



**National Agro-meteorological Committee (NAC) Advisory on the
2022 winter season
Statement from Climate Change and Disaster Risk Reduction
10 DALRRD 2021**

07 July 2022

In light of the seasonal climate watch 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

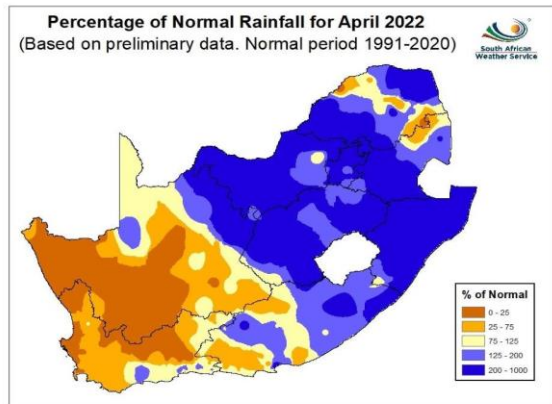


Figure 2

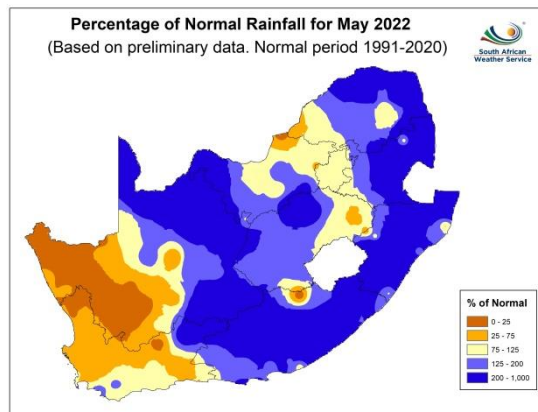


Figure 3

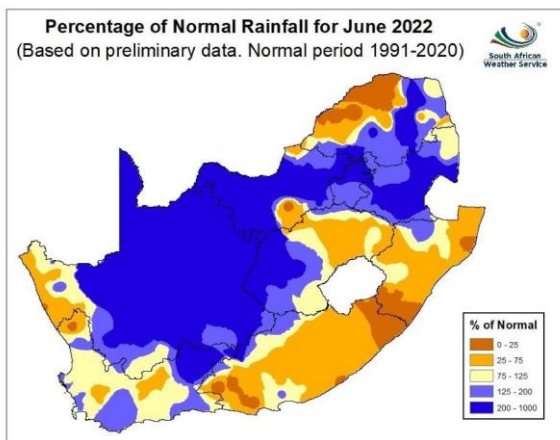
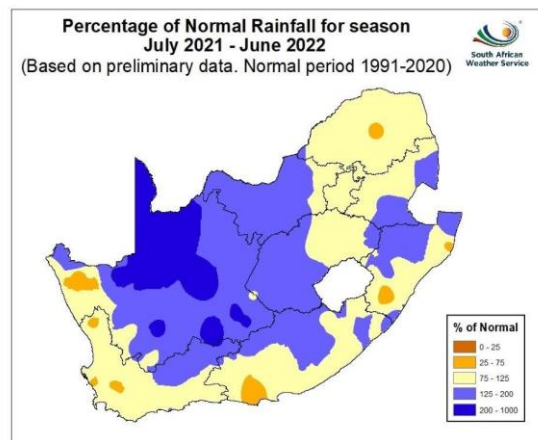
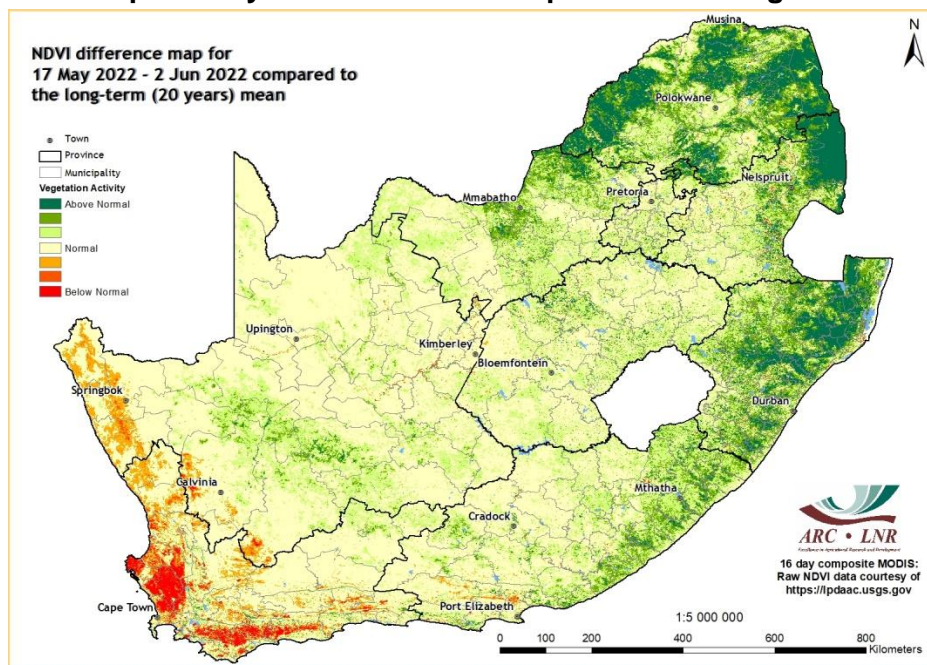


Figure 4



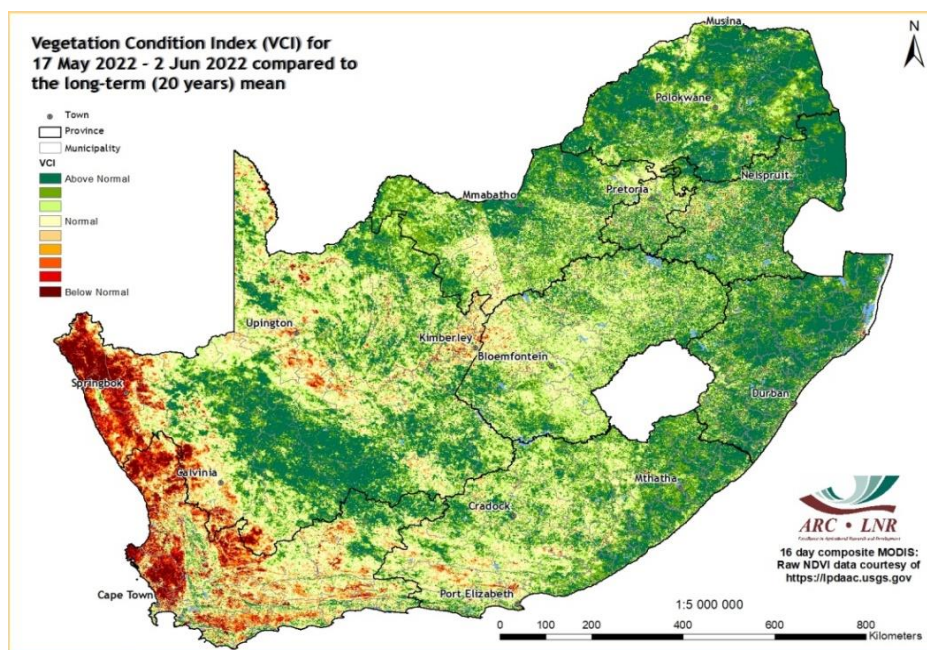
During the month of April, below-normal rainfall was recorded in the western parts of the country becoming above-normal over the remainder of the country (**Figure 1**). The below-normal rainfall trend continued in the western regions of the country in May, except along the south coast of the Western Cape and adjacent interior where rain was normal (**Figure 2**). The rest of the country received normal to above-normal rainfall. In June the winter rainfall regions received normal rainfall but below-normal along the west coast of the Northern Cape and adjacent interior (**Figure 3**). Most of the Northern Cape and some northern parts of the country received above-normal rainfall and the remainder of the country received below normal-rainfall. The season July 2021 to June 2022 received normal rainfall in most areas becoming above-normal over the central and western interior (**Figure 4**).

NDVI map: 17 May – 02 June 2022 compared to the long-term mean



Below normal vegetation activity is visible in the Western Cape and the western parts of the Northern Cape. Above normal vegetation activity has been observed in the eastern parts of the country.

VCI map: 17 May – 02 June 2022 compared to the long-term mean



The Western Cape, the far western parts of the Northern Cape and parts of the Sarah Baartman District of the Eastern Cape continue to experience poor vegetation conditions. The remainder of the country experienced above-normal vegetation conditions.

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

II. CONDITIONS IN THE PROVINCES DURING MAY/JUNE

Eastern Cape

Above-normal rainfall was recorded in May in the eastern parts and below-normal in the western parts of the province. Most of the dryland farming areas reported good crop conditions; however the excessive rains especially in the areas along the coast resulted to degradation of maize quality. In Nelson Mandela Metro citrus production farmers continue with picking for the export market. Sarah Baartman experienced dry conditions and pasture producing farmers are struggling to produce good quality feed. In addition, due to brown locust outbreak, some farmers delayed planting of pastures. However, the Sundays River Municipality areas and Joe Gqabi District reported good pasture conditions. Most areas reported reasonable to good conditions of grazing areas and livestock. The conditions of veld in Sarah Baartman, Nelson Mandela Metro, as well as in Chris Hani Districts was reported to range from fair to very poor, while good in Alfred Nzo, Amathole and OR Tambo Districts. Brown locust swarms continue to encroach into new areas. Control of the locusts continues as well as awareness campaigns. The average level of major dams has increased to 70% in 2022, as compared to 53% of 2021.

Free State

The veld has slowly deteriorated in most parts of the province especially in areas that are situated in valleys and swamps. Livestock is in good condition in most areas due to good rains and improved quantity of veld grazing and pastures. Veld fires have been reported in Kroonstad, Ventersburg, Brandfort, Winburg, Sannaspos, Verkeerdevlei, and Tweespruit. Small swarms of brown locust were seen in Bloemfontein. The swarms were successfully controlled by farmers and provincial combating teams. Harvesting of sunflower, beans and potatoes has started especially in the eastern parts where winter wheat is to be planted. The average level of major dams has increased as compared to the previous year (101% in 2022; 96% in 2021).

Gauteng

Normal to above-normal rainfall was received that impacted horticultural crops. The veld has deteriorated due to winter conditions. There were reports of African Horse Sickness, African swine fever, highly pathogenic avian influenza, Bluetongue and Salmonella Enteritidis. The average level of major dams has slightly increased (101% in 2022; 98% in 2021).

KwaZulu-Natal

Dry conditions prevailed over most parts with heavy rains received in Ugu and Ilembe Districts which resulted in flooding. The drought monitor for mid-May shows that conditions continued at level 2, drought advisory for the whole province. Summer pastures have stopped growing except along the coastal areas. Winter pastures are growing well with a large variety of mixtures being used. Land preparations for winter crops such as wheat have not started because harvesting of maize for grain is still in progress. Harvesting was delayed due to accessibility of the maize lands after the April and late May rains. Good crops of maize silage and hay bales (conserved feed) has been grown and conserved. Livestock condition remains good. Tick burdens have possibly decreased slightly since the start of the frosts and dipping and deworming schedules should be adjusted according to sound veterinary and/or Extension Officials advice. Managing livestock numbers according to the available fodder is essential through the winter season into spring and summer. Fair to good veld and vegetation conditions continued across the province. Below average veld fires have been reported. The average level of major dams has increased as compared to previous year (90% in 2022; 71% in 2021).

Limpopo

The province received normal to above-normal rainfall except for Mopani District and some parts of Waterberg District where below-normal rainfall was received. Farmers in almost all districts have harvested vegetable crops, while dry-land farmers are planting winter crops. The conditions of livestock have improved due to the improvement of veld and grazing lands where there was good rain but poor in areas where below-normal rainfall was received. Farmers are continually advised to provide feed to supplement and to destock older animals to prevent production loss. There are incidences of Foot and Mouth disease outbreak in Thulamela and Collins Chabane Local Municipalities within Vhembe District. Veterinary officials are controlling and placing livestock in quarantine. The average level of major dams has increased (89% in 2022; 85% of 2021).

Mpumalanga

Above-normal rainfall was received. Crops are being planted in different districts; land preparations and harvesting continues in other districts. Livestock is in poor condition in areas where additional feed is not being provided, and reasonable to good condition in other areas. Pastures are in reasonable to good condition. The average level of major dams has increased to 95% as compared to 84% in 2021 during the same period.

Northern Cape

NIL REPORT.

North West

The veld and livestock are in reasonable to good condition as a result of summer rains. The yield of grain crops is expected to be low due to flooding that occurred during summer. Foot and Mouth disease continues to be monitored and controlled. The average level of major dams has slightly increased (82% in 2022; 81% in 2021).

Western Cape

Below-normal rainfall was received in May, with only the eastern part of the Central Karoo District receiving above-normal rainfall. In June rainfall was normal. The grape, pome and stone fruit harvests have been completed, with the citrus harvest season well underway. Winter grains have been planted. The veld condition varies from average (winter rainfall region) to good (summer rainfall region). Livestock condition is good. Overgrazing occurs due to high stocking rates in communal areas and fodder shortages in arid areas. Drought relief initiatives provide fodder to farmers in drought affected areas. African Swine Fever, African Horse Sickness and sheep scab incidents were reported. The average level of major dams has decreased (61% in 2022; 67% in 2021). The level of irrigation dams in the Klein-Karoo and West Coast regions is a concern.

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 2022/07/04

III. AGRICULTURAL MARKETS

Livestock domestic markets

According to ABSA, Class A carcass prices have been stable over the past weeks at levels above R60.00 per kg. Class C prices, in turn, have come down from the highs experienced during mid-June. Prices are expected to remain stable at around R60.00 per kg for class A and R47.00 per kg for class C over the coming months. Despite consumers being under increased economic pressures, lamb prices have continued to firm due to constrained availability. Mutton prices, in turn, have eased somewhat but is around 8% higher compared to a month ago. Pork prices have been fluctuating around R28.00 per kg for porkers and R 27.00 for baconer. It is expected that pork prices will remain stable over the coming months. Poultry prices continue to remain firm, supported by global price growth and a weakening exchange rate.

Producer prices for selected livestock commodities	Beef	Mutton	Pork	Poultry
Open market: Class A / Porker / Fresh whole birds (R/kg)	60.3	107.28	27.78	33.65
Open market: Class C / Baconer / Frozen whole birds (R/kg)	46.3	77.69	27.12	31.5
Contract: A2/A3* / IQF (*includes fifth quarter) (R/kg)	60.83	-		30.13
Import parity price (R/kg)	-	-		
Weaner Calves / Feeder Lambs (R/kg)	36.90	52.1		

ABSA: 2022/07/01

Major grain commodities

Local white and yellow maize prices have followed global markets and is lower compared to a month ago, decreasing by 5.4% and 6.8% respectively. Local wheat prices decreased by 2.0% but 8.0% higher compared to a month ago. Wheat planting is in full swing and good production conditions and high local prices present a good wheat production climate for this season. Soybean prices decreased by 3.0% while sunflower prices increased by 1.5%. These prices were lower compared to a month ago with soybeans 7% lower and sunflower seed 3.7% lower.

Commodity	Future Prices ((2022/06/28) R/ton				
	Jul-22	Sep-22	Dec-22	Mar-23	May-23
White maize	4 358.00	4 403.00	4 467.00	4 433.00	4 163.00
Yellow maize	4 370.00	4 418.00	4 494.00	4 467.00	4 230.00
Wheat	7 434.00	7 378.00	6 931.00	7 068.00	n/a
Sunflower	10 409.00	10 546.00	10 773.00	10 684.00	10 093.00
Soybeans	8 579.00	8 709.00	8 837.00	8 789.00	8 290.00

SAGIS: 2022/06/30

IV. SADC REGION

The June Famine Early Warning Systems Network (FEWS NET) reported that the ongoing harvest is improving household food access across most of the region, although some areas continue to face food deficits. While production has generally been favorable in 2022, poor rainfall and conflict have resulted in lower-than-normal production in some areas of Zimbabwe, Malawi, Madagascar, Mozambique, DRC, and Angola. In these areas, household food stocks from own production are likely only to last about one to three months. In these areas, poor households are expected to

maintain Crisis (IPC Phase 3) outcomes through at least September. In areas where rainfall was average to above average, Minimal (IPC Phase 1) and Stressed (IPC Phase 2) outcomes are most likely through September as households consume own-produced foods.

FEWS NET further described that conflict in DRC and the Cabo Delgado Province of Mozambique persists, leading to significant disruption to the agricultural season and continued displacement. According to OCHA, since March 2022, displacement has increased by 614,000 people. On top of increases in conflict in North and South Kivu, an upsurge in conflict in Djugu territory in Ituri will likely drive declines in food and income access. In Mozambique, the food insecurity situation remains precarious even as households return to their area of origin. Based on information from IOM, over 7,800 returnees were reported in Muidumbe, Palma, and Macomia districts. Across conflict-affected areas of Southern Africa, households affected by conflict face difficulty engaging in their typical livelihood activities, notably agricultural activities. In some cases, cropping activities took place; however, armed actors either destroyed or looted crops. Furthermore, humanitarian access is a challenge in conflict-affected areas of DRC and Mozambique. Staple food prices remain high across much of the region, despite the harvest due to the high international prices. Additionally, macroeconomic conditions in Zimbabwe are of concern as the inflation rate has significantly increased in the last month. This, combined with shortages of market goods like cooking oil, maize meal, and sugar, has driven up prices significantly, with many markets switching to sales only in USD. In Mozambique, approximately 60 percent of monitored markets reported maize grain prices above the five-year average in April. While in Malawi, maize prices in April were up to 75 percent higher than in April 2021.

[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

Winter grain crops have been planted in winter rainfall areas. Summer crops are being harvested however; yields are anticipated to be lower in some areas due to the impact of rain. The veld and livestock is in reasonable to good condition but poor in the western parts of the country. African Horse Sickness and Swine Fever were reported in Gauteng and the Western Cape. There were cases of sheep scab in the Western Cape; highly pathogenic avian influenza, Bluetongue and Salmonella Enteritidis in Gauteng. Foot and Mouth disease continues to be controlled in Limpopo and North West Provinces. The average level of major dams remains high in the majority of provinces.

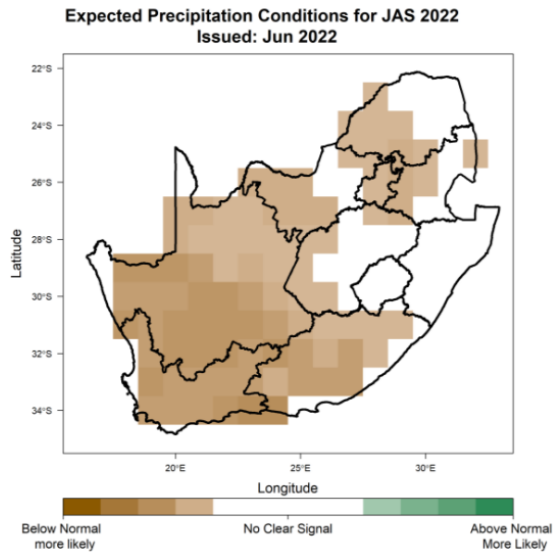
V. MONTHLY CLIMATE OUTLOOK

Seasonal Climate Watch: July to November 2022

State of Climate Drivers

The El Niño-Southern Oscillation (ENSO) is currently in a La Niña state, and forecasts indicate that it will likely remain in this state during the coming seasons. During winter, the presence of ENSO has less of an impact. Thus, the presence of the current La Niña event is not expected to have any significant impact on rainfall in the coming seasons.

Figure 1 – Rainfall



The multi-model rainfall forecast indicates below-normal rainfall for the south-western half of the country and notably above-normal rainfall over parts of Kwa-Zulu-Natal towards the spring season.

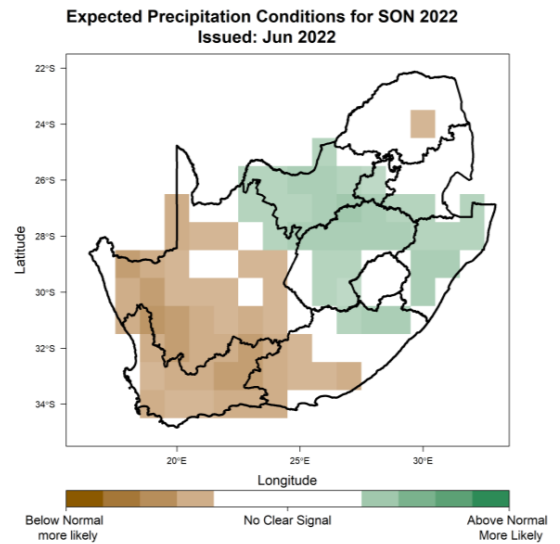
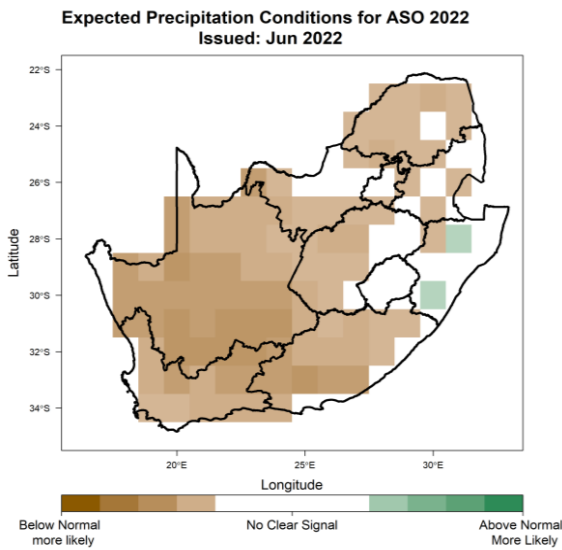
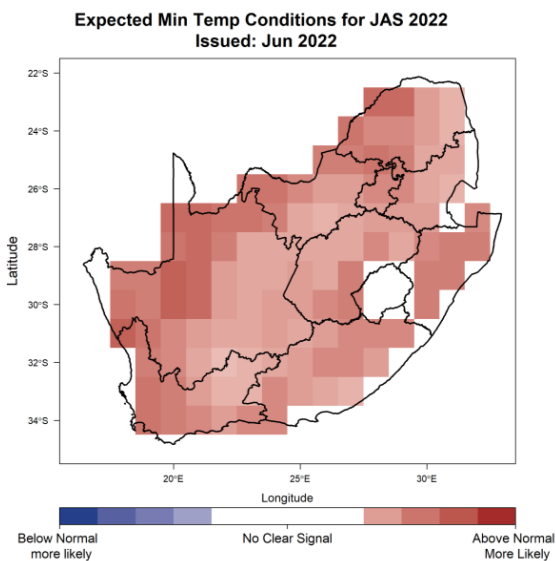
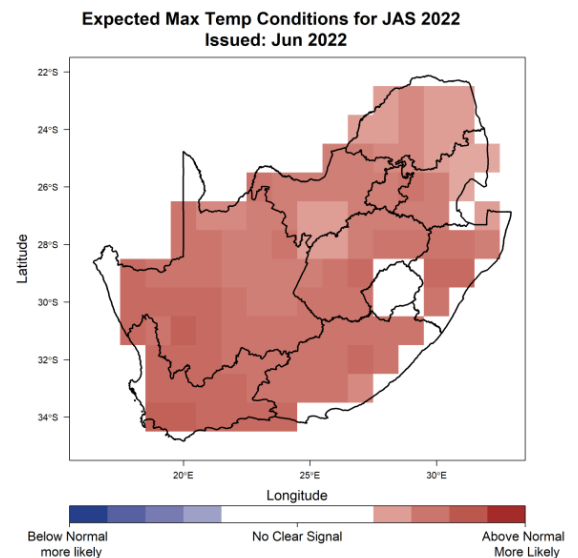


Figure 2 – Minimum and Maximum temperatures

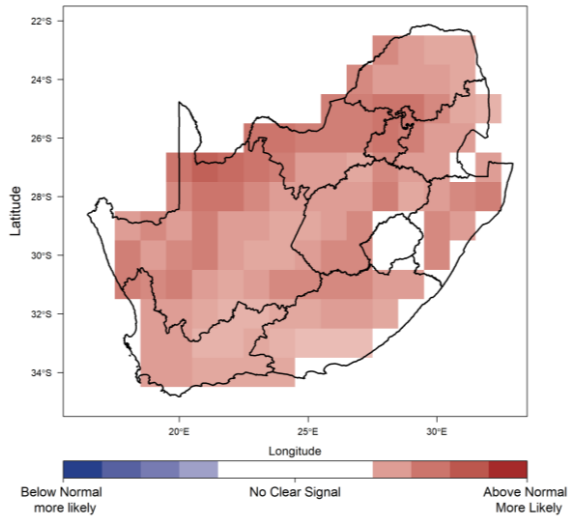
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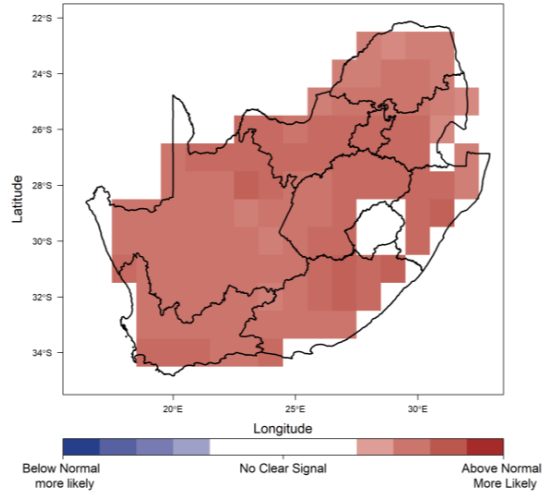
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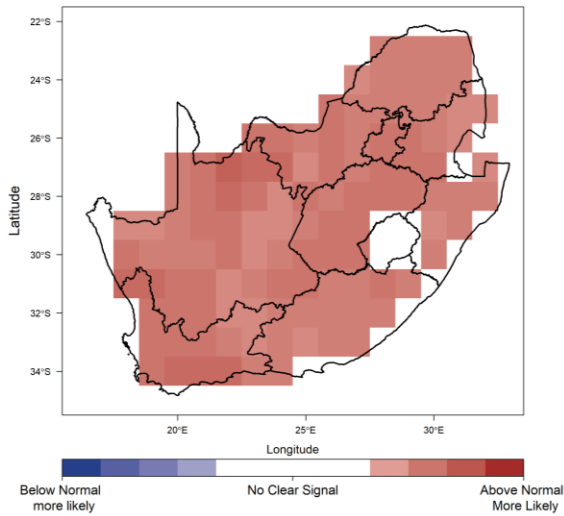
Expected Min Temp Conditions for ASO 2022
Issued: Jun 2022



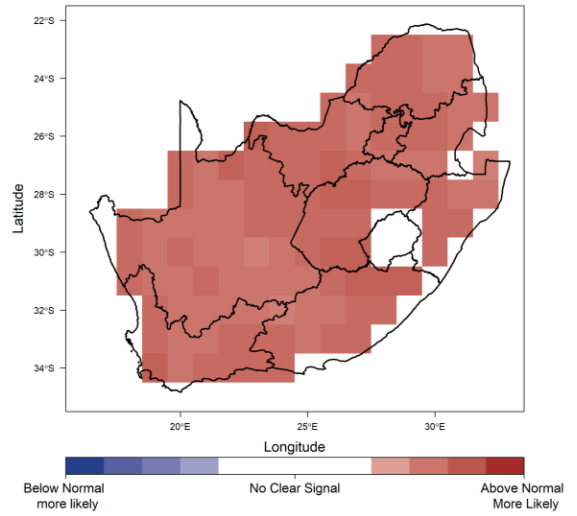
Expected Max Temp Conditions for ASO 2022
Issued: Jun 2022



Expected Min Temp Conditions for SON 2022
Issued: Jun 2022



Expected Max Temp Conditions for SON 2022
Issued: Jun 2022



Both maximum and minimum temperatures are expected to be above-normal for most of the country.

In summary, below-normal rainfall is expected for winter rainfall areas. It is anticipated that temperatures will be above-normal. 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. Winter crops: 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 minimize evaporation.
- Minimise compaction by reducing the passing of heavy machinery in the field.

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.
- Stick to normal planting windows if appropriate 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.
- Lay out planting rows parallel to the prevailing direction of the cold air flow.
- Keep air drainage pathways open to insure good air drainage and elimination of frost pockets.

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

- 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.
- 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.
- Avoid over irrigation because that can create problems e.g. water logging and diseases.
- 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.
- 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.
- Analysis of vegetation/soil samples can benefit the decision for supplement composition.
- Sell mature, 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 maintain firebreaks in all areas. 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 flammable material capable of carrying a veld fire across it.
- Firebreaks may be temporary or permanent.
- Firebreaks should consist of fire-resistant vegetation, non-flammable 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. Flooding

Heavy rainfall raises the water level. When the water level is higher than the river banks or the dams, water flows out from the river and flooding occurs.

Preventive measures:

- Construction of proper drainage systems. Drains must be cleaned constantly as they ensure proper water irrigation.
- Mechanical land treatment of slopes such as contour ploughing or terracing to reduce the runoff coefficient.
- Construction of small water and sediment holding areas.
- Construction of floodways (man-made channels to divert floodwater).
- Terracing hillsides to slow flow downhill.
- Water pumps in rivers likely to be affected should be lifted from the river banks when a warning for heavy rain has been issued.

What to do when flooding is forecasted:**Avoid:**

- Cutting grass in the rainy season as this can result in nutrient depletion.
- Applying fungicides and pesticide (plants and animals).
- Applying Nitrogen fertilizer as this can burn plants. Dumping fertilizer in one spot can cause the roots below the fertilizer to be burnt and die.
- Irrigation, this can result in waterlogging leading to nutrient depletion.

Other measures to implement:

- Cover Urea licks to prevent them from becoming toxic.
- Provide shelter for animals (young ones can die easily).
- Leave cultivated areas coarse.
- Relocate/ move animals to a safe place.
- Be extra cautious for pest and diseases after rain has fallen, as high moisture content and high temperatures may trigger these.
- Assume that flood water contains sewage and might be harmful for human and livestock consumption.
- Before leading livestock across a river, check whether the water level is rising. This is especially necessary if it is already raining.

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 acts as a blanket, traps eroded particles and reduces the wind speed at ground level.
- Plant evergreen trees growing densely and perpendicular to the 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 overgrazing.
- Practice conservation farming
 - Maximize retention of crop residues.

I. Cold spells (snowfall and frost)

When temperatures plunge below zero, livestock and crops need to be given extra attention. Prevention is key in dealing with hypothermia, and other cold weather injuries in livestock and crops. Following are a number of concerns and recommendations:

Livestock:

- Hypothermia and dehydration are a serious concern in animals during cold and wet conditions. Wind-chill also adds greatly to the cold stress for animals.
- Livestock should be provided with windbreak, roof shelter and monitored for signs of discomfort (extensive shivering, weakness, lethargy, etc.)
- It is very important that livestock be provided with extra hay/forage/feed to double the calories for normal body heat maintenance during extremely cold conditions.
- It is critical that livestock have access to drinking water. Usual water sources may freeze in low temperatures and dehydration becomes a life threatening factor. In general, livestock tend to drink less water in extremely cold conditions.
- Special attention should be paid to very young and old animals because they may be less able to tolerate temperature extremes.
- Do not shear Angora goats. Also, take extra time to observe livestock, looking for early sign of diseases and injuries.
- Severe cold-weather injuries or death primarily occur in the very young or in animals that are already debilitated.
- Cases of cold weather-related sudden death in calves often result when cattle are suffering from undetected infection, particularly pneumonia.
- Livestock suffering from frostbite don't exhibit pain. It may be up to two weeks before the injury becomes evident as freeze-damaged tissue starts to slough away. At that point, the injury should be treated as an open wound and a veterinarian should be consulted.

Crops:

- Prune out the lower portions of windbreaks to allow air to pass through to avoid the formation of a frost pocket.
- Wrapping the trunks with materials such as newspaper, cardboard, aluminium foil will prevent much of frost damage.
- With more severe frosts, canopy death can occur and trunk coverings need to extend up beyond the graft union, so the tree can reshoot from undamaged buds above the graft once the wraps are removed.
- Use heating devices such as orchard heaters to raise temperatures in plantings.

The veld and livestock are in reasonable to good condition in most areas. However, farmers are advised to keep livestock in balance with carrying capacity of the veld, and provide additional feed such as relevant licks. Winter grain crops have been planted in the Western Cape. The seasonal forecast anticipates below-normal rainfall for the winter rainfall areas but above-normal over KwaZulu-Natal. It is expected that temperatures may be warmer than normal.

With the current conditions in mind as well as the seasonal forecast, winter crop farmers are advised to wait for sufficient moisture before planting and stay within the normal planting window. As below-normal rainfall is anticipated, farmers are also advised to be conservative in their planting i.e. planting density/cultivar/area being planted. In addition, they should consider drought tolerant cultivars where possible. Farmers using irrigation should reduce the planting area in line with water restrictions in their zones. Farmers need to follow the weather and climate forecast regularly so as to make informed decisions.

Livestock should be provided with enough water points on the farm as well as shelter during bad weather conditions. As the veld has recovered in many summer rainfall areas, it continues to dry out

during winter thereby increasing the risk of veld fires. Therefore the creation and maintenance of fire belts should be prioritized as well as adherence to veld fire warnings. Episodes of cold spells and localized flooding resulting from frontal systems are likely during winter and measures 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: <https://www.dalrrd.gov.za/>.

For more information contact:-

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