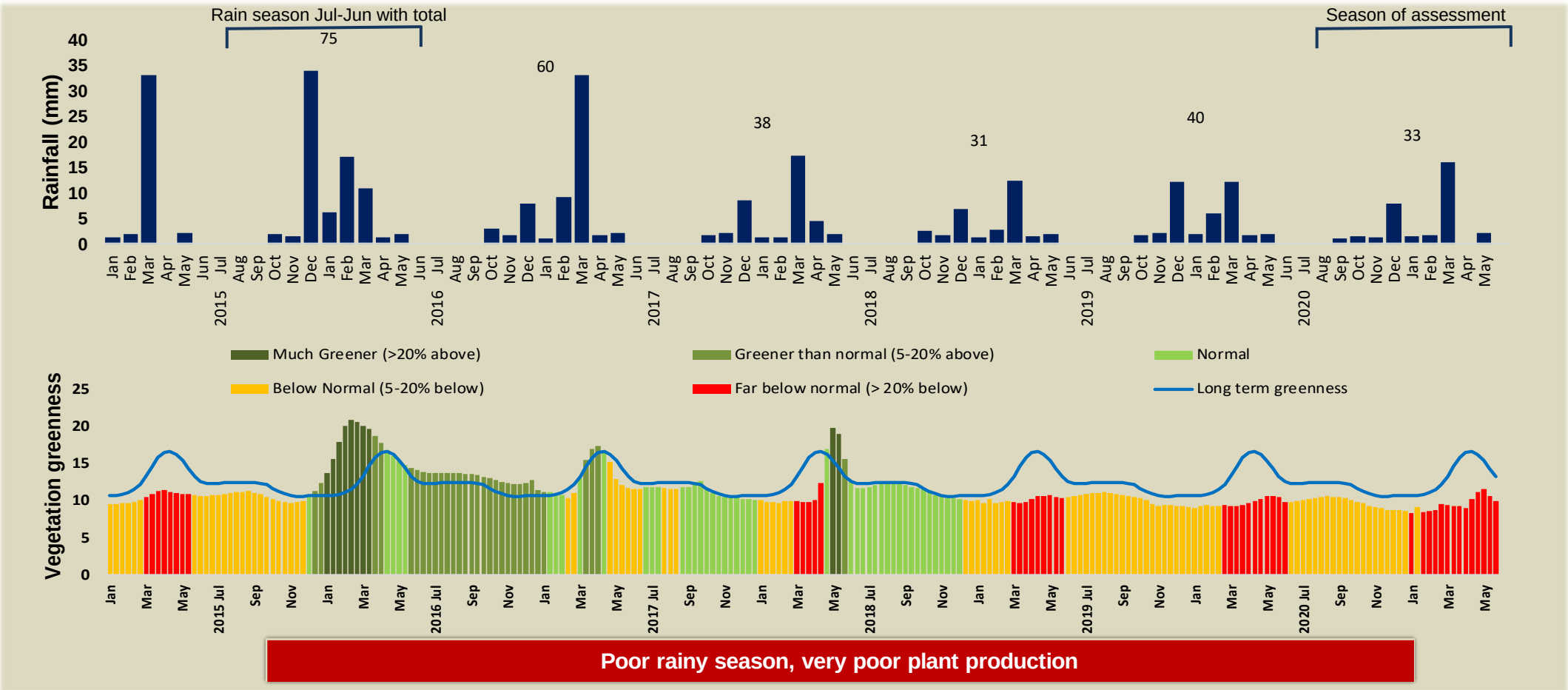
2021

Marienfluss
Climate and Vegetation Report

D1

Adapting in response to the current environmental conditions …

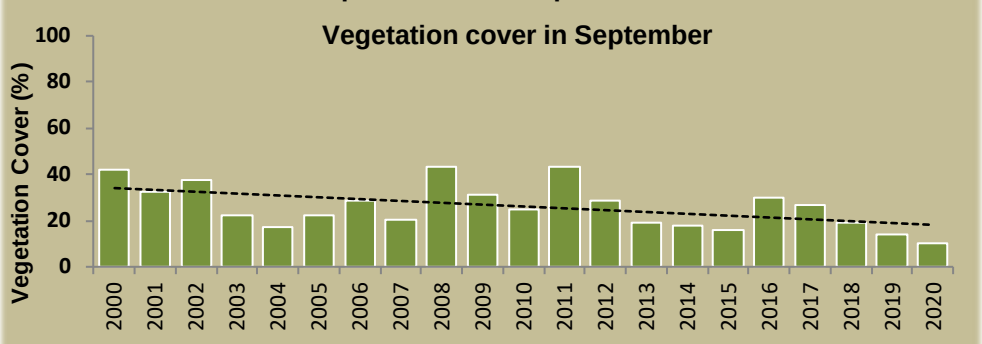
Seasonal trends in rainfall and vegetation (2020 / 2021 Season)



Poor rainy season, very poor plant production

Vegetation cover trend (2000 - 2020)

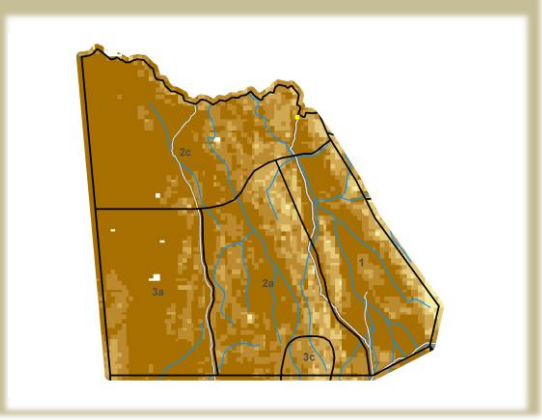
High vegetation cover is good because more rainwater is prevented from running off, causing less erosion. Also the soil is shaded leading to a decrease in soil temperature and evaporation.



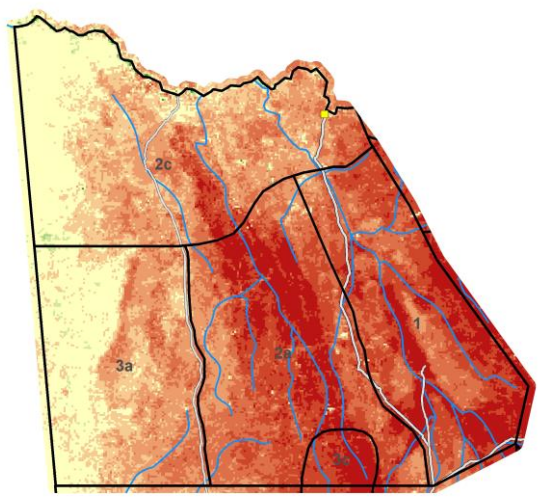
Plant cover is decreasing - Why?

Vegetation cover : 2020

- Good vegetation cover
- Much bare ground



Vegetation productivity (February to April) 2021



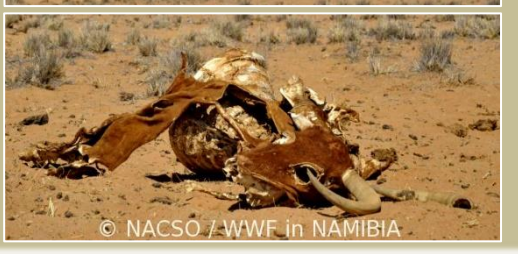
Growing season

Difference from average

- Much poorer
- Same as average
- Much better
- Roads
- Rivers
- Management zones

Zones

1) Settlement & Cropping Area
2a) Multiple Use: Livestock Priority
2b) Multiple Use: Hunting Priority
2c) Multiple Use: Tourism Priority
2d) Multiple Use: Mining Priority
3a) Exclusive Wildlife: All Utilisation
3b) Exclusive Wildlife: Trophy Hunting
3c) Exclusive Wildlife: Tourism
3d) Exclusive Wildlife: No Disturbance
4) Forest



Fire management

Burns between 2000 and 2020 | **When and where it burnt in 2020**

No fire monitoring

Times burned

- 1 - 2
- 3 - 5
- 6 - 9
- 10 - 13
- >13

Prevent late burns

Burned area

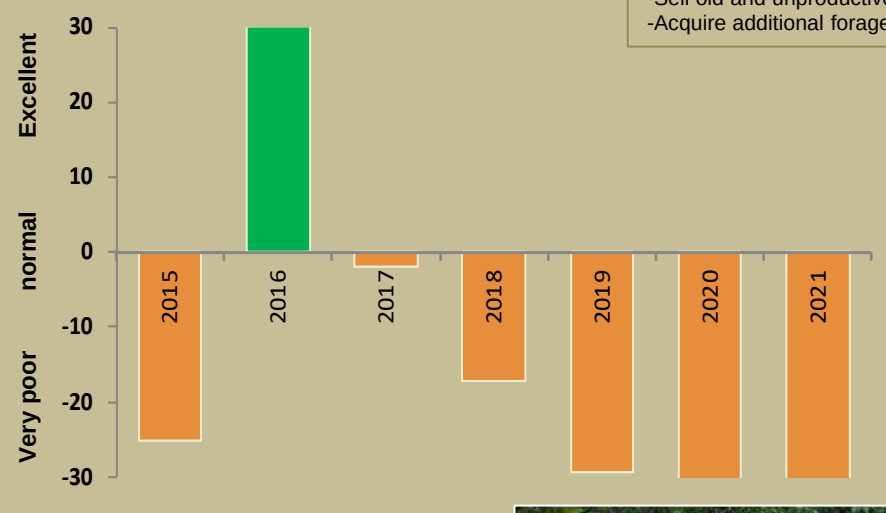
- April - July
- Aug - December

Forage availability

During the growing season enough forage must be produced to sustain livestock and game until the next rainy season

Management Options

-Do nothing
-Buy more animals
-Move animals to better grazing
-Sell old and unproductive animals
-Acquire additional forage



Far below normal forage availability - Enough for livestock and game?

Climate and vegetation patterns assist in our understanding of the status of wildlife and livestock in the conservancy for the effective management of these resources.