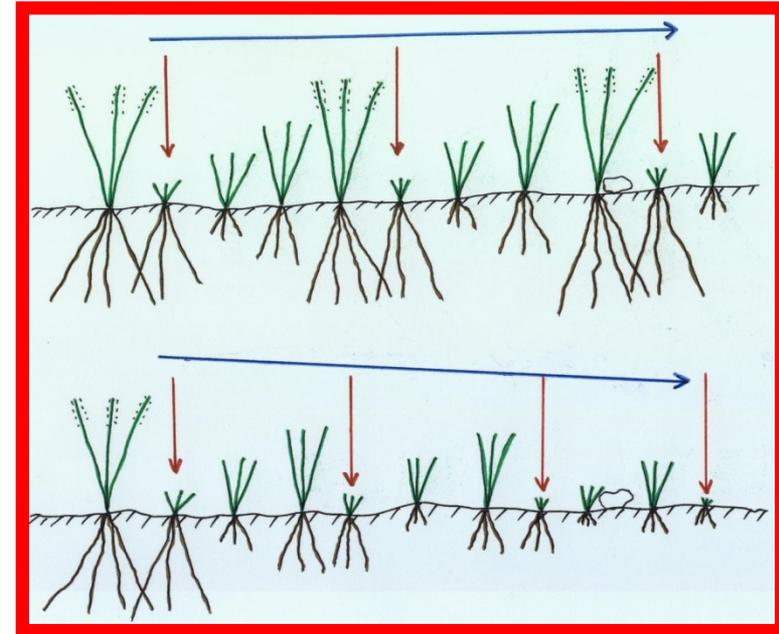
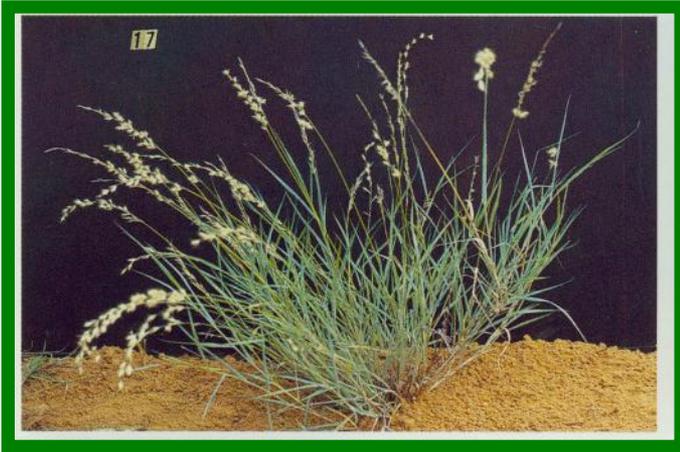
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- Know the natural resource and indicator plants
  - Ecologically sensible farm planning (camps)
  - Effective recovery of per. grasses after grazing
  - Adaptive forage management (stocking rates)
  - Rangeland rehabilitation and restoration
    - 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 13<sup>TH</sup> 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  $\pm$  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 loses 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