

# FACT SHEET

## 2018/2019 Drought in Southern Africa

January 2020

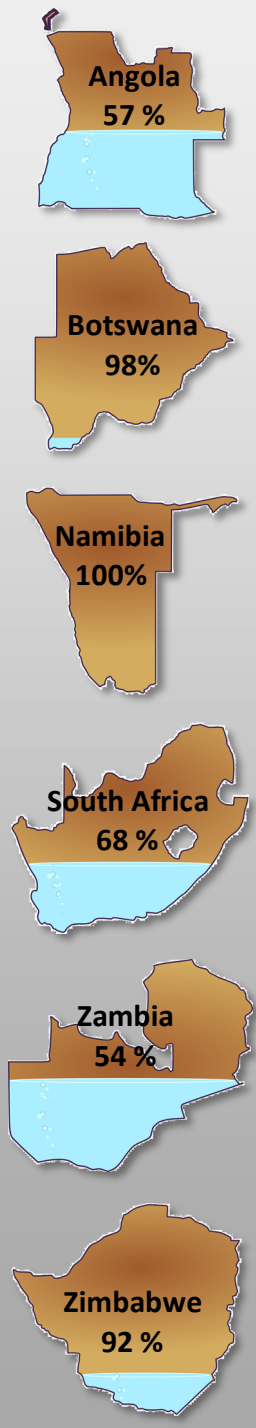


In July 2019, the SADC Climate Service Centre issued a seasonal drought advisory recommending that its member states be on high alert as the drought continues to ravage the southern African region (SADC 2018). This fact sheet summarises the 2018/2019 rainy season and highlights the seriousness of this drought event that has been plaguing most of southern Africa since October 2018, when an El Niño event impacted the start of the rainy season and consequently the water supply and the agricultural sector, with dire effects on food and water security in the region (FAO 2018). Due to climate change, droughts are projected to become more frequent and intense in the future of southern Africa (IPCC 2019).

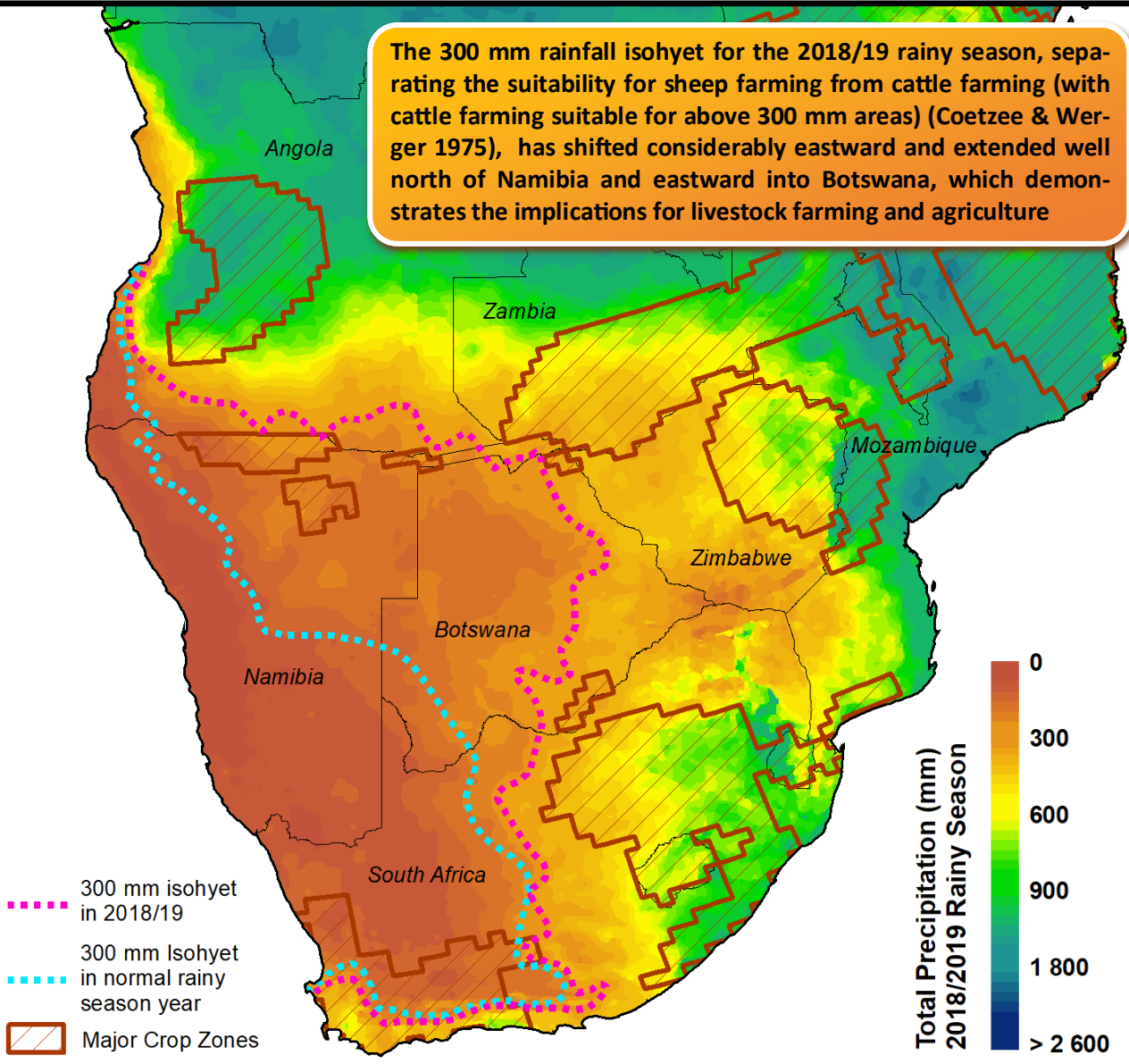
The current drought was declared a level 2 Red-Class event (drought with very severe or life-threatening impacts to people for which international humanitarian aid will be needed) by the Global Disaster Alert and Coordination System (GDACS 2019)

### WATER SCARCITY

% of land surface with below normal rain for 2018/19



Total seasonal precipitation for southern Africa for 2018/19 rainy season (Sep 2018 to Aug 2019)



Data Source for Drought Fact Sheet maps, graphs and figures: Precipitation variables and drought indicators were derived from CHC CHIRPS 2.0 Dekadal Precipitation Data (Funk et al. 2015); 300 mm Isohyets were derived from the 38 year and 2018/19 CHIRPS 2.0 record; Major Crop Zones were derived from FEWS-NET crop areas, US Agriculture Crop Zones and national sources

- A record **45 million** Southern Africans are said to be food insecure in January 2020 (WFP 2020)
- Affected countries: Angola, Botswana, Democratic Republic of Congo, Eswatini, Lesotho, Malawi, Mozambique, Namibia, South Africa, United Republic of Tanzania, Zambia, Zimbabwe
- Funding gap of US\$ 284 million to avoid a humanitarian disaster (WFP 2020)
- Hydropower: Kariba Hydropower utility cut output, affecting some **17 million** people in southern Africa with daily power outages (BusinessDay 2019), whilst Gove Dam's Hydropower supply was reduced to half of its normal power capacity, affecting some 2 million people in Huambo, Kuito and Caala (ENDE 2020)

### The Severity of the 2018/19 Drought

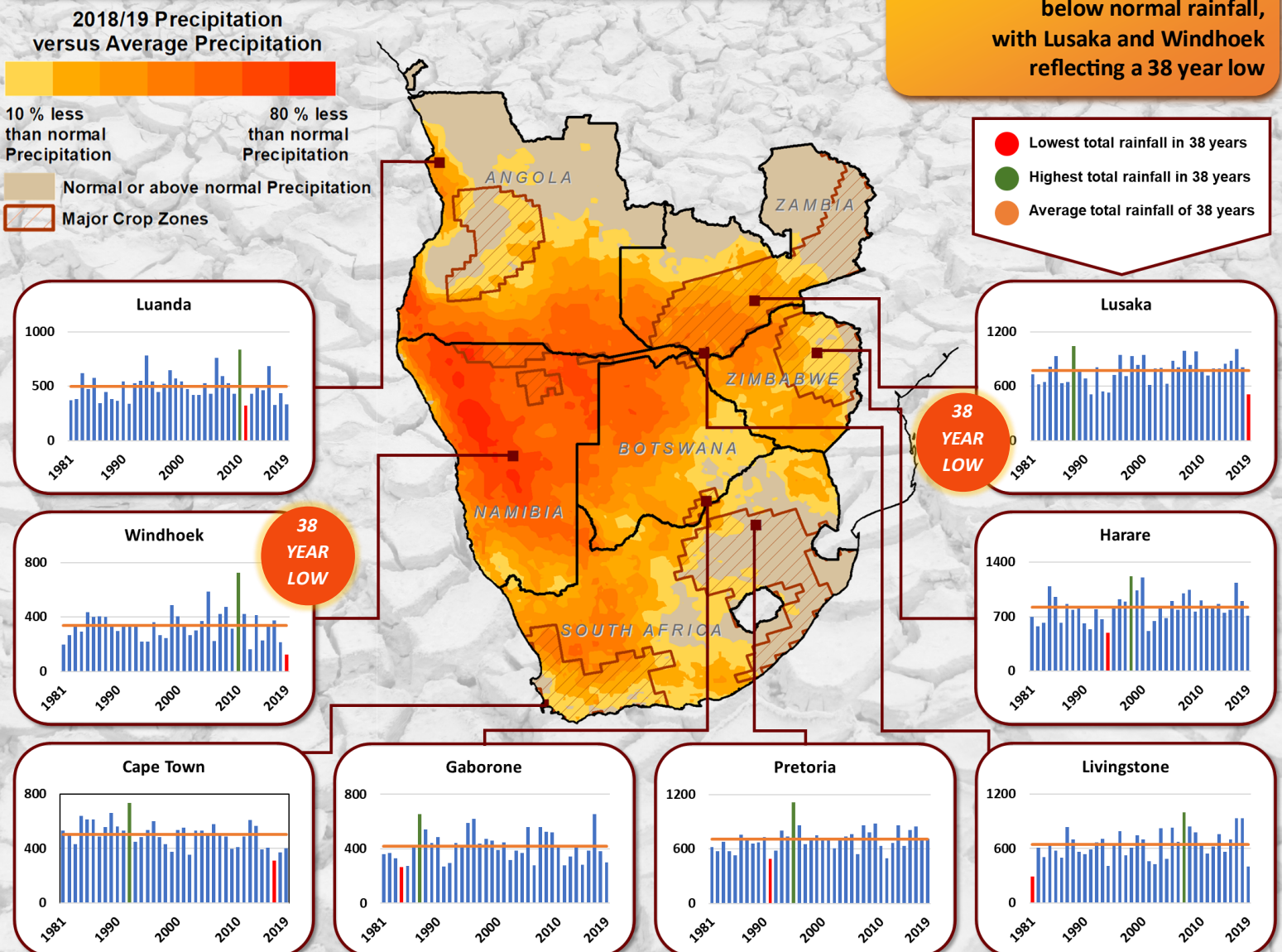
The map of the 2018/2019 rainy season demonstrates that large parts of southern Africa have been affected with considerably lower seasonal rainfalls, than are normally expected, with Namibia, Botswana and Zimbabwe being most severely affected. The drought influences different sectors, in particular the urban area water supply, the energy sector and the agricultural sector, hence water and food security.

#### Water shortages affecting urban areas

In May 2019, the president of Namibia declared a state of emergency and the City of Windhoek, the capital of Namibia, declared a water crisis, coupled with strict water restrictions, as dam levels of the main supply dams north and north-west of the city, were running critically low (City of Windhoek 2019). Similarly the Gaborone Dam, that supplies Botswana's capital Gaborone with water, reached historical lows (Southern Times 2019).

In the region's cities, such as Windhoek and Lusaka, that have suffered the driest seasons in almost four decades, stringent water saving measures were introduced, affecting the drainage and water supply infrastructure, building projects, industry, green areas, gardens, water quality, and quality of urban life.

**Total precipitation for southern Africa for the 2018/19 rainy season expressed as a percentage (%) of the 38 year average precipitation**



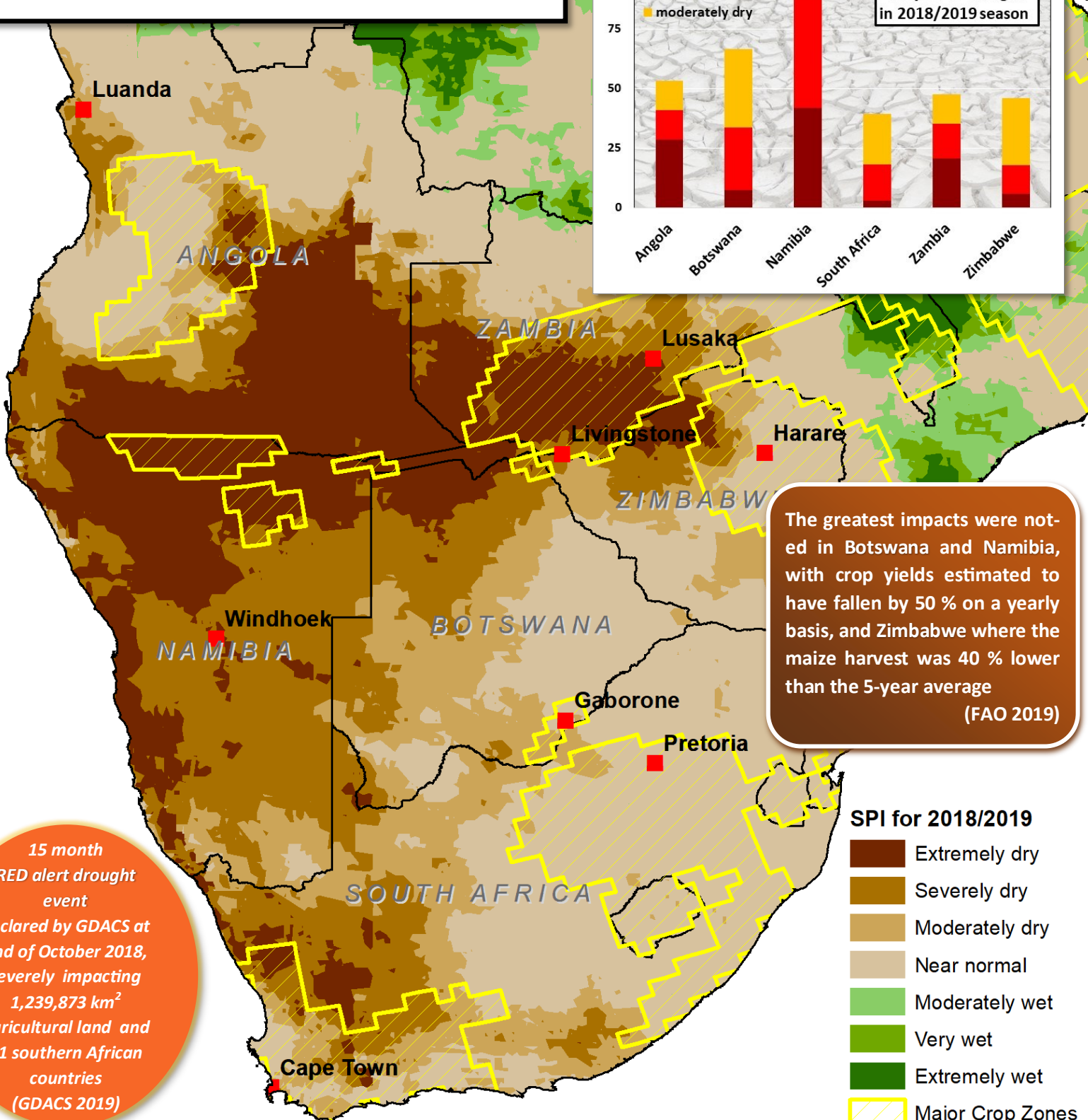
**Effects of drought on agriculture**

According to the SPI (Standardised Precipitation Index), as a measure for drought (WMO 2012), most of the south-western area of the region was severely to extremely dry (see graph and map) and consequently suffered a meteorological drought during the 2018/2019 rainy season. In particular, southern Angola, south-western Zambia, most of Namibia, north-western Botswana and most of South Africa's Cape were severely or extremely dry. In particular the major

crop zones of southern Africa were affected (Crop Monitor for Early Warning 2019).

By January 2020, Namibian agricultural inputs and the Household Food Security Situation report estimated the number of livestock deaths at around 90,000 by September 2019 (Namibian 2020) and in Botswana, since the onset of the drought, the cattle population has declined from 3.1 to 2 million by 2018, also with high wildlife mortality observed (Southern Times 2019, VOANEWS 2019).

*The SPI for southern Africa for the 2018/2019 rainy season*



## Recurrent and longer drought periods

The southern African region has been plagued by consistent long-term droughts that have extended over more than one season, that are becoming more frequent and that have severely affected regional food and water security.

### Number of drought years in past 10 years

#### Angola – “emergency program to fight drought”

Reports state 28,867 affected families, 301 of them are malnourished, death of 10,982 head of cattle and the destruction of 52,119 agricultural fields (ReliefWeb 2019)

#### Zambia – “causing starvation, a power crisis and threatening the Victoria Falls”

2.3 Million people on brink of starvation, 81 % of electricity generation of Kariba affected, Victoria falls at lowest flow since 1995 (LifeGate 2019)

#### Namibia “worst drought in 90 years”

State of Emergency declared in May 2019, with estimated live-stock deaths around 88,000, cereal production reduced by up to 80 % and 500,000 people faced food and water shortages (ClimateSignals. 2019, FAO 2019, New Era 2019, Namibian 2019)

#### Zimbabwe – “worst drought in 40 years”

“Phase 3” food crisis according to FEWSNET, aggravated by economic crisis and climate change (Bloomberg 2019)

#### Botswana – “wasteland of harvests, livestock”

Two thirds of crops failed, 40,000 cattle deaths in Ngamiland, high elephant mortality (VOANEWS 2019)

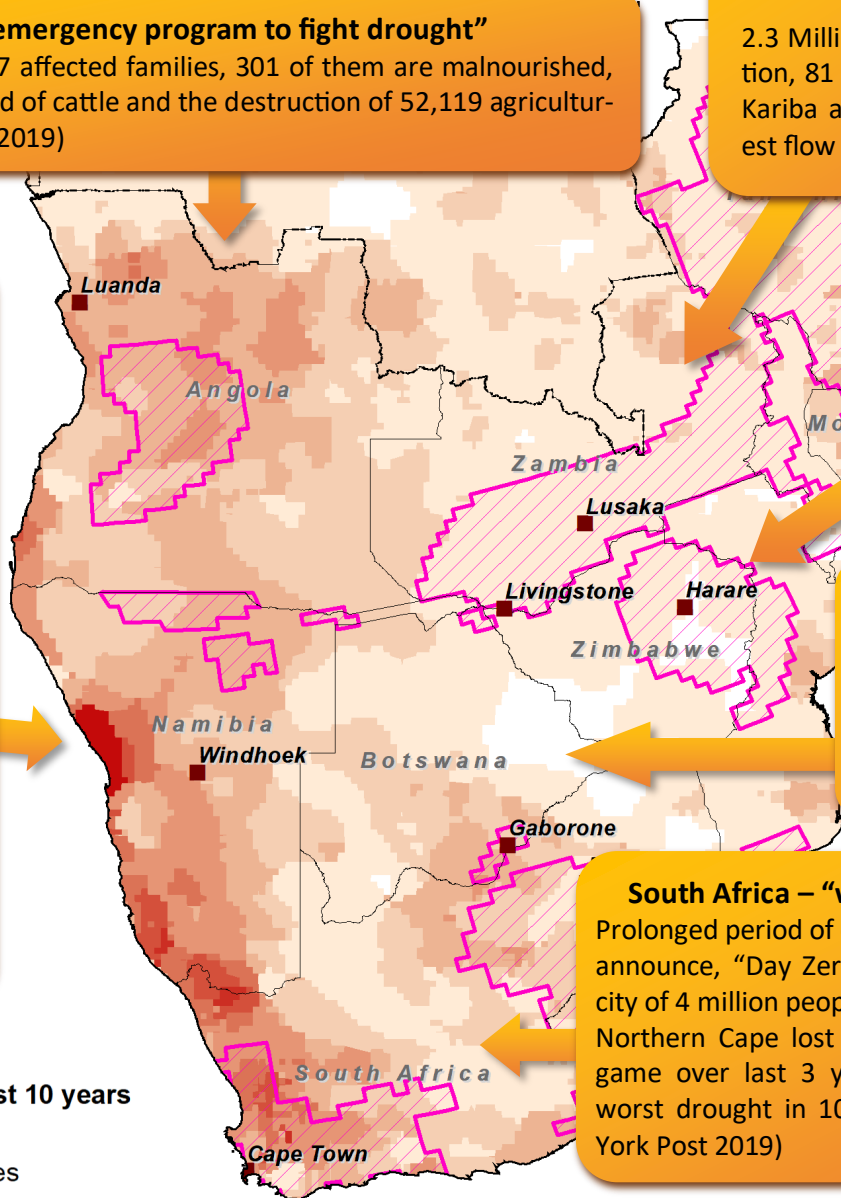
#### South Africa – “worst historic drought”

Prolonged period of drought leads authorities to announce, “Day Zero”, by when Cape Town, a city of 4 million people would run out of water, Northern Cape lost more than two-thirds of its game over last 3 years, South Karoo struggles worst drought in 100 years (CityLab 2019, New York Post 2019)

### Nr of dry years in last 10 years

1 2 3 4 5 6 7 8

Major Crop Zones



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