



# agriculture, forestry & fisheries

Department:  
Agriculture, Forestry and Fisheries  
REPUBLIC OF SOUTH AFRICA

## National Agro-meteorological Committee (NAC) Advisory on the 2018/19 summer season Statement from Climate Change and Disaster Management 03 DAFF 2018

04 December 2018

In the light of the seasonal outlook as produced by the South African Weather Service (SAWS), the following advisory guidelines are suggested. It is emphasized that these advisories are broad guidelines and should be interpreted considering the local aspects of the region such as soil types, cultural preferences and farming systems. Depending on the particular region, the prioritization of the guidelines will differ. The basic strategy to follow would be to minimize and diversify risk, optimize soil water availability and to manage the renewable resources (rain water and grazing) to uphold sound farming objectives. Long-term mitigation strategies should be considered by implementing techniques to enhance in-field water harvesting by reducing run-off and improving infiltration. Reduced tillage methods are very important in this regard, as is basin tillage, to capture rainwater in the drier areas. **The provinces should further simplify, downscale and package the information according to their language preference and if possible use local media and farmers' days to disseminate the information. Users are advised to be on the look-out and act on the daily extreme weather warnings as well as the monthly advisory.**

### I. CURRENT CONDITIONS

Figure 1

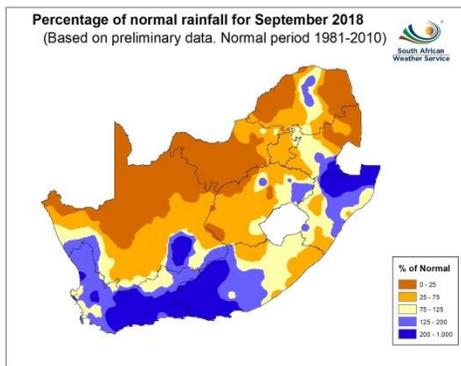


Figure 2

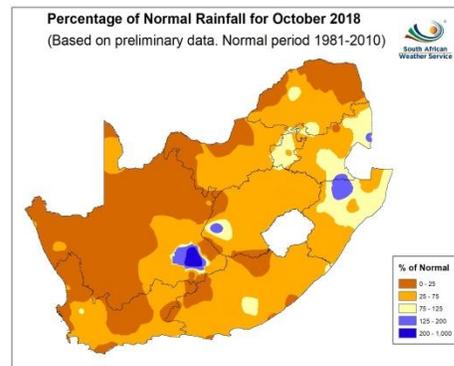


Figure 3

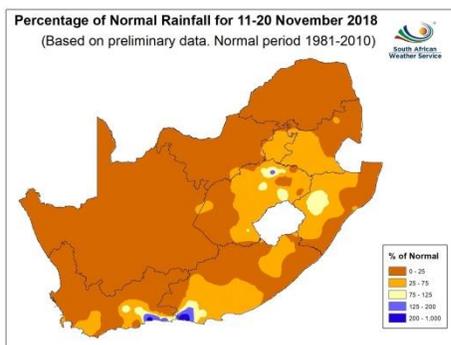
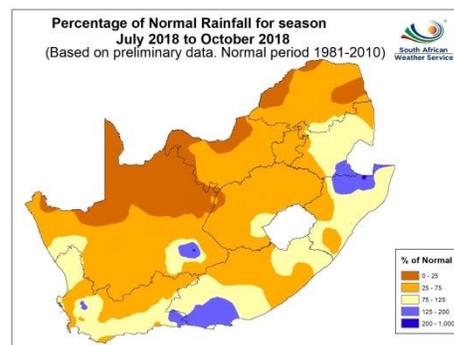
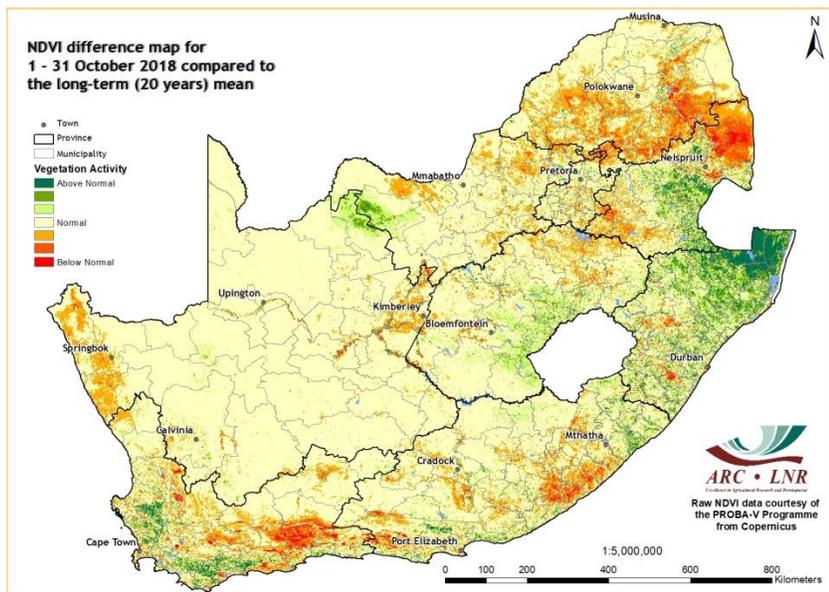


Figure 4



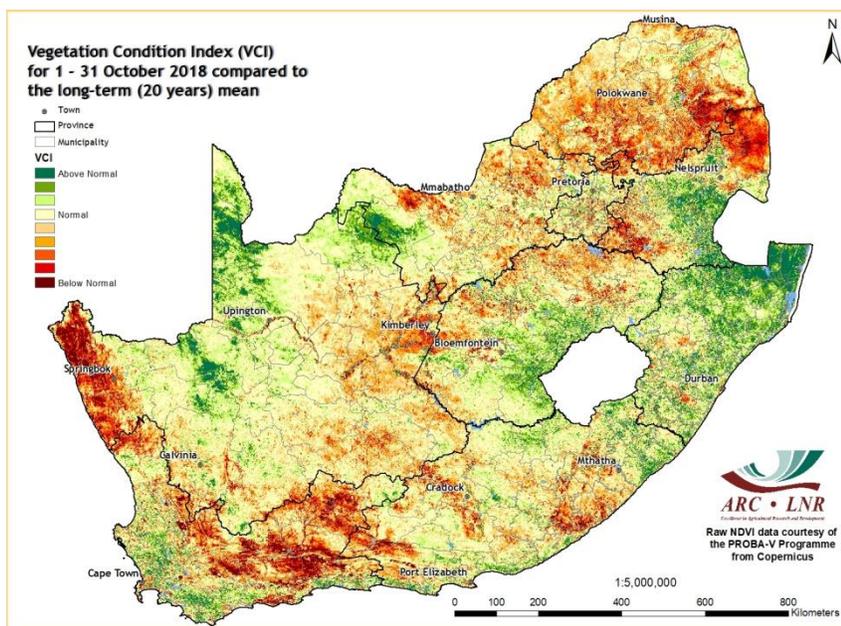
In September, above normal rainfall was recorded in the Western Cape and the northern parts of KwaZulu-Natal. Elsewhere it was below normal (**Figure 1**). During October, rainfall decreased resulting in below normal rainfall over most parts of the country (**Figure 2**). Mid-November generally received below normal rainfall contrywide (**Figure 3**). For the season July to October 2018, near normal to below normal rainfall was received over most parts of the country (**Figure 4**).

**NDVI map: October 2018 compared to the long-term mean**



The NDVI difference map for October shows that normal vegetation activity remains over much of the interior, except for parts of Limpopo, Mpumalanga, Western Cape, Eastern Cape and Northern Cape where below-normal vegetation conditions prevail when compared to the 20 years long term mean.

**VCI map: October 2018 compared to the long-term mean**



The Eden and Central Karoo of the Western Cape, Limpopo, parts of the Northern Cape and parts of Mpumalanga remain areas of concern as vegetation conditions in these areas remain below normal. Good vegetation activity persists mainly in KwaZulu-Natal, central Free State and ZF Mgcawu District of the Northern Cape.

**(The VCI is a better indicator of water stress than the NDVI).**

## **II. CONDITIONS IN THE PROVINCES DURING OCTOBER/ NOVEMBER 2018**

### **Eastern Cape**

Normal to below normal rainfall has been reported across the province. Crop conditions have been reported to be good in Great Kei, Intsika Yethu and Mhlonlo, whereas other areas reported fair, poor to very poor conditions. The conditions of livestock ranged from poor to very poor, with the exception of Dr Beyers Naude, Ndlambe, Raymond Mhlaba, Great Kei, Emalaheni, Sakhisizwe Mhlonlo and Ingquza local municipalities where good livestock conditions have been reported. Conditions of veld and pasture were ranging from poor to good and very poor in areas within Buffalo City. There were reports of sheep scab which were controlled. The average level of major dams has slightly increased as compared to the previous year during the same period (62% in 2018; 60% in 2017).

### **Free State**

Below normal rainfall was received, with the exception of the eastern parts of Thabo Mofutsanyane; while Fezile Dabi and Xhariep especially at the periphery of the Northern Cape and North West Provinces have shown signs of drought. Most municipalities are still operating under water restrictions. The veld is under very severe stress due to lack of rainfall. Livestock conditions have deteriorated drastically due to the poor veld. Soil preparation and planting of maize and sunflower has begun in the eastern and central parts of the province. Veld fires have been reported in Trompsburg, Bethulie and Smithfield. It has been further reported that sheep and cattle were burned as a result of the veld fires. The recent heatwave caused great damage in wheat crop that was at grain filling stage especially the wheat under rain-fed. Reports of locust infestation in Zastron and Rouxville were received and assessments have been conducted. The average level of major dams has increased as compared to the previous year during the same period (80% in 2018; 69% in 2017).

### **Gauteng**

Most parts received normal rainfall. The veld is in poor condition while livestock is in poor to reasonable condition. Some vegetable farmers have suffered serious losses due to strong winds that damaged tunnels. Most crop farmers under irrigation have planted while some farmers under dry land have also started planting maize, sorghum and other crops. The dam levels are still at satisfactory condition. The average level of major dams has increased as compared to the previous year during the same period (96% in 2018; 85% in 2017).

### **KwaZulu-Natal**

Below normal rainfall was recorded over most parts. The coastal and northern Districts received more rain than the interior and western districts which received well below the norm. Snow was experienced over the Drakensberg towards the end of October. The drought monitor map for October indicates a further decline over the province due to the below normal rains, with all districts being in a minor drought status. Livestock condition is improving although it is still variable in those areas where veld has been depleted. There have been incidents of veld fires as a result of lightning. Reports of Banana Bunchy Top Virus (BBTV) in some parts of Ugu have been received. The average level of major dams has increased as compared to the previous year (57% in 2018; 46% in 2017).

### **Limpopo**

Below normal rainfall was received. Vegetables under irrigation are being produced, whereas very limited water for irrigation is available in most of the irrigation schemes in Vhembe. Dryland crop farmers have not yet planted due to poor rainfall. The veld is in very poor condition and livestock conditions are slowly deteriorating especially in communal areas where grazing is depleted.

Farmers have been advised to buy feeds to supplement and also to destock older animals. Livestock mortalities due to drought have been reported in Sekhukhune, Mopani and Vhembe Districts. There were veld fires in Waterberg District. The average level of major dams has decreased as compared to the previous year during the same period (61% in 2018; 66% in 2017).

### **Mpumalanga**

Below normal rainfall was received in Gert Sibande and Nkangala Districts and near normal in Bohlabele District. Most farmers had begun with land preparation but had not yet planted due to dry conditions. Farmers are harvesting green maize and vegetables in Bohlabele District. The overall condition of livestock is fair to good in most areas. Veld is in reasonable condition in Gert Sibande and Nkangala Districts but very poor in Thaba Chweni Municipality under Bohlabele. The average level of major dams has slightly increased (68% in 2018; 66% in 2017).

### **Northern Cape**

**Nil Report.**

### **North West**

The province received below normal rainfall coupled with heatwaves. The conditions of veld and livestock are still declining. Crop farmers are preparing for planting summer crops. The average level of major dams has decreased (53% in 2018; 72% in 2017).

### **Western Cape**

Rainfall during October was poor, averaging less than 50% of the long term rainfall over the province. Temperatures were warmer than the long term mean. Conditions for winter cereal crops in the Swartland had been promising but were then damaged by very strong winds, which inevitably could result in lower yields. Cereal crops in the Ruens remain poor due to dry spells. The drought stricken areas (Matzikama, Central Karoo, Little Karoo) remained subjected to very poor veld production conditions due to poor precipitation. Livestock production in the Matzikama and Karoo regions remained poor. Various fires occurred in the Garden Route District. The average level of major dams has increased (61% in 2018; 35% in 2017).

### **Information on level of dams is obtained from the Department of Water and Sanitation**

**Available:** <https://www.dwa.gov.za/Hydrology/Weekly/Province.aspx>

**Dam levels as at 2018/11/26**

## **III. AGRICULTURAL MARKETS**

### **Livestock domestic markets**

According to ABSA, beef prices were mostly lower across the different classes. Very little rain with temperature extremes occurred since the second part of October over much of the country and cheaper alternative proteins like pork and poultry are readily available and add a bearish tone to prices. It is expected that prices may recover in line with seasonal trends. Lamb and mutton prices were mixed. The struggling South African economy may negatively impact on demand. It is expected that sheep meat prices will recover in the short term in line with seasonal trends and improved demand. Pork prices continued to strengthen, and traded mostly higher across the different categories. The pork industry has reached prices above the 2016 level after the listeriosis crisis, but prices are still below the 2017 levels.

<b>Producer prices for selected livestock commodities</b>	<b>Beef</b>	<b>Mutton</b>	<b>Pork</b>	<b>Poultry</b>
Open market: Class A / Porker / Fresh whole birds (R/kg)	45.12	71.50	30.35	25.73
Open market: Class C / Baconer / Frozen whole birds (R/kg)	39.82	61.62	28.23	25.47
Contract: A2/A3* / Baconer/ IQF (*includes fifth quarter) (R/kg)	45.64	71.87	29.24	23.34
Import parity price (R/kg)	66.28	56.84	26.16	16.5
Weaner Calves / Feeder Lambs (R/kg)	33.49	40.67		

**FNB: 2018/11/23**

### **Major grain commodities**

ABSA stated that local maize market traded lower. Farmers in the western parts of the country experienced some delays in planting due to drier weather; however there is still optimal planting time till December. The central and eastern parts of the country are at risk of receiving below average rainfall which may potentially lead to below average maize/soybean yields and poor grazing conditions. Wheat prices for delivery in December 2018 decreased by R65/ton. Above average yields are expected in some parts of the Western Cape due to good rainfalls received during the winter rainfall period. Soybean prices decreased. Due to drier and hot weather conditions in the past few weeks, sunflower seed crops could not be planted during the optimal planting period.

<b>Commodity</b>	<b>Future Prices (2018/11/27) R/ton</b>				
	<b>Dec-18</b>	<b>Mar-19</b>	<b>May-19</b>	<b>Jul-19</b>	<b>Sep-19</b>
White maize	2390.00	2464.00	2503.00	2545.00	2570.00
Yellow maize	2344.00	2420.00	2418.00	2465.00	2489.00
Wheat	4265.00	4388.00	4450.00	4463.00	4534.00
Sunflower	5130.00	5093.00	4899.00	4997.00	5122.00
Soybeans	4521.00	4643.00	4734.00	4832.00	4919.00
Sorghum	N/A	3700.00	3650.00	3550.00	3200.00

**SAGIS: 2018/11/29**

**NB: Users are advised that these are just indicative prices therefore it is imperative that clients investigate their own individual basis value when marketing their products (livestock and grain).**

#### **IV. SADC REGION**

The food security outlook issued in November 2018 by the Famine Early Warning Systems Network (FEWS NET) indicates that the poor harvest caused by severe dry spells in early 2018 continue to affect many areas across the region as poor households have little to no food stocks, below-average incomes, and depend on market purchases for food. Significant areas of Lesotho, Madagascar, Malawi, Mozambique and Zimbabwe are anticipated to experience Crisis (IPC Phase 3) outcomes through January 2019. Similar outcomes are also likely in poor households in areas of Ituri, Kassai and Tanganyika Provinces in DRC, where livelihoods are being disrupted by conflict. The rest of the region is anticipated to experience Stressed (IPC Phase 2) and Minimal (IPC Phase 1) outcomes through January 2019. Regional staple food supplies remain stable; however, prices show mixed trends. In Chokwe, Mozambique and Lesotho market prices increased from September to October due to increased demand as most household maize stocks are depleted and they are relying on markets for food. In Zimbabwe, maize grain prices increased by 31 percent compared to the same time last year mainly due to macroeconomic challenges. Poor households will likely have restricted food access, if staple food prices continue to increase. In Malawi, maize grain prices stabilized following government maize grain distribution in October.

FEWS NET further stated that the start of the season has been noted in a few areas of South Africa, central Madagascar, Angola, DRC, and northern Zambia. As a result, households started planting in the central highlands and western areas of Madagascar and parts of DRC, although conflict constrains planting across areas of DRC. South Africa's productive maize grain areas and parts of Lesotho, Angola, Zambia, and Eswatini (Swaziland) are currently experiencing abnormal dryness and above-average temperatures, potentially affecting planting activities and crops. Short term rainfall forecasts indicate dryness could continue and potentially expand. The latest forecast indicates the highest probability is for below-average seasonal rainfall in most areas, driven in part by the forecast of a weak El Niño event during the 2018/19 rainfall season. It is important to note there is a wide range of possibilities due to uncertainty associated with the weak El Niño. The forecast rainfall conditions could negatively affect agriculture related labor incomes and production for the 2018/19 agriculture season. The season is being closely monitored by FEWS NET as it develops across the region.

[The Integrated Food Security Phase Classification (IPC) is a set of standardized tools that aims at providing a "common currency" for classifying the severity and magnitude of food insecurity.]

Source: <http://www.fews.net/southern-africa>

#### **Summary of the reports**

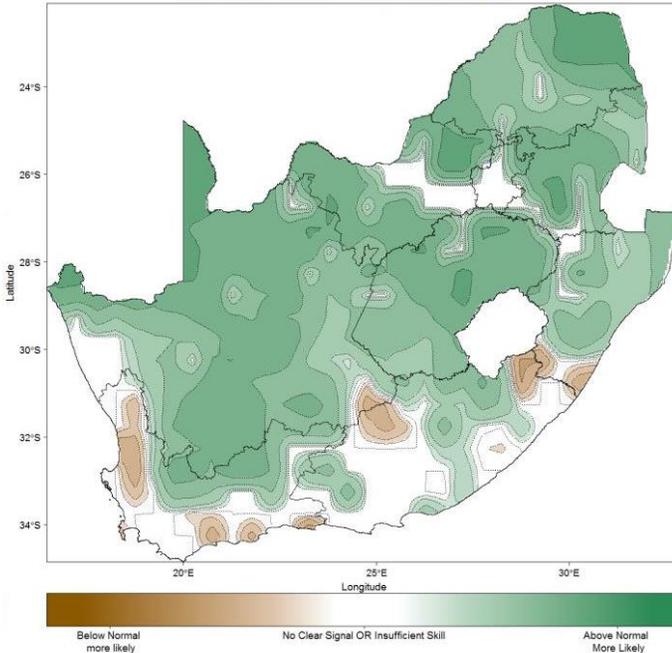
Rainfall has remained poor over the majority of summer rainfall areas. Some dry land farmers have planted where rainfall has fallen. The veld and livestock are in poor to reasonable condition. Sheep scab has been reported in the Eastern Cape and has been controlled. There was locust infestation/ outbreak in southern Free State. Veld fires resulted in damages in Limpopo, KwaZulu-Natal, and Free State where there were also mortalities in sheep and cattle. Banana Bunchy Top virus has been reported in KwaZulu-Natal. Strong winds damaged vegetable tunnels in Gauteng and cereal crops in Western Cape; whereas in Free State heatwaves damaged wheat. Drought mortalities were reported in Limpopo.

## V. MONTHLY CLIMATE OUTLOOK

### Seasonal Climate Watch: December 2018 to April 2019

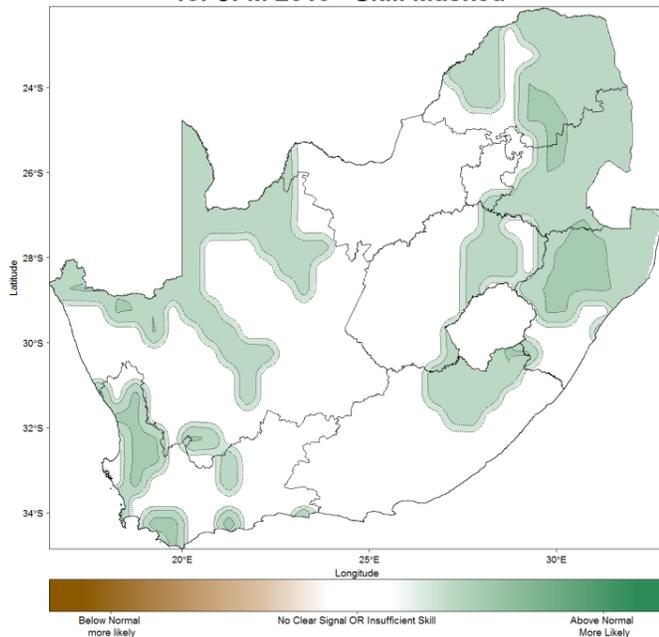
**Figure 1 – Rainfall**

**Expected Precipitation Conditions  
for DJF 2019 - Skill Masked**

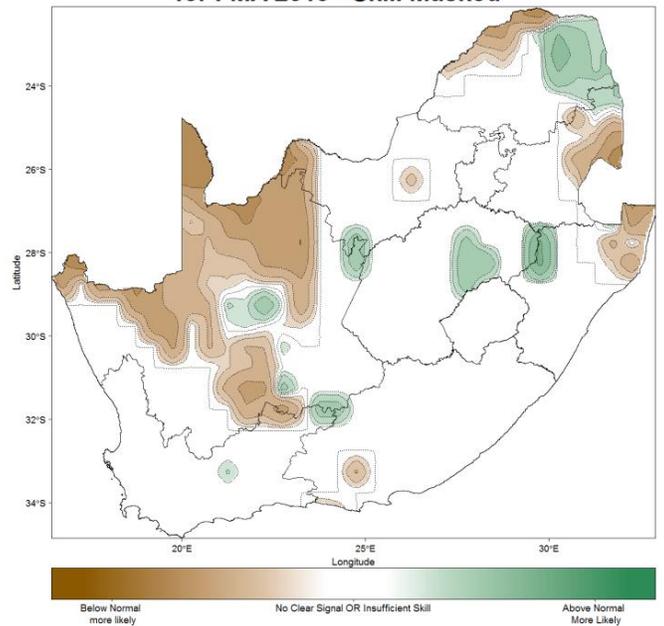


Above-normal rainfall conditions are expected to continue over most parts of the summer rainfall areas during mid-summer (Dec-Jan-Feb), despite the below-normal forecast last month. However, due to this significant change in the forecast, the confidence levels on the expected rainfall totals for the summer period are very low.

**Expected Precipitation Conditions  
for JFM 2019 - Skill Masked**



**Expected Precipitation Conditions  
for FMA 2019 - Skill Masked**

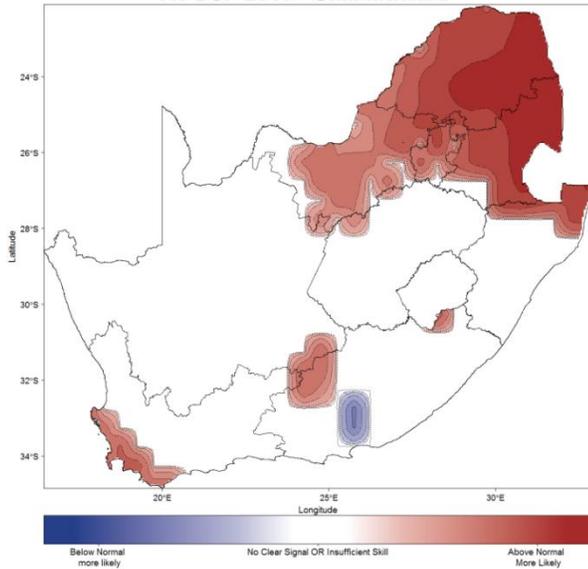


**Figure 2 - Minimum and Maximum temperatures**

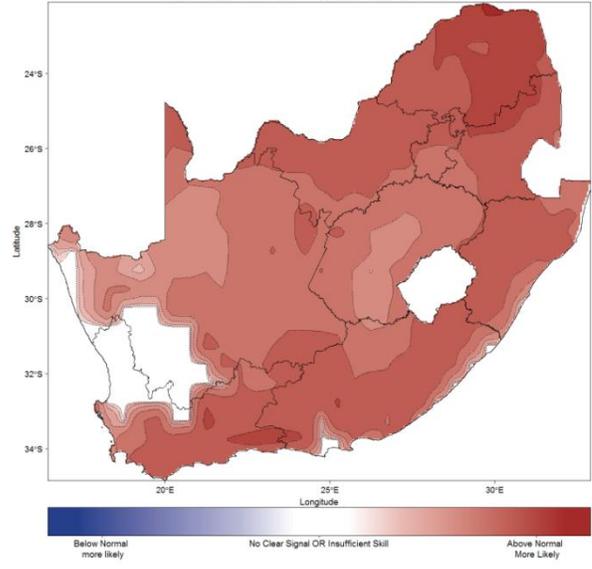
**Minimum**

**Maximum**

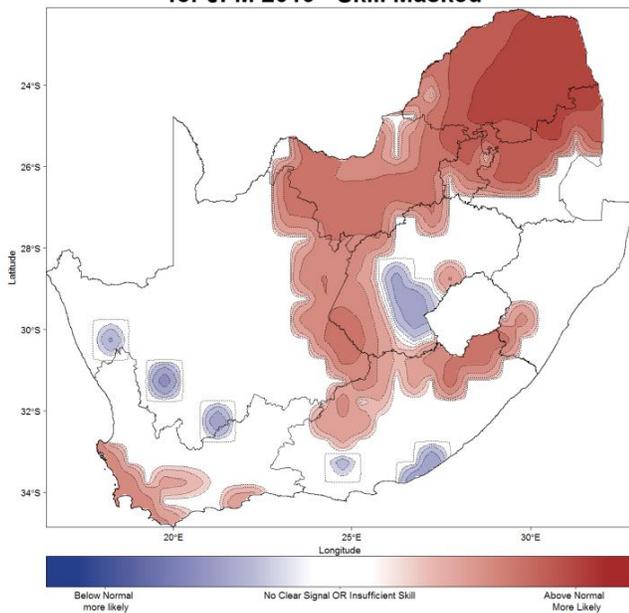
**Expected Min. Temp. Conditions  
for DJF 2019 - Skill Masked**



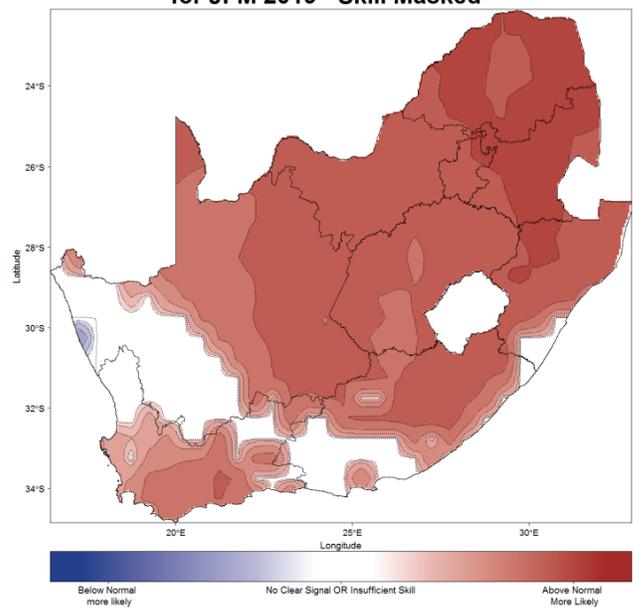
**Expected Max. Temp. Conditions  
for DJF 2019 - Skill Masked**

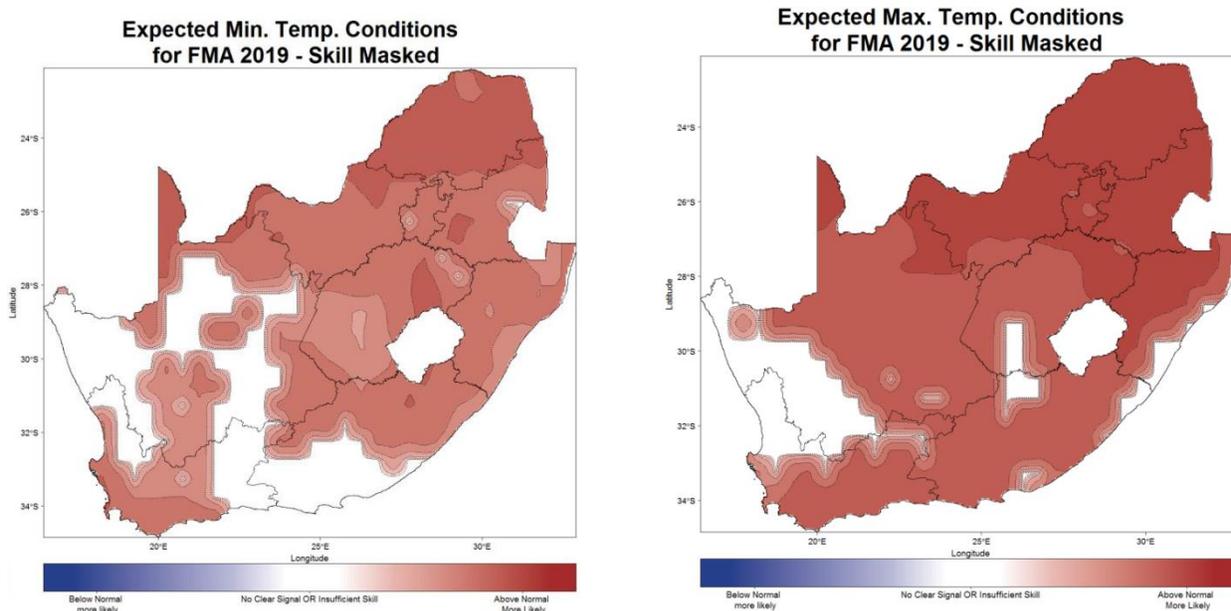


**Expected Min. Temp. Conditions  
for JFM 2019 - Skill Masked**



**Expected Max. Temp. Conditions  
for JFM 2019 - Skill Masked**





Overall higher temperatures are still expected moving towards the late-summer and early-autumn periods. There is a particularly confident forecast for above-normal maximum temperatures over the northern parts of the country.

### State of Climate Drivers

The El Niño-Southern Oscillation (ENSO) has just started its El Niño cycle this month, which is relatively late from typical El Niño events. The upper atmosphere over the Pacific has not yet responded from what one typically expects from an El Niño event that affects Southern Africa. Thus, we still expect no impact from El Niño during mid-summer (Dec-Jan-Feb), however this may change for the late summer (Jan-Feb-Mar) and early autumn period (Feb-Mar-Apr).

Above normal rainfall is anticipated during mid-summer with above normal temperatures. However, the confidence levels on the expected rainfall totals for the summer period are very low. Due to the significant changes to the rainfall outlooks from the previous month, caution is advised in putting too much confidence in these forecasts. Farmers are encouraged to continually check updates i.e. seasonal forecasts and utilize 7 day weather forecasts for short term planning.

With the above forecast in mind, the following strategies are recommended:

## VI. SUGGESTED STRATEGIES

### A. Rain-fed crop production

#### Soil choice

- Choose suitable soil type.
  - Suitable soil and land use management practices that would control wind and water erosion in cultivated lands are suggested.
  - Avoid marginal soils - shallow and low water holding capacity soils.
  - Rather plant in soils with high water holding capacity or with shallow water table.
- Ascertain that the soil profile has enough water when planting commences.

- Roughen the soil surface to enhance rain water penetration and reduce runoff.
- Minimise compaction by reducing the passing of heavy machinery in the field.
- Add organic material to improve soil structure.

#### **Land preparation**

- Avoid where possible soils with pronounced plough pans.
- Consider practicing conservation agriculture such as zero or minimum tillage.
- Cover soil with organic matter or cover crops.
- Practice crop rotation.
- Do not expand land under crop production unnecessarily.
- Prioritise fallow land.

#### **Crop choice and planting**

- Choose drought resistant cultivars.
- Provide flexibility and diversification.
- Rather plant early in the season than late, but stay in the normal planting window and follow the weather and climate forecast regularly so as to make informed decisions.
- Consider staggered planting - spreading over weeks.
- Do not experiment with new and unknown cultivars and also avoid unnecessary capital investments.
- Consider intercropping for improved soil structure and pest/diseases control.
- Planting in a controlled environment (e.g. green house) is advisable where possible.

#### **Crop management**

- Adjust planting density accordingly.
- Consider mulching to minimise evaporation.
- Always eradicate weeds.
- Consider a conservative fertilizing strategy during dry conditions.
- Consider organic fertilization.
- Wheat: The strategy proposed is to scout the plants regularly, correctly identify any pests or diseases and make informed decisions regarding reaction.
- Prune trees properly to avoid blocking air movement. The removal of low hanging, dense branches is a must.
- Using white paint on trunks of fruits tree reduces winter trunk damage.
- Use overhead sprinkler irrigation.

### **B. Irrigation farming**

**Water restrictions remain in place in several provinces and this continues to have a negative impact on irrigation.**

- Remove all weeds containing seeds, but keep other vegetative rests on the land because that will reduce evaporation.
- Check and repair all tools and machinery especially where there are water leaks.
- Be aware of the state of regional water resources and whether it will be adequate for irrigation.

- Irrigate with the correct amount, avoid over-irrigation because that can create problems e.g. water logging and diseases.
- Timing of irrigation - rather late afternoon or early evening to reduce evaporation.
  - Manage irrigation so that the plant receives water only when needed.
- Consider using drip irrigation as it saves water by allowing it to drip slowly straight to the roots.
- **Adhere to water restrictions when issued.**

### **C. Domestic and home garden water use**

- Conserve existing water supplies.
- Eradicate water weeds.
- Limit water waste and losses.
- Repair leaking pipes.
- Re-use water and retain high quality.
- Use grey water in gardens when necessary.
- Harvest water during rainy days.

### **D. Stock farming**

- Keep stocking rates conservative and even lower to protect grazing.
- Never exceed carrying capacity of plant associations.
- Provide lots of drinking points where possible.
- Provide additional fodder and enhance nutritional value of dry grazing/feed with licks:
  - Phosphorous deficiency is a major problem.
  - Licks should (in most cases) provide:
    - Phosphorous.
    - Urea (to help with the break-down of dry vegetation).
    - Salt.
    - Molasses.
- Deficiencies differ according to vegetation composition/soil properties/climate.
- Assessment of vegetation condition and analysis of soil samples can benefit the decision for supplement composition.
- Sell mature, unproductive, marketable animals (to help prevent overstocking/overgrazing).
- If grazing is in danger, herd animals into pens where different animals can be segregated and fed separately.

### **E. Grazing**

- Subdivide your grazing area into camps of homogeneous units (in terms of species composition, slope, aspect, rainfall, temperature, soil and other factors) to minimise area selective grazing as well as to provide for the application of animal management and veld management practises such as resting and burning.
- Determine the carrying capacity of different plant associations.
- Calculate the stocking rate of each, and then decide the best ratios of large and small animals, and of grazers or browsers.
- Provide periodic full growing-season rests (in certain grazing areas) to allow veld vigour recovery in order to maintain veld productivity at a high level as well as to maintain the vigour of the preferred species.
- Do not overstock at any time to avoid overgrazing.
- Eradicate invader plants.

- Periodically reassess the grazing and feed available for the next few months, and start planning in advance.
- Spread water points evenly.

## **F. Pests and diseases**

### Crops

- Fruit crop farmers should regularly scout for pests and diseases and contact the local agricultural office for advice on best control measures. Farmers should further implement phytosanitary measures.

### Livestock

- Follow the vaccine routine and consult with the local veterinarian.

## **G. Veld fires**

The provinces and farmers are advised to create and maintain firebreaks. An owner of the land who is obliged to prepare and maintain a firebreak must ensure that, with due regard to the weather, climate, terrain and vegetation of the area, the following is taken care of in terms of installing firebreaks (Chapter 4 of the National Veld and Forest Fire Act No. 101 of 1998):

- It has to be wide enough and long enough to have a reasonable chance of preventing a veld fire from spreading to or from neighbouring land.
- It does not cause soil erosion and
- It is reasonably free of inflammable material capable of carrying a veld fire across it.
- Firebreaks may be temporary or permanent.
- Firebreaks should consist of fire-resistant vegetation, inflammable materials, bare ground or a combination of these.
- Firebreaks must be located in such a way as to minimize risk to the resources being protected.
- Erosion control measures must be installed at the firebreak.

### **Firebreaks can be made through the following methods:**

- Mineral earth firebreak:
  - Through ploughing, grading, other earth movement.
- Use of herbicides.
- Use animals to overgraze specifically to minimise fuel.
- Strategic placement of burned areas,
  - Not to be done on days with fire hazard (windy and dry/hot).
- Plant fire resistant plants.
- Plant species selected for vegetated firebreaks must be non-invasive and capable of retarding the spread of fire.

### **Maintaining firebreaks:**

- Mow, disk, or graze vegetative firebreaks to avoid a build-up of excess litter and to control weeds.
- Inspect all firebreaks for woody materials.
- Inspect firebreaks at least annually and rework bare ground firebreaks as necessary.
- Repair erosion control measures as necessary.
- Access by vehicles or people must also be controlled.

- Bare ground firebreaks which are no longer needed must be stabilized i.e.
  - Sow grass.
  - Mulch.

**What to do when conditions favorable for veld fire are forecast:**

- Prohibit fires in the open air during periods of high fire hazard and establish a fire control committee.
- To control fires, an alarm system, firefighting teams, and beaters must be organized in advance and plans prepared.
- Livestock should be moved out of grazing land to a safe place.

**What to do during a veld fire:**

- Water is generally not available in sufficient quantities or at adequate pressure for the control of major fires; however, sand or other loose mineral soil material can be an effective method of control.
- Tree branches can be used to beat fire.

**H. Heat stress – bad for productivity**

- Signs of heat stress:  
Bunching in shade, high respiratory rates, open mouth breathing.
- What to do:
  - Offer shade.
  - Offer water- keep good quality water in front of animals.
  - Wet with sprinklers/fire hose.
  - Water ground.
  - Avoid overworking animals.
  - Control insects. Biting insects, such as flies can further stress livestock and interrupt their cooling. If pastures or buildings draw insects to livestock during times of extreme heat, provide proper insecticides or considering relocating your livestock.

**Poultry**

- Provide cool, clean, quality drinking water to your poultry. Water will help keep your birds cool.
- Always make sure your poultry is in a well-ventilated area in which there is nothing to obstruct the airflow.
- Provide feed during the coolest part of the day.
- Supplement drinking water with electrolytes.
- Reduce the number of birds kept in a house or in an area.
- Avoid excessive activity during the hottest part of the day.

**I. Severe thunderstorms/flash floods**

Building resilience:

- Identify resources/facilities within 50km that can be utilized and can be of help during emergencies.
- Be sure to have legal and adequate markings to identify your livestock.

- Stay well informed about livestock in your possession and conduct an inventory after the event.
- Monitor television and local radio stations for information regarding severe storms/flash floods in your region.
- Identify natural or built areas/shelters where animals can be kept during such conditions
  - Sufficient height to be above water level,
  - Sheltered from strong winds and wetness,
- Restrict access to high-risk areas such as low lying fields close to streams.
- Store food in safe areas sheltered from wetness to be used after storms/flash floods.
- Keep pesticides and other chemicals in areas where water will not be contaminated during extreme rainfall/storm events.
- Inspect/repair farm dams
  - Before rainy season, after each event.

## J. Erosion

**Erosion is the wearing away of soil and rocks by the action of natural forces, for example, water and wind. The loose and dissolved materials move from one location to another. Erosion therefore may reduce agricultural production potential.**

### **Preventative measures for erosion:**

- Do not burn vegetation.
- Keep vegetation cover – e.g. shrubs, grass, small trees; a cover crop may be used to increase organic material and increase soil structure.
- Plant permanent vegetation e.g. perennial grasses where possible.
- Maintain any remaining vegetative cover, e.g. maize stubble during winter wheat sowing, as it: Act as blanket, trap eroded particles –and reduce wind speed at ground level.
- Plant evergreen trees growing densely and perpendicular to typical wind direction during winter and spring as wind breaks.
- Increase water infiltration by correct management of soil – e.g. reduce frequency of plough and use minimum tillage.
- Mulch: to increase infiltration, reduce evaporation, and reduce raindrop impact as well as wind erosion.
- Construct retaining walls around gardens.
- Avoid soil compaction by roughening the soil surface
  - Furrows and tillage ridges can trap loose soil
- Farm along contours as this reduces slope lengths
- Prevent over grazing.
- Practice conservation farming
  - Maximize retention of crop residues.

Most summer rainfall areas began receiving rainfall in October; however planting has been delayed in some areas as the rain has been insufficient. Livestock and the veld are still in reasonable to poor conditions. Above-normal rainfall conditions are expected over most parts of the summer rainfall areas during mid-summer (Dec-Jan-Feb), despite the below-normal forecast last month. However, due to this significant change in the forecast, the confidence levels on the expected rainfall totals for the summer period are very low.

The South African Weather Service further states that due to the significant changes to the rainfall outlooks from the previous month, caution is advised in putting too much confidence in these forecasts. The previous month's statement remains for inconsistent rainfall throughout summer with an increase of dry spells.

With the current conditions in mind as well as the seasonal forecast, farmers are advised to continually conserve water and other resources in accordance with the Conservation of Agricultural Resources Act 1983, (Act No. 43 of 1983). Dryland farmers are advised to wait for sufficient moisture before planting and consider drought short season cultivars as inconsistent rainfall is anticipated with an increase of dry spells. They are also advised to consider other alternative crops such as sorghum. Moreover, they are advised to be conservative in their planting i.e. planting density/cultivar/area being planted. Farmers using irrigation should be mindful of the forecast i.e. dam levels might not be replenished as quickly while irrigating due to inconsistent rainfall possibility and high temperatures. Farmers must also comply with water restrictions in their areas. All farmers should follow the weather and climate forecast regularly so as to make informed decisions.

Livestock must continually be kept in line with carrying capacity of the veld, and be provided with additional feed such as relevant licks. They should also be provided with enough water points on the farm as well as shelter during bad weather conditions. The risk remains high for conditions conducive for veld fires as the veld is dry in areas with sufficient biomass, and veld fires have been reported in several provinces. Farmers are encouraged to maintain firebreaks and adhere to veld fire warnings. Episodes of localized flooding resulting from thunderstorms are likely and preventative measures should be in place. Heat waves have occurred and are likely to reoccur and therefore measures to combat these should be in place. Farmers are encouraged to implement measures provided in the early warning information issued.

**The users are urged to continuously monitor, evaluate, report and attend to current Disaster Risk Reduction issues. It is very important and mandatory for farming communities to always implement disaster risk measures and maintain good farming practices.**

The climate advisory should be disseminated widely. Users are advised to be on the look-out and act on the daily extreme weather warnings as well as the monthly advisory. Information sharing groups are encouraged especially among farming communities for sustainable development. In general, effective communication among all stakeholders in the sector will enhance effective implementation of risk reduction measures/early warning services. It is the responsibility of farmers to implement disaster risk measures.

The Disaster Management Act 2002, (Act No. 57 of 2002) urges Provinces, individuals and farmers, to assess and prevent or reduce the risk of disasters using early warning information. The current advisory can be accessed from the following websites: [www.daff.gov.za](http://www.daff.gov.za) and [www.agis.agric.za](http://www.agis.agric.za).

**For more information contact:-**

<p>DAFF, Directorate: Climate Change and Disaster Management Private Bag X93 Pretoria 0001 Tel:012 309 5722/23; Fax: 012 309 5878 Email: <a href="mailto:MittaA@daff.gov.za">MittaA@daff.gov.za</a></p> 	<p>SAWS: Private Bag X097 Pretoria 0001 Tel: +27 (0) 12 367 6000 Fax: +27 (0) 12 367 6200 <a href="http://www.weathersa.co.za">http://www.weathersa.co.za</a></p> 	<p>ARC: Institute for Soil, Climate and Water Private Bag X79 Pretoria 0001 Tel: 012 310 2500 Fax: 012 323 1157 Email: <a href="mailto:iscwinfo@arc.agric.za">iscwinfo@arc.agric.za</a>, <a href="http://www.arc.agric.za">http://www.arc.agric.za</a></p> 
---	---	--

**Disclaimer:** The Department of Agriculture, Forestry and Fisheries (DAFF) accepts no responsibility for any application, use or interpretation of the information contained in this advisory and disclaims all liability for direct, indirect or consequential damages resulting from the use of this advisory. Unauthorised use, copying or dissemination hereof is strictly prohibited and may result in severe civil and criminal penalties.

**Copyright © Department of Agriculture, Forestry and Fisheries**