

Namibian Rangeland Forum

THE NATIONAL RANGELAND MANAGEMENT POLICY AND STRATEGY (NRMPAS)

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MAWF
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The rationale: Why the need for such a document?

- For many of you there is nothing new in what I am going to present.**
- To those of you for whom this is news, I hope it comes as a sufficient shock!**

In 1924

- The Drought Investigation Committee announced:
- "Soil erosion has commenced in South West Africa ...".

In 1987

- Dr Piet le Roux, former Director of Agriculture expressed his concern with regards to Namibia's rangeland resource as follows:
- *"The main element responsible for Namibia's rangelands is man's attitude towards it.*
- *The ability of the land to sustain animals are constantly overrated.*
- *A number of structural problems stand in the way of reclamation:*
 - *A. Bush encroachment*
 - *B. Denudation (loss of trees, grasses and shrubs)*
 - *C. Uneconomical farming units.*

- **All of this on a conference where the condition of Namibia's rangelands was already a serious concern and where an ambitious and well thought out strategy was formulated in an effort to address the problem.**
- **This strategy, unfortunately died a quick death after independence**

In 1997

- Dr Mary Sealy and Kathy Jacobsen lists the following indicators of desertification:
- Lowering of ground water tables
- Soil erosion
- Loss of woody vegetation
- Loss of grasses, shrubs
- Decrease in preferred species (think about the loss of species such as *E. lehmanniana* and *Astenatherum glaucum* over large parts of the Aranos/Koës Kalahari, and replacement by spp such as *Schmidtia kalahariensis*)
- Bush Encroachment

A large, black, multi-pointed starburst shape is centered on a solid blue background. Inside the starburst, the text "So where are we in 2009!?" is written in a bold, red, sans-serif font. The text is arranged in two lines: "So where are we in" on the top line and "2009!?" on the bottom line.

**So where are we in
2009!?**

Soil Erosion ?

- Ongoing work by Ben Strohbach of the NBRI indicates that only 17% of 7128 observed sites in Namibia did not show any signs of soil erosion.
- He points out that:.. *“Erosion, albeit only slight to moderate in degree, is happening in over 90 % of the country”*.



















10/04/2004



**Loss of vegetation
and decrease in
preferred spp**

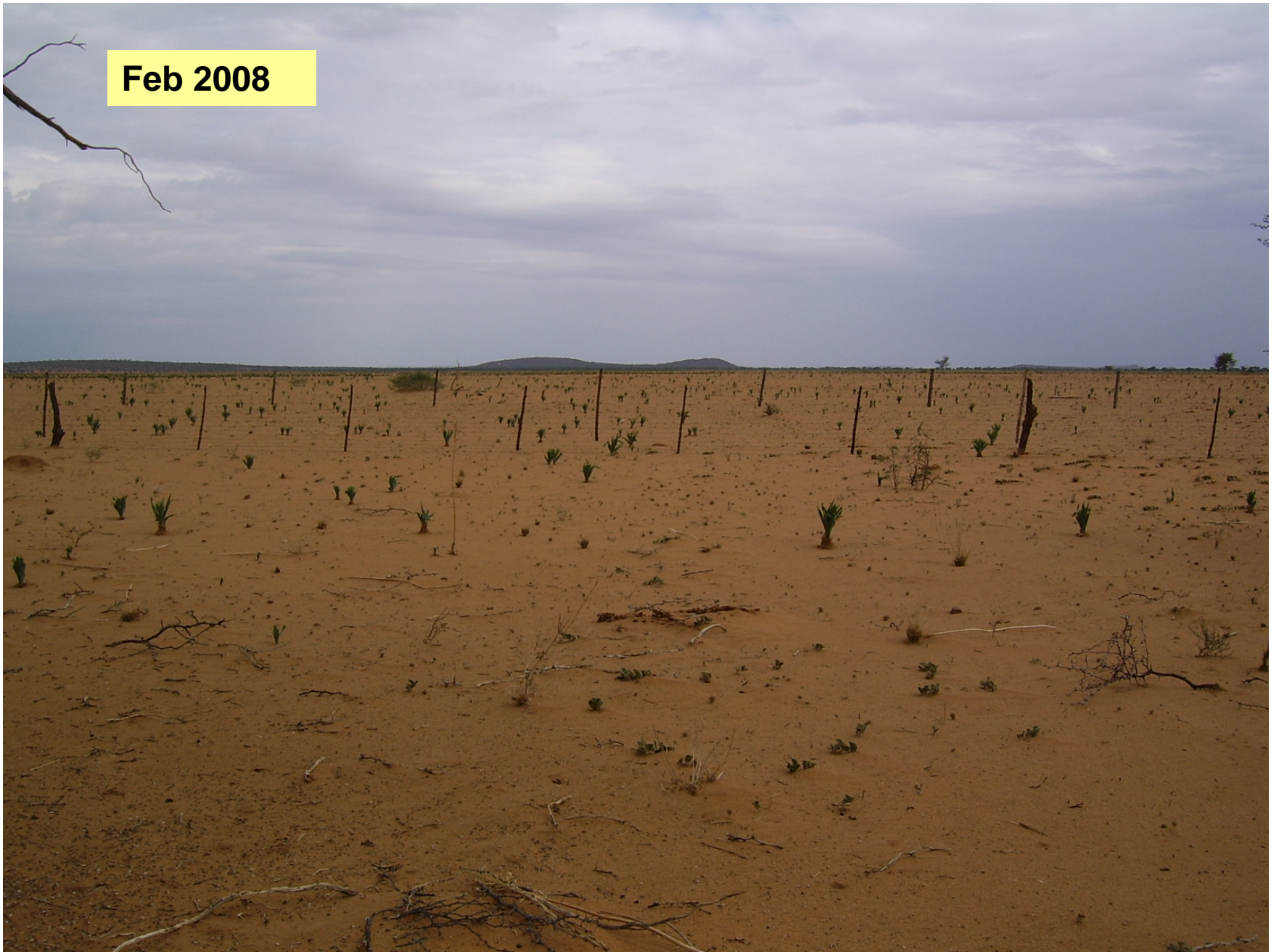
April 2006



April 2007



Feb 2008



April 2008

Pseudogaltonia, Oxygonum & Bulbostylus (a lot of the stuff!!)









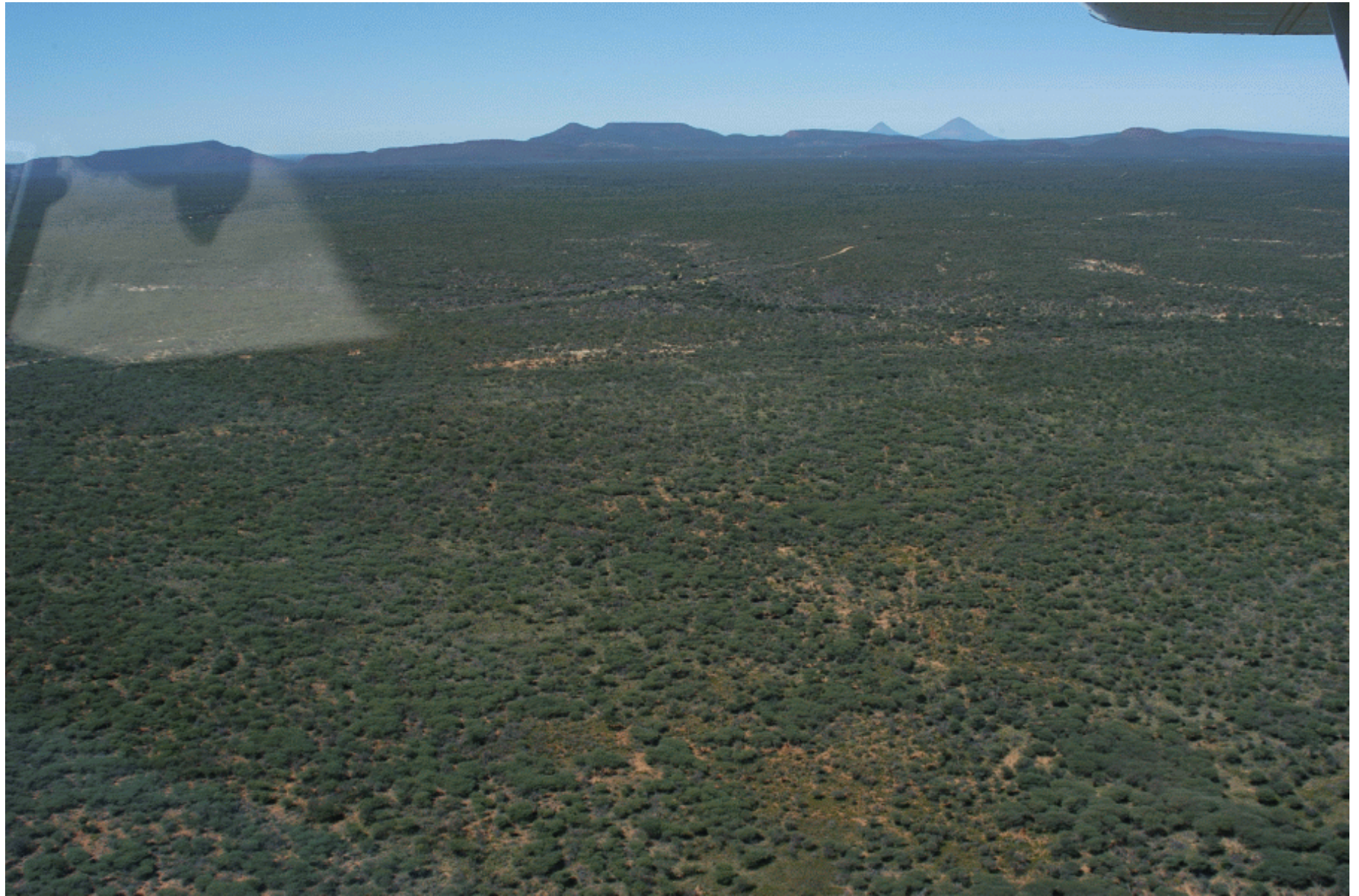
**BUSH
ENCROACHMENT**

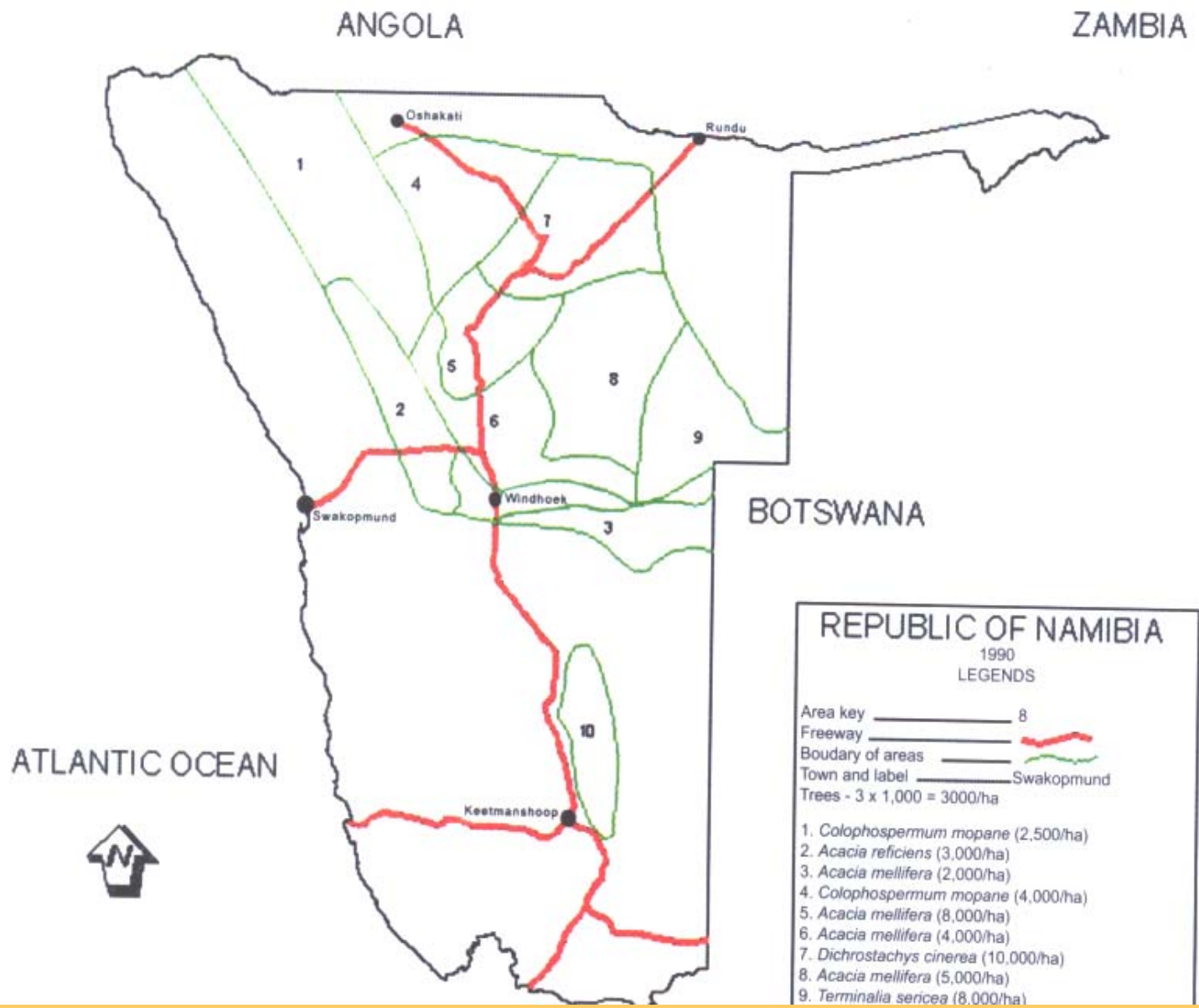












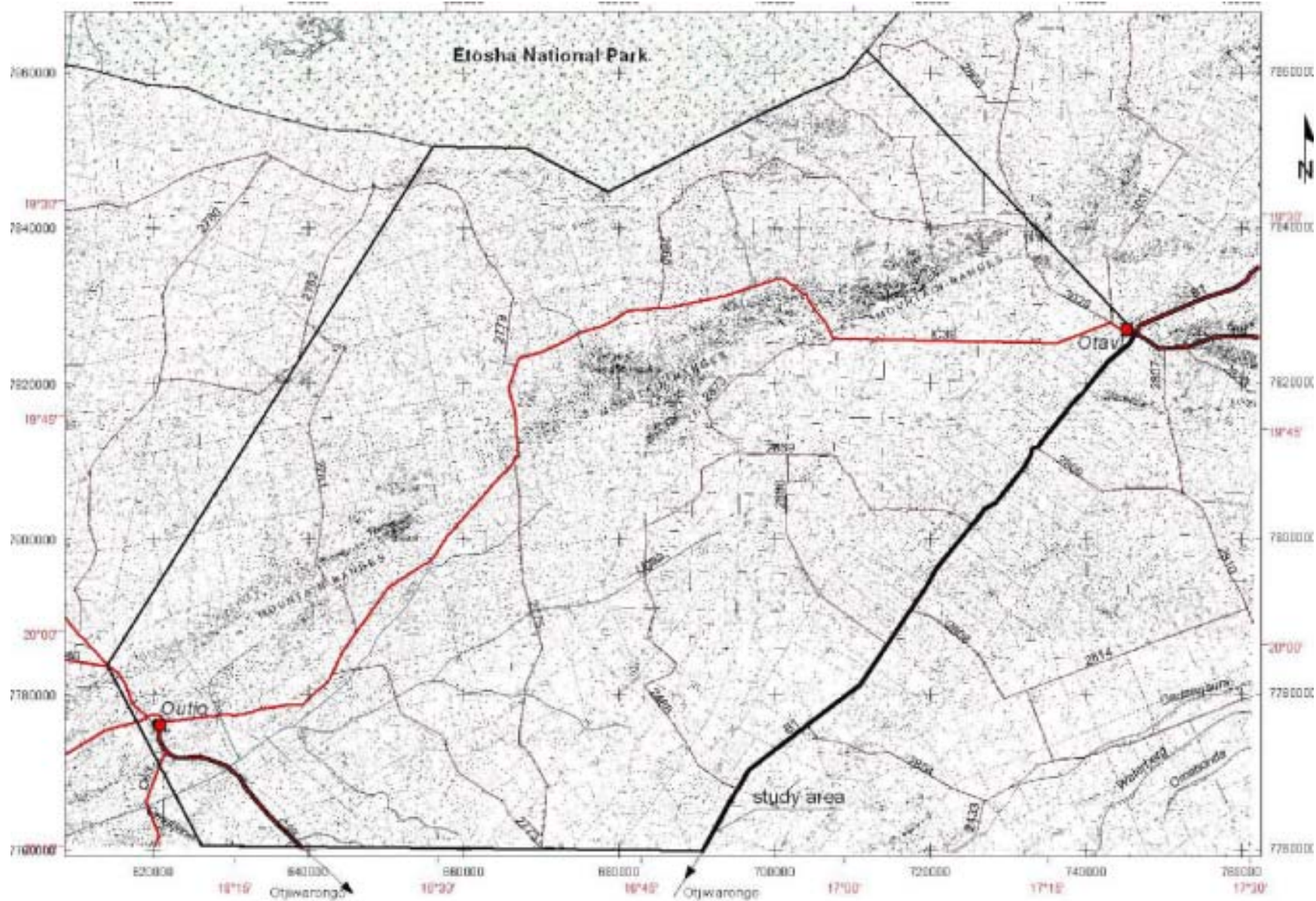
Surface area affected:

- More or less 26 000 000 ha from Rehoboth north
- More or less 2 000 000 ha in the south.

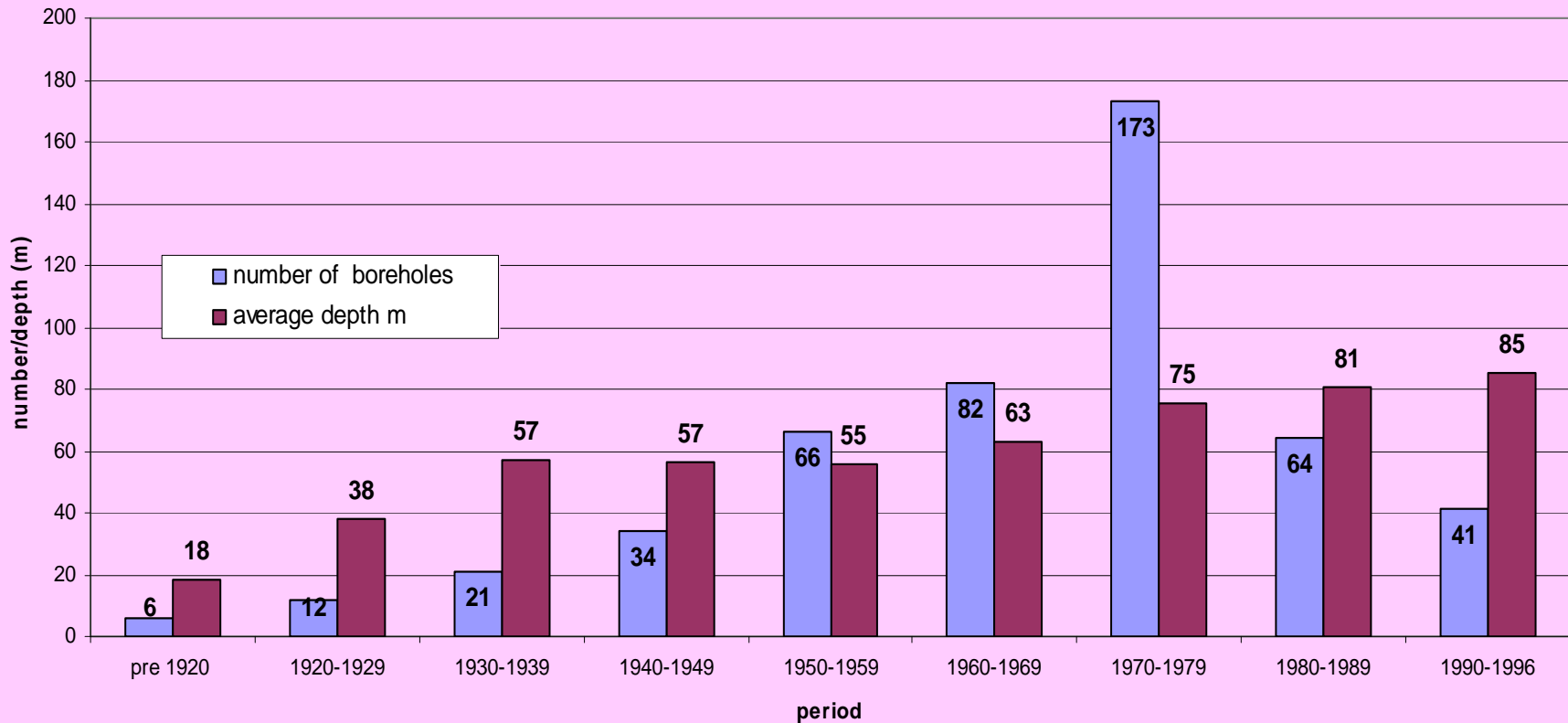
On the lowering of ground water tables.

- **Mr Frank Bockmühl – Consulting Geohydrologist currently doing work for the Ministry – The Platveld aquifer study**

Location: detail



Average depths of boreholes drilled



Only boreholes for which

1. **Reliable drill-dates have been found**
 2. **Reliable depth data was found have been used. (500 boreholes)**
- **This is not a statistic representing total boreholes drilled.**
 - **The tendencies reflected are considered representative.**

Conclusions

- Bush encroachment has a severe, if not catastrophic influence on recharge to groundwater
- Declining water levels are approaching dangerously low levels (before start of the 2006 season)
- In areas where de-bushing has taken place, groundwater is evidently recharging fast
- Bush control in the long term will result in the recovery of groundwater resources
- With water levels recovered to the state when fountains re-occur, groundwater will be an asset which can be utilized more reliably for food production, irrigation in general, industrial use, municipal supply and so forth.

In a country where about 55 % of the land receives less than 300 mm of rain per year (classified as arid), and some 40 % receives between 300 and 500 mm per year (classified as semi - arid)

The economic cost of desertification in the communal areas

- **Caroline Ashley in *“Namibia Environment (1997)”*:**
- ***“Long term land degradation could be costing families (in communal lands) around N\$ 80 million/year in lost income and increased expenditure”!***

The economic cost of desertification in the commercial areas?

- Nico de Klerk in *“Bush encroachment in Namibia”* (1999):
- *“It is generally accepted that the decline in carrying capacity of Namibia’s rangelands could be anything from 100 % or more, with a concomitant loss of income (at present prizes) of more than **N\$ 1.2 billion/yr** !*
- Eish !!

**This is rationale enough for
the development of a National
Rangeland Management
Policy and Strategy!!**

Goals of the NRMPAS.

- **In the long term: To contribute towards improving the livelihoods of people in Namibia, especially those that are directly or indirectly dependent on rangeland and rangeland resources.**
- **In the short term: To enable resource users to manage their rangeland resources in such a way that:**
- **Animal production/ha is improved, and vulnerability of users to a highly variable resource base is decreased.**
- **Vulnerability of users to a highly variable resource base is reduced**
- **Awareness of the current situation is created**
- **Biodiversity is improved and maintained**

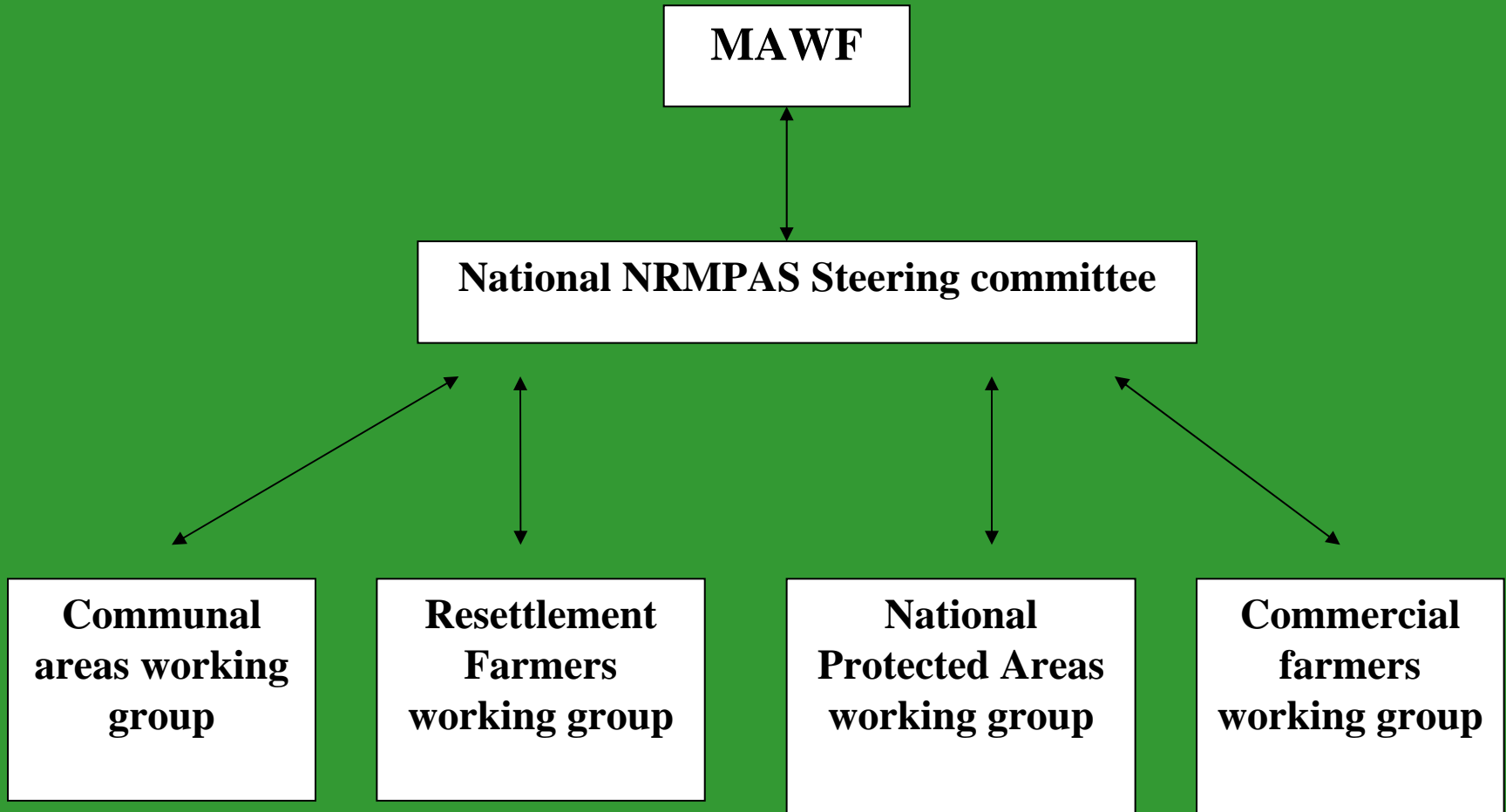
The objectives of NRMPAS to achieve the short term goals are:

- To restore and maintain:**
- The nutrient cycle by promoting diversity of plants amongst others**
- The water cycle by promoting a good soil cover amongst others**
- Rangeland biodiversity**
- To timely adjust animal numbers to available fodder resources**
- To make timely provision for disaster drought situations**

The principles of good rangeland management and how it can be applied

- Know your resource base (your plants, your soil)
- Manage for effective rest (rest for a purpose, managing the length of the resting/recovery period)
- Manage for effective utilization of plants (so as to maintain vigour through management of stocking density, length of grazing period)
- Enhancing soil condition (manage for maximum basal cover and so for maximum protection of the soil)
- Address bush encroachment (biological, mechanical and chemical control)
- Drought planning (e.g. make provision for spare camps, consider planted pastures in areas with rainfall above 500 mm per annum, building up fodder banks etc)
- Monitoring the resource base (keeping records of veld, veld management and water)

Proposed Institutional Framework for the implementation of the NRMPAS



Hopefully this will put us back on track to this

