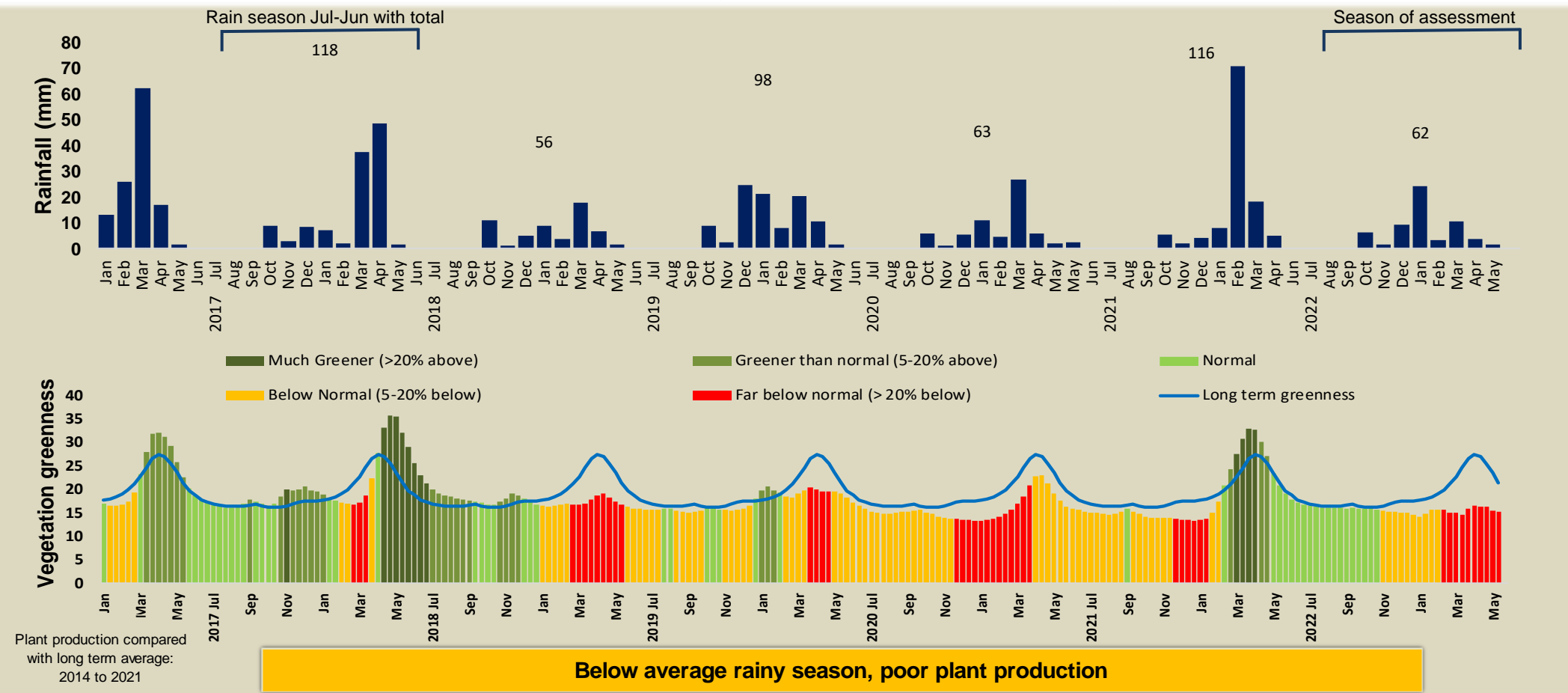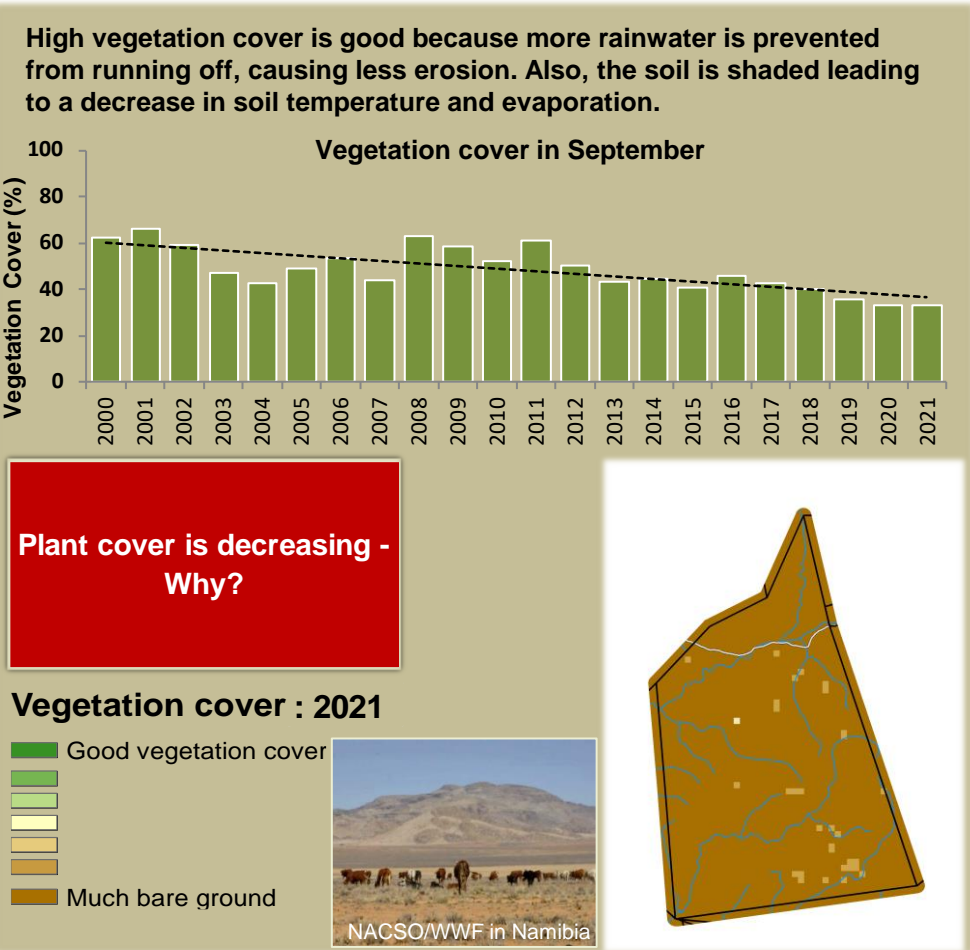# Otjikongo
Climate and Vegetation Report

D1

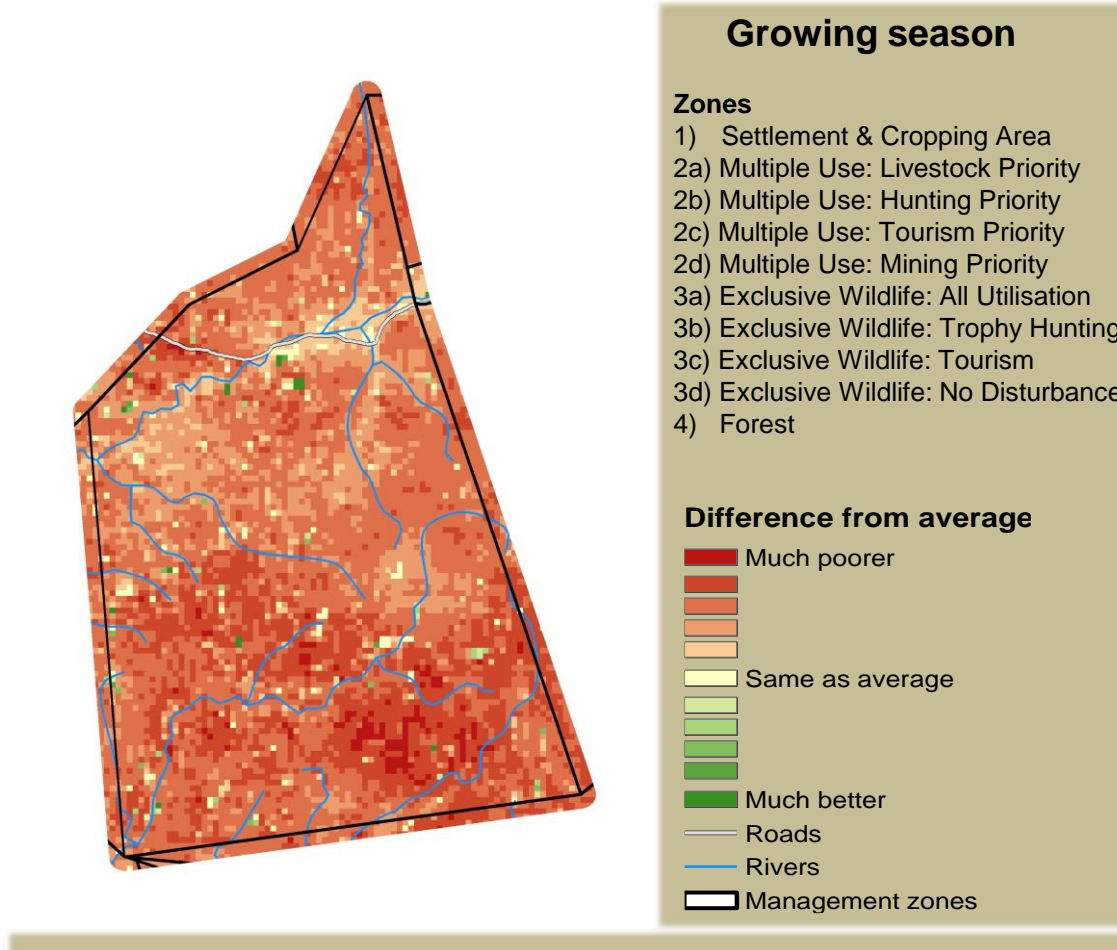## Adapting in response to the current environmental conditions …

Seasonal trends in rainfall and vegetation (2022 / 2023 Season)

Rain season Jul-Jun with total
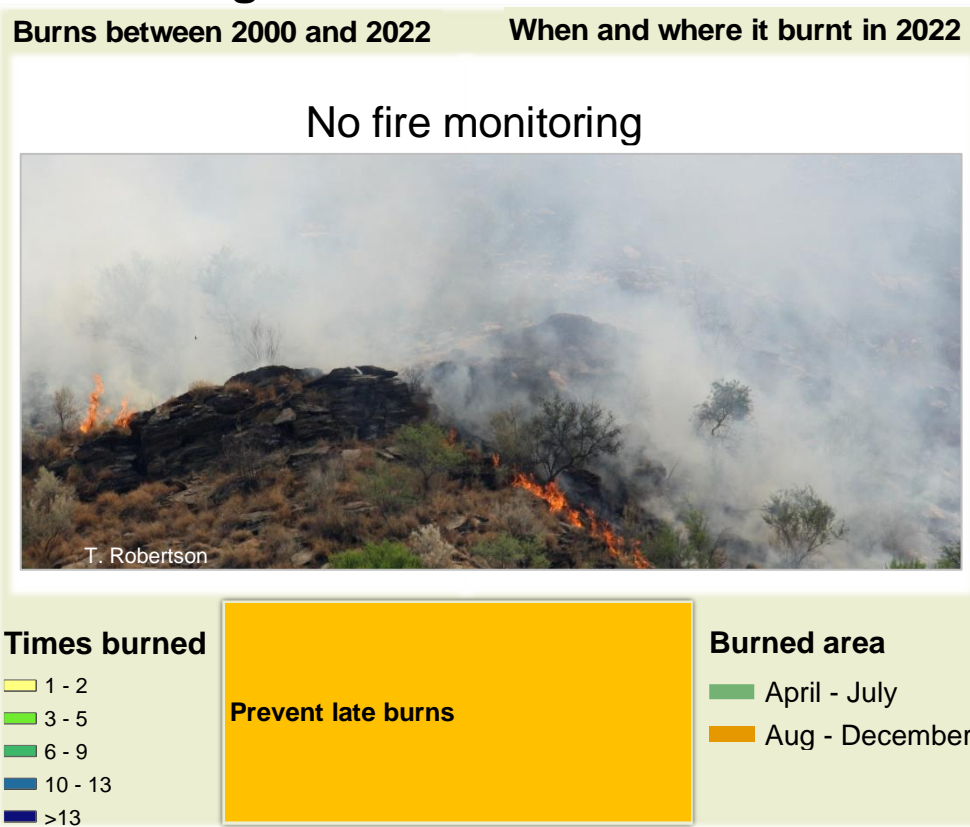
118
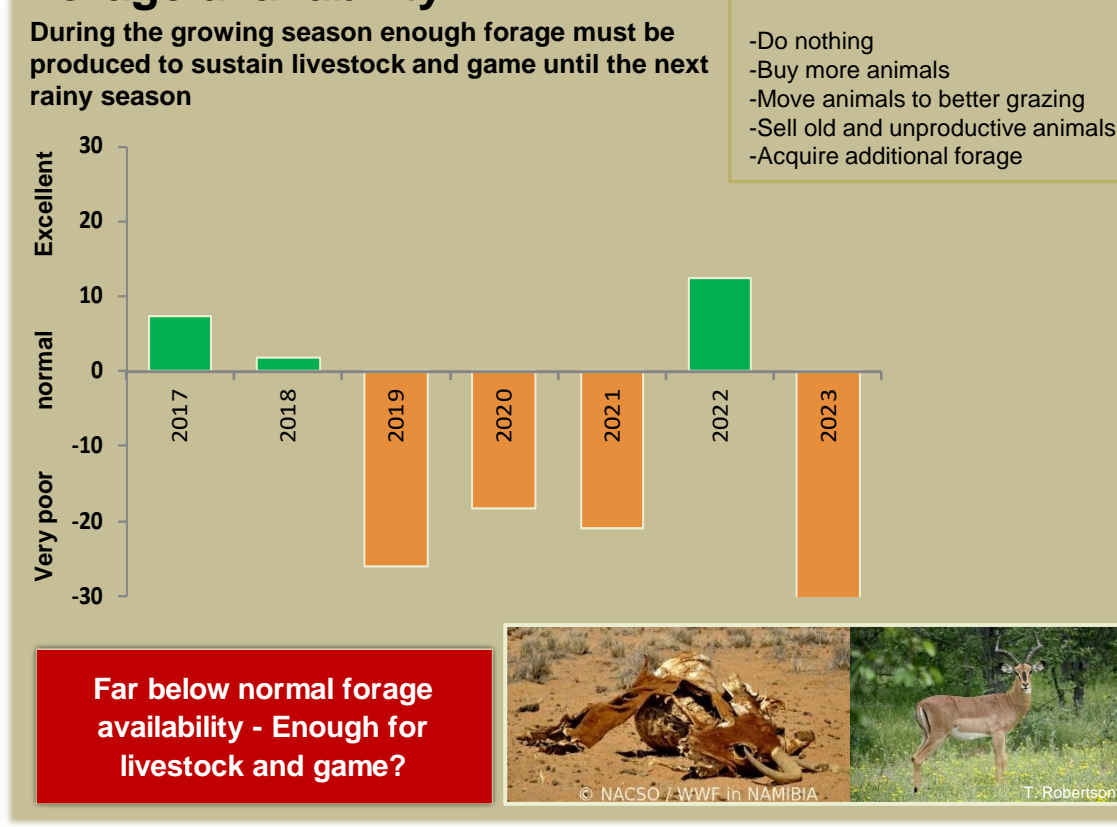
98

116

56

63

62

Season of assessment

Rainfall (mm): 80 70 60 50 40 30 20 10 0

Months: Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec (2017 – 2022)

Vegetation greenness

- Much Greener (>20% above)
- Greener than normal (5-20% above)
- Normal
- Below Normal (5-20% below)
- Far below normal (> 20% below)
- Long term greenness

Vegetation greenness scale: 40 35 30 25 20 15 10 5 0

Plant production compared with long term average: 2014 to 2021

Below average rainy season, poor plant production

Vegetation cover trend (2000 - 2021)

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.

Vegetation cover in September

Vegetation Cover (%): 100 80 60 40 20 0

Years: 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Plant cover is decreasing - Why?

Vegetation cover : 2021

- Good vegetation cover
- Much bare ground

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Vegetation productivity (February to April) 2023

Growing season

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

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

Fire management

Burns between 2000 and 2022　　**When and where it burnt in 2022**

No fire monitoring

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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

Forage scale: Excellent 30 20 10 normal 0 -10 -20 Very poor -30

Years: 2017 2018 2019 2020 2021 2022 2023

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

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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.