



**Presentation  
to  
Portfolio Committee on Agriculture, Land Reform  
and Rural Development  
on**

**Drought and its impact on the agricultural Sector  
05 November 2019**

**By Maisela RJ  
HOD: LIMPOPO DEPARTMENT OF AGRICULTURE AND RURAL  
DEVELOPMENT**



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***The heartland of Southern Africa-Development is about people!***

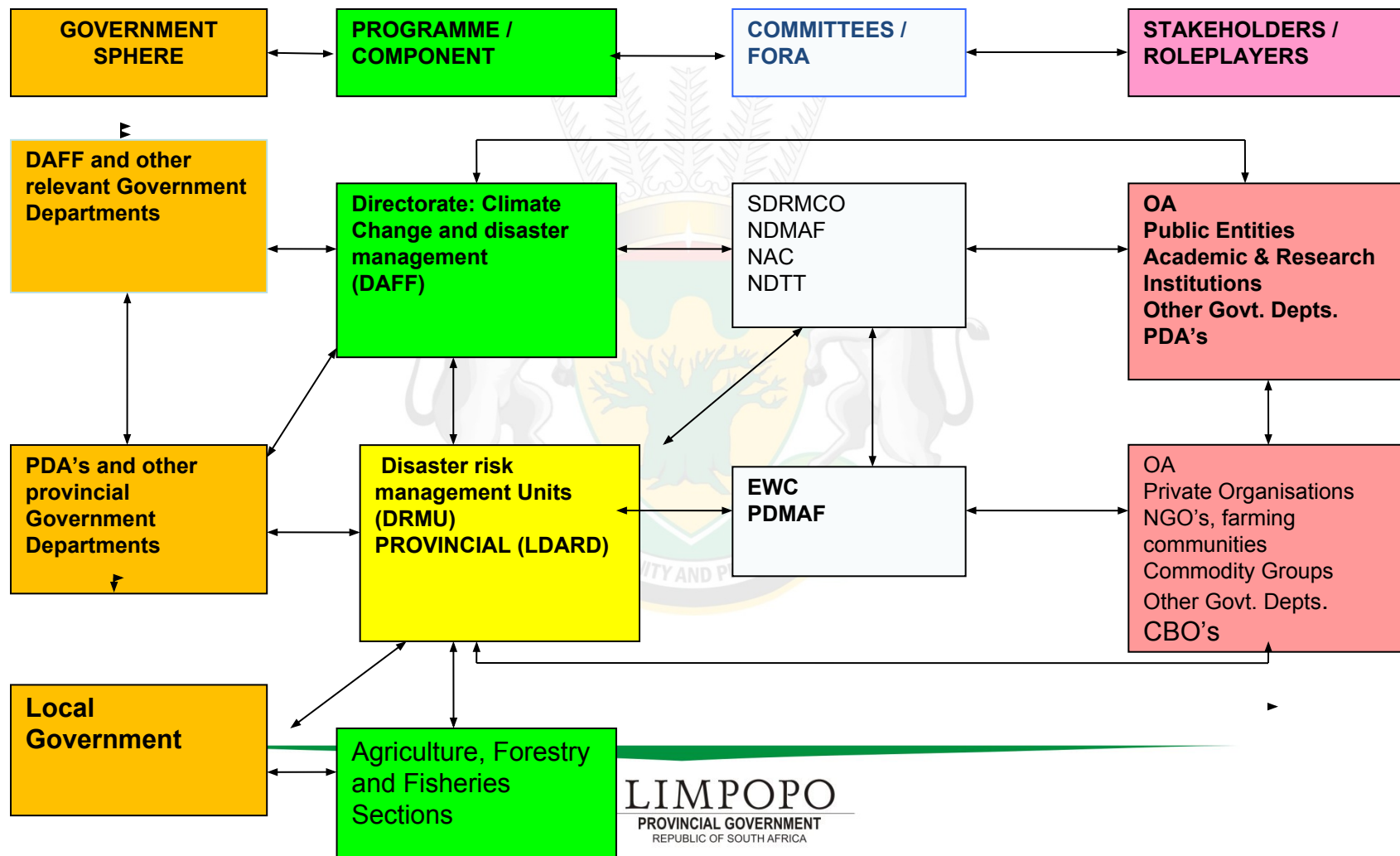
# CONTENT

- Background information: Limpopo Drought conditions
- Integrated institutional capacity in managing agricultural disasters
- The impact of drought on the agriculture sector in Limpopo Province
- LDARD drought contingency plan- drought management strategies
- Livestock feed distribution points
- Vegetation condition index map
- CASP Disaster Drought Projects
- LandCare Drought Projects
- Climate Forecast for upcoming seasons
- Rainfall prediction map- NDJ & DJF
- Temperature prediction map- NDJ

# BACKGROUND INFORMATION: LIMPOPO DROUGHT CONDITIONS

- Due to climate change Limpopo province has observed a significant trend of increased exposure to disasters, in particular to droughts, floods, veldfires, pest and diseases especially over the last two years.
- Vulnerable smallholder farming communities were significantly affected
- In response LDARD has recently developed the Provincial Agricultural Disaster Risk Management Plan.
- The plan is aimed at achieving a proactive approach in the management of agricultural disasters at Limpopo Province.

# LDARD INTEGRATED INSTITUTIONAL CAPACITY IN MANAGING AGRICULTURAL DISASTERS



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# THE IMPACT OF DROUGHT ON AGRICULTURE AT LIMPOPO PROVINCE

- Livestock are experiencing lack of grazing resulting in very poor livestock within the Province
- Livestock water sources such as the dam levels are very low at 49.9% this year as compared to 63.7% this time last year, while the earthdams are drying out.
- Crop farmers are also severely affected, dryland farmers are waiting for good rains to start ploughing.



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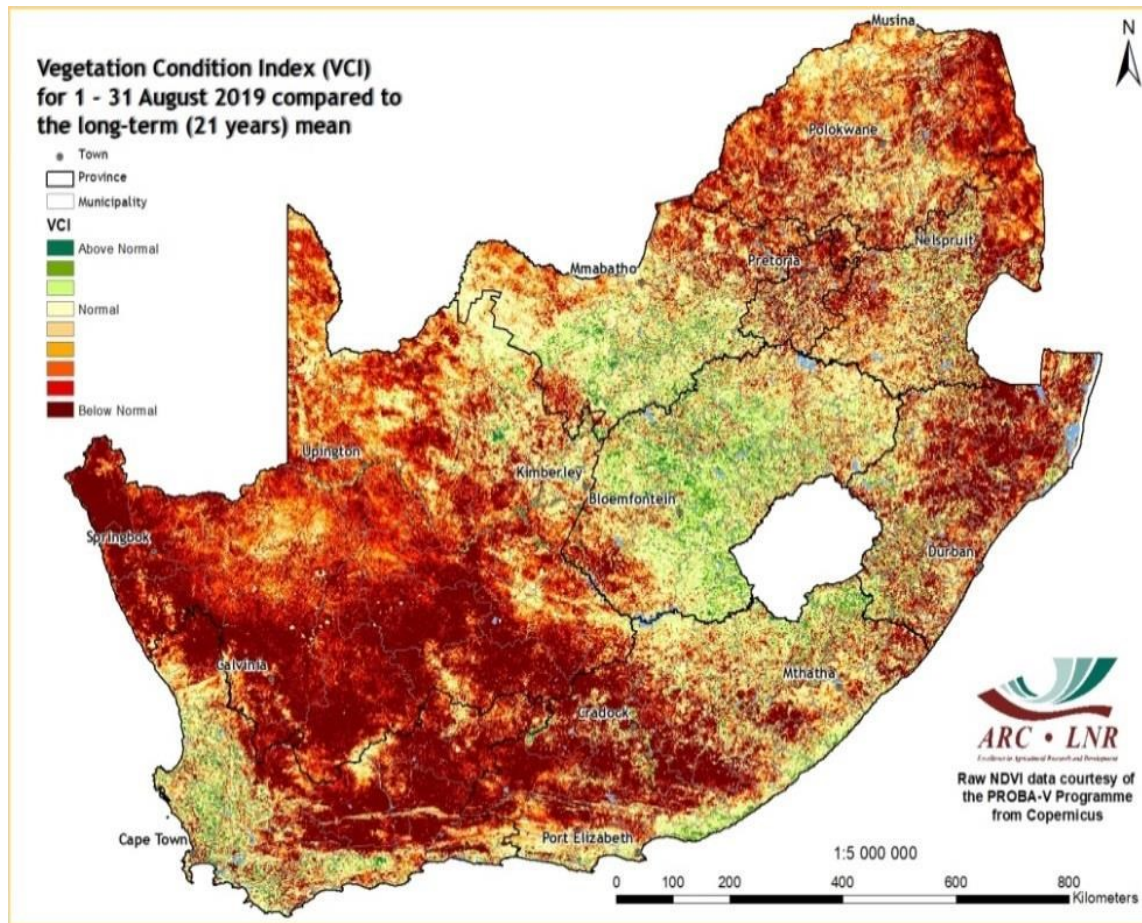
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# Limpopo Province State of Dam levels as at 28 October 2019

Dam	River	Photo	Indicators	FSC	This Week %	Last Week %	Last Year %
Albasini Dam	Luvuvhu River	<a href="#">Photo</a>	<a href="#">Indicators</a>	28.2	64.5	65.0	76.0
Ebenezer Dam	Groot-Letaba River	<a href="#">Photo</a>	<a href="#">Indicators</a>	69.2	36.0	37.8	73.8
Flag Boshielo Dam	Olifants River	<a href="#">Photo</a>	<a href="#">Indicators</a>	185.2	52.4	53.1	80.4
Glen Alpine Dam	Mogalakwena River	<a href="#">Photo</a>	<a href="#">Indicators</a>	18.9	3.4	3.5	8.2
Houtrivier Dam	Hout River	<a href="#">Photo</a>	<a href="#">Indicators</a>	6.7	35.9	36.8	34.4
Luphephe Dam	Luphephe River	<a href="#">Photo</a>	<a href="#">Indicators</a>	14.0	35.7	37.2	69.9
Middel-Letaba Dam	Middel-Letaba River	<a href="#">Photo</a>	<a href="#">Indicators</a>	172.0	3.2	3.3	9.1
Modjadji Dam	Molototsi River	<a href="#">Photo</a>	<a href="#">Indicators</a>	7.2	5.5	6.0	8.6
Nzhelele Dam	Nzhelele River	<a href="#">Photo</a>	<a href="#">Indicators</a>	51.3	53.0	54.3	63.6
Warmbad Dam	Buffelspruit River	<a href="#">Photo</a>	<a href="#">Indicators</a>	0.6	#26.8	#26.8	62.5
Total				1522.3	49.9	50.5	63.7



# Vegetation condition index Map



The VCI map for shows that the province is experiencing severe drought conditions which is reflected in the poor vegetation condition in all the districts of Mopani, Vhembe Sekhukhune Waterberg and Capricorn

# DISASTER DROUGHT FUNDS ALLOCATED

FY	Allocated Amount R000'	Funding Source	Project Type	No Projects Completed	Amount Spent R000'	Total Amount Spent R000'	Balance R000'
2018/19	10 000	CASP	Livestock water infrastructure	13	4 707	10 000	
			Livestock feed	5	5 293		
2019/20	09 000	CASP	Livestock water infrastructure	11	5 900	5 900	3 100



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# DISASTER DROUGHT RELIEF FUNDING AND BENEFICIERIES DISTRIBUTION

Expenditure per district	Vhembe R000'	Waterberg R000'	Mopani R000'	Capricorn R000'	Sekhukhune R000'	TOTAL
Expenditure per district	1 213	962	888	1 045	1 184	5 292

## Livestock Feed Beneficiaries per District

	Vhembe	Waterberg	Mopani	Capricorn	Sekhukhune	TOTAL
No. of beneficiaries	1212	839	858	320	1269	4498



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# LANDCARE DROUGHT FUNDS ALLOCATED USAGE

FY	Allocated Amount R000'	Funding Source	Project Type	No Projects Completed	Amount Spent R000'	Total Amount Spent R000'
2018/19	35 200	LandCare	Conservation Agriculture	6	11 900	9 819
			Veld Management	7	12 800	14 277
			Soil Conservation	2	9 500	9 938
			JuniorCare	1	1000	1 166
<b>TOTAL</b>				<b>16</b>	<b>35 200</b>	<b>35 200</b>



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# PROFILES AND ACHIEVEMENT OF DROUGHT PROJECTS 2018/19

Project Name	Activity	Municipality	Budget R000'	Achievement
Elakhama	Drilling and equipping of borehole, water tank, irrigation system, CA implements package, seeds	Maruleng	1 500	Bush clearing: 35ha EPWP workers: 78
Bana Ba Makgeana CA	Drilling and equipping of borehole, irrigation system, CA implements package, seeds	Makhuduthamaga	1 500	Bush clearing: 68ha EPWP workers: 61 CA implements
Precedential Agri Holdings Ltd	Debushing, drilling and equipping of borehole, irrigation system	Greater Giyani	2 200	Bush clearing: 9ha EPWP workers: 130 Fence erection: 10km
Lafata Agricultural Project	Tunnel systems, fertilizing tanks, water tank, irrigation pipes, debushing, firebelts, CA implements, animal handling facility, fodder and nursery	Mogalakwena	3 000	Bush clearing: 8ha Fence erection: 7,5km EPWP workers: 70
M&J Farming	Permaculture, water tanks, irrigation system, fencing and nursery	Makhuduthamaga	1 400	Fence erection: 5km EPWP workers: 30 Shade net material



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# OVERVIEW OF DROUGHT PROJECTS 2018/19

Project Name	Activity	Municipality	Budget R000'	Achievement
Uitkyk Farming	Drilling and equipping of borehole, fencing, Alien plant clearing, firebelts, charcoal production equipment	Elias Motsoaledi	2 300	Alien Invasive Plants (AIP) clearing: 51ha EPWP workers: 19 AIP tools Fencing material purchased
Kgatelopele Farming Project	Drilling and equipping of borehole, irrigation system, nursery and fencing	Lepelle Nkumpi	1 800	Bush clearing 10ha Fence erection: 3km EPWP workers: 50
Monte Christo-Tiberius Mphello	AIP tools, bush encroachment, debushing fire breaks, fodder, pasture management, soil fertility, fencing and desilting	Mogalakwena	1 500	Bush clearing: 250ha Fence erection: 25km EPWP workers: 348



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# OVERVIEW OF DROUGHT PROJECTS 2018/19

Project Name	Activity	Municipality	Budget R000'	Achievement
Nhlanganelo LandCare	Fencing, firebreaks and desilting of dams	Greater Giyani	1 500	Bush encroachment: 20 Fence erection: 3,5km EPWP workers: 140
Dimani CA	Drilling and equipping of boreholes, irrigation pipes, installation of electricity, CA implements package, seeds	Thulamela	2 700	Borehole: drill & equip; generator, CA implements Shade net and irrigation material Bush encroachment: 30ha EPWP workers: 160 AIP tools
Khomanani LandCare project	Fire breaks , gabion structures, planting vetiver, drilling and refurbishing of boreholes, installation of electricity, stock-watering system, construction of waterways or contours	Collins Chabane	1 500	Borehole: drill & equip; generator; drinking trough Fence erection: 5km Gabion structures: 29 Firebelt: 5km planted 15000 vetiver grass seedlings Fodder; AIP clearing: 160ha EPWP workers: 64



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# OVERVIEW OF DROUGHT PROJECTS 2018/19

Project Name	Activity	Municipality	Budget R000'	Achievement
Mamaila AIP project	Control of AIP, bush encroachment, fire breaks, fencing in grazing camps	Greater Letaba	1 800	AIP tools; AIP clearing: 415ha; Firebelt: 5,5km Fence erection: 5km Fodder; EPWP workers: 404
Provincial	Establish 1 farmer field schools in each district, youth camp, training out-of-school youth		1 000	Shade net and irrigation material for 2 schools PPE and chemicals
Molemole AIP	AIP, bush encroachment, fire breaks, fodder and pasture management, soil fertility and fencing	Molemolle	2 000	AIP clearing: 293,3ha Fence erection: 10km Fodder; EPWP workers: 247
Ga Kgatla Soil Conservation	Soil conservation, land restoration, gabions structures, fencing, fodder, desilting of dam, firebreaks	Blouberg	8 000	Fence erection: 4km Bush encroachment: 54 ha Fodder; EPWP workers: 145
Burgersfort Landcare (Moroke)	Fencing, firebreaks, AIP control, drilling and equipping of borehole	Tubatse	1 500	AIP clearing: 17ha EPWP workers: 64
<b>16 projects</b>			<b>35 200</b>	



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# CONSERVATION AGRICULTURE (CA) IMPLEMENTS AT LEEUKRAAL





# JUNIORCARE PROJECT AT DIKGABJE PRIMARY SCHOOL; SEKHUKHUNE





# FENCE ERECTED AT M&J PROJECT, SEKHUKHUNE



Fencing material



Fence constructed



Fencing material



# AIP CLEARING AT ELAKHAMA PROJECT; MARULENG



# LDARD Drought Contingency Plan

## DROUGHT MANAGEMENT STRATEGIES

### •Provision of Early Warning information and advisory services

- The Department continues to provide the farmers with timeous early warning information which includes prediction of the seasonal forecast, provision of daily extreme weather warnings, market information, as well as any helpful information and advisory services that will enable the farmers to cope well and thrive in all seasons.
- **Feed to Sell Scheme**
- The Department will continue to assist mainly rural livestock owners whose livestock are dependent on natural grazing to feed and market their animals, especially in the FMD affected areas.
- Farmers are encourage to remain only with the nucleus herd.

### •Livestock Feeding Scheme

- LDARD is procuring feed to assist the livestock farmers in communal areas to feed their livestock to prevent livestock mortalities as well to ensure food security.
- An amount of R3 million from Equitable Share has already been spent in this financial year on livestock feed.



# LDARD Drought Contingency Plan Cont...

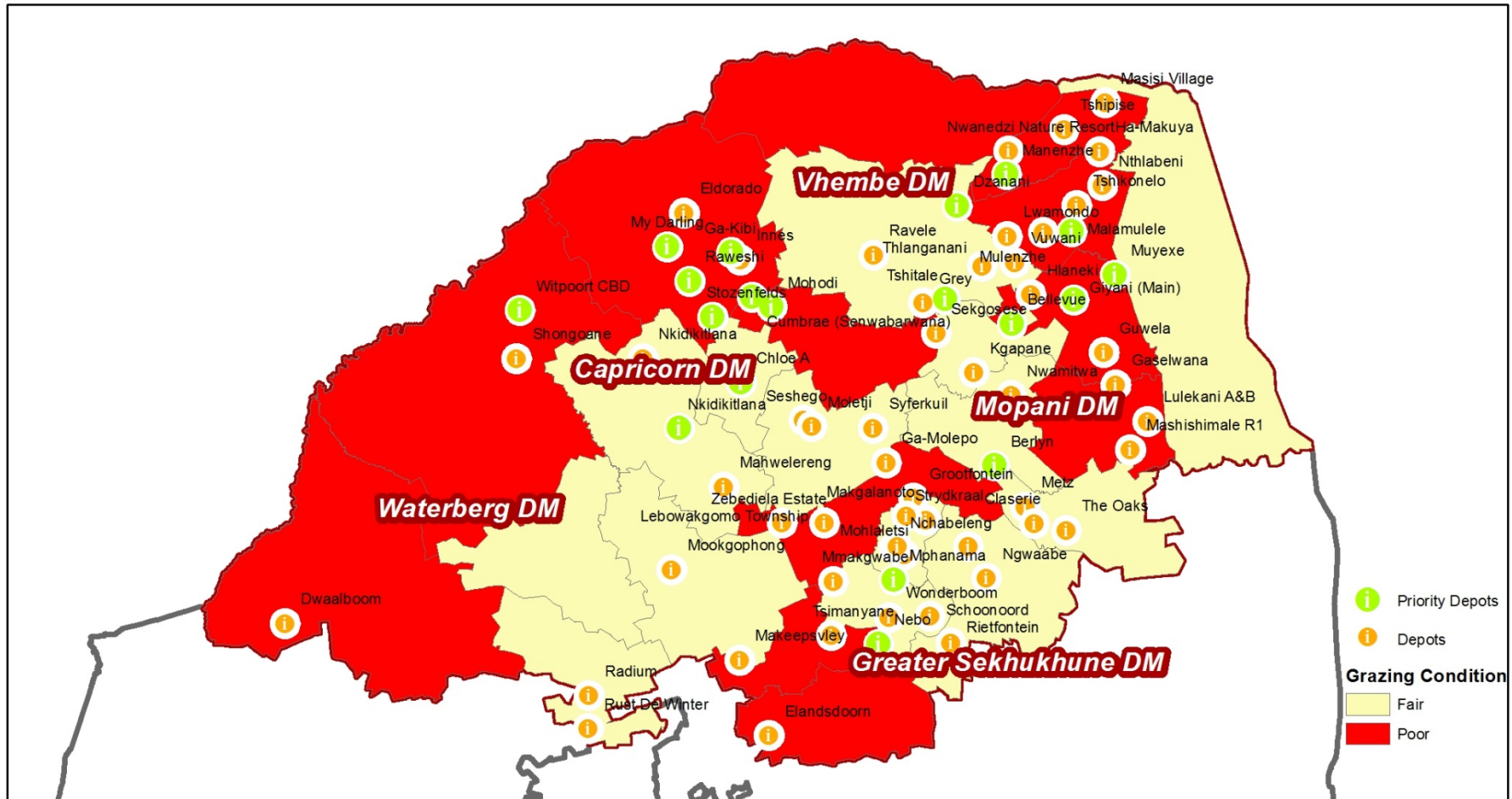
## **Establishment Fodder Bank**

- A process is underway to mobilization of Irrigation schemes for the production of fodder

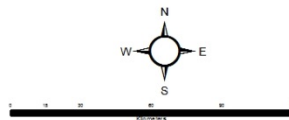
## **•Emergency Livestock Water**

- Provision of livestock water, drilling and equipping of boreholes,, and construction of water reservoirs is continuing and to date in the financial year 2019/20 an amount of R9 million from CASP has been made available for implementation of this programme.
- An amount of R5.98 million is already spent on drilling, testing, and equipping of boreholes in the drought affected communal areas.
- Farmers are encouraged to adopt water harvesting technologies to augment the other water sources

# Livestock feed distribution points



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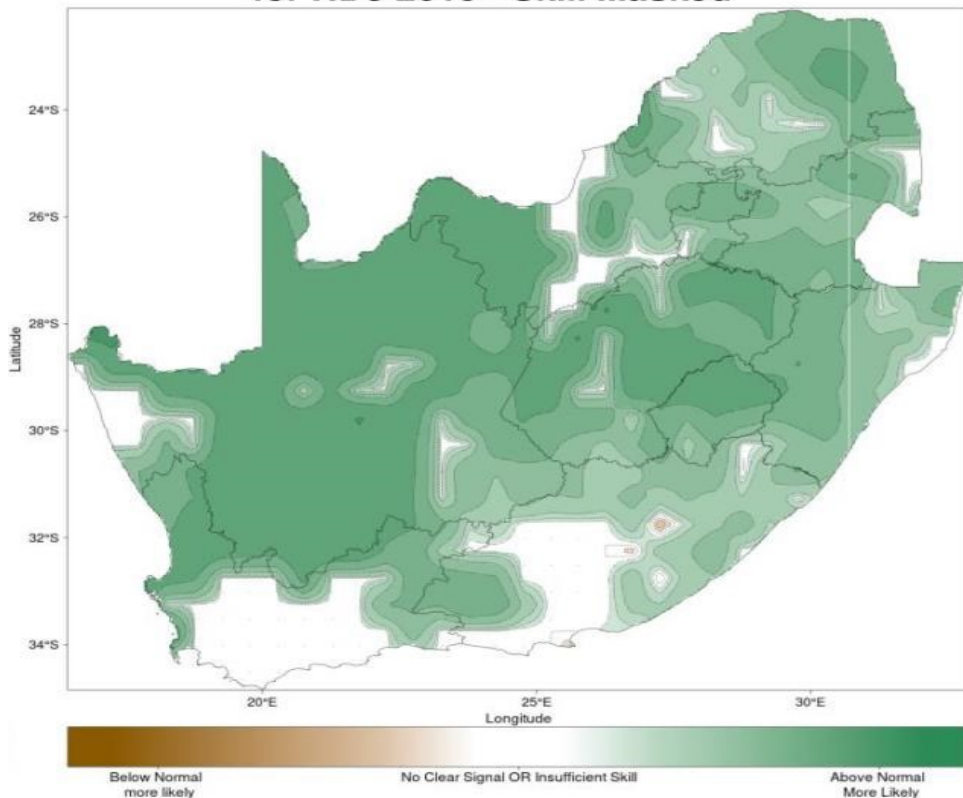
# CLIMATIC FORECAST FOR UPCOMING SEASONS

- Rainfall Prediction (NDJ) & (DJF)
- Above-normal rainfall are predicted over Limpopo Province for Vhembe, Mopani and Waterberg districts from November, December and January 2019, with a high confidence for February 2020
- Temperature Prediction (NDJ)
- Extremely higher than normal temperatures are currently experienced and are predicted until January 2020

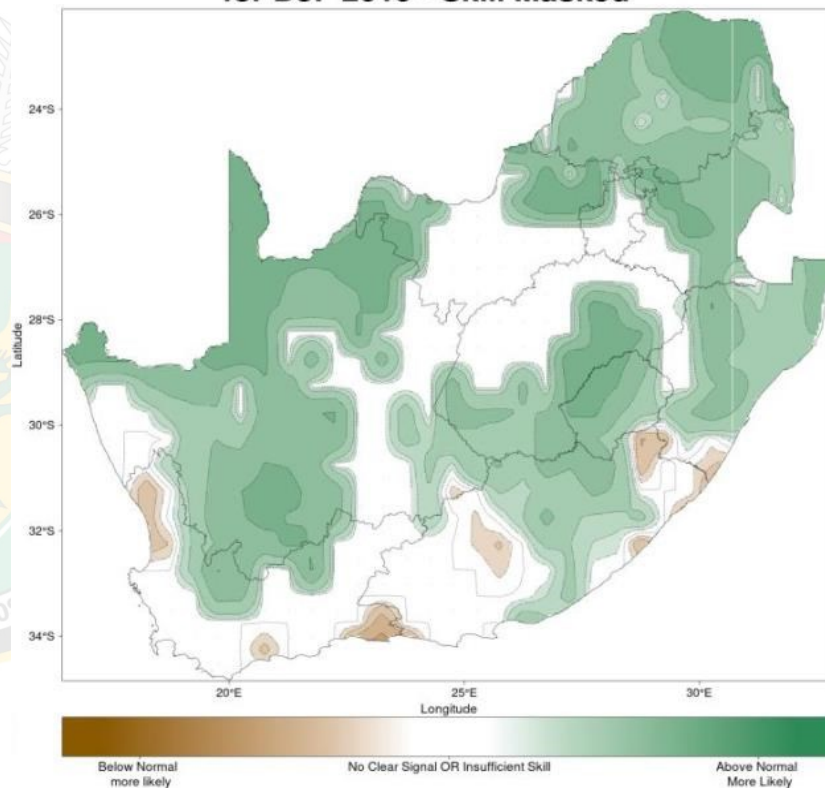
# RAINFALL PREDICTION MAP

## NOVEMBER 2019 TO JANUARY 2020

Expected Precipitation Conditions  
for NDJ 2019 - Skill Masked



Expected Precipitation Conditions  
for DJF 2019 - Skill Masked



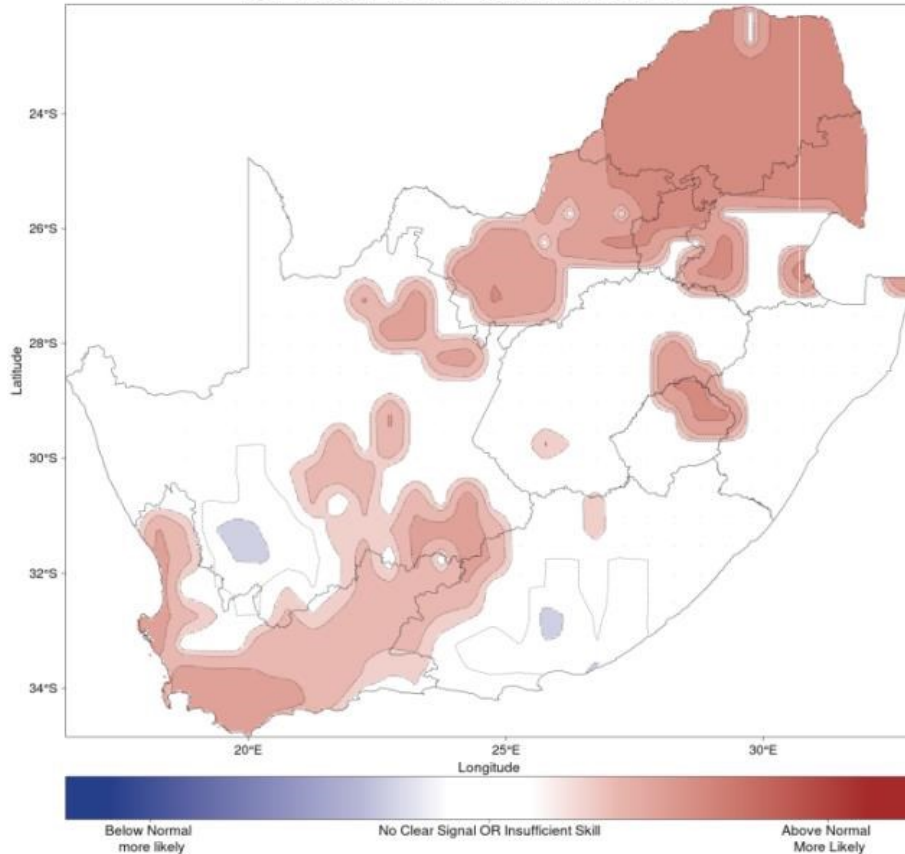
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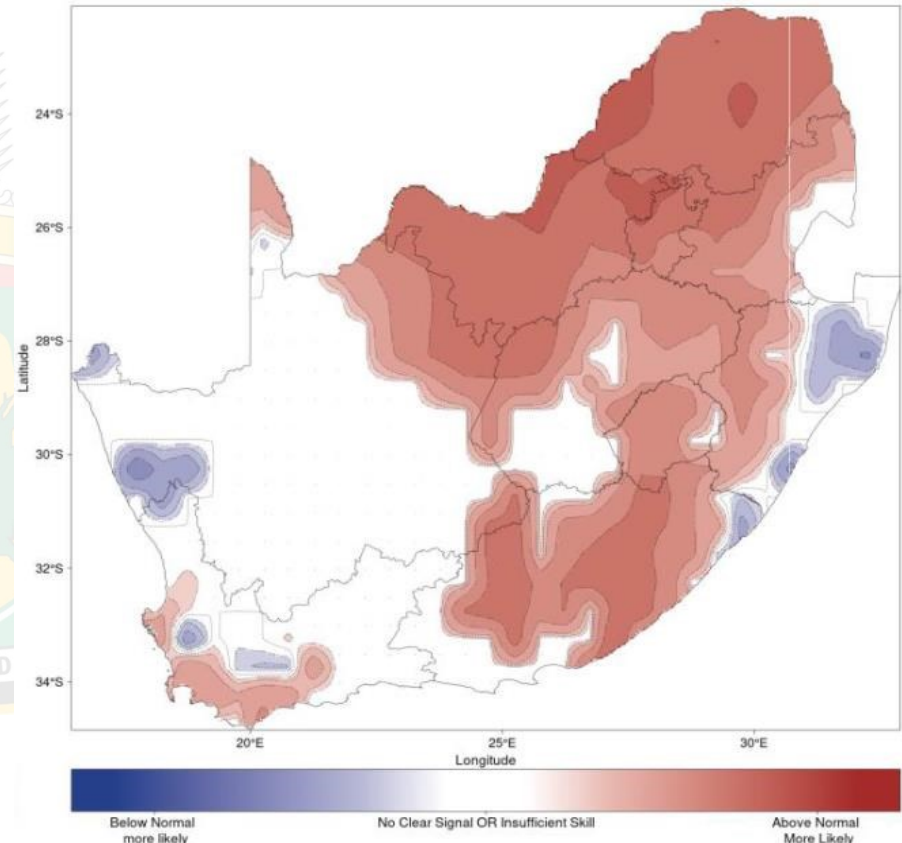


# TEMPERATURE PREDICTION MAP NOVEMBER 2019 TO JANUARY 2020

Expected Min. Temp. Conditions  
for NDJ 2019 - Skill Masked



Expected Max. Temp. Conditions  
for NDJ 2019 - Skill Masked



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THANK YOU  
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