



**National Agro-meteorological Committee (NAC) Advisory on the
2022/23 autumn and winter seasons
Statement from Climate Change and Disaster Risk Reduction
08 DALRRD 2022**

11 May 2023

Considering 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 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 (rainwater 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

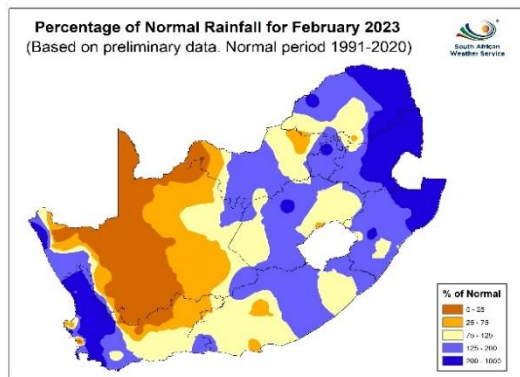


Figure 2

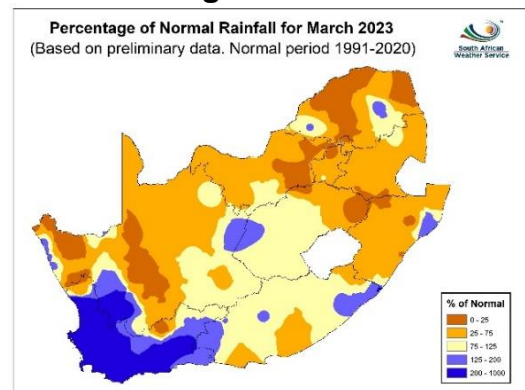


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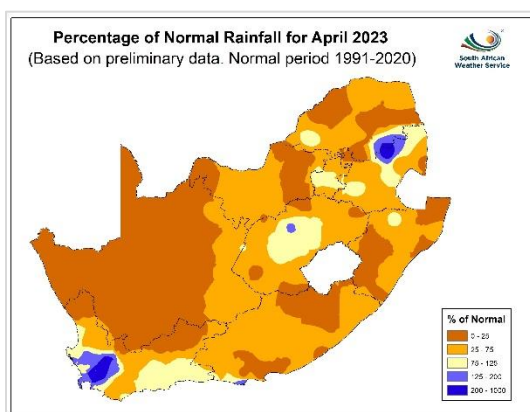
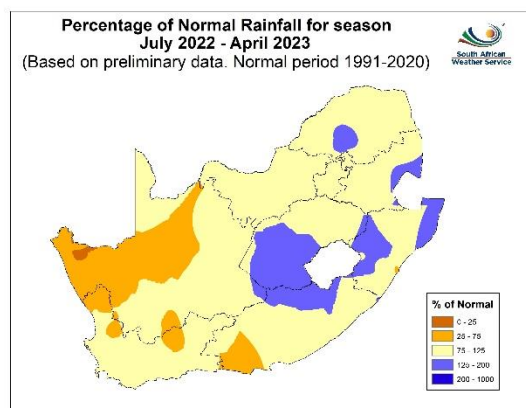
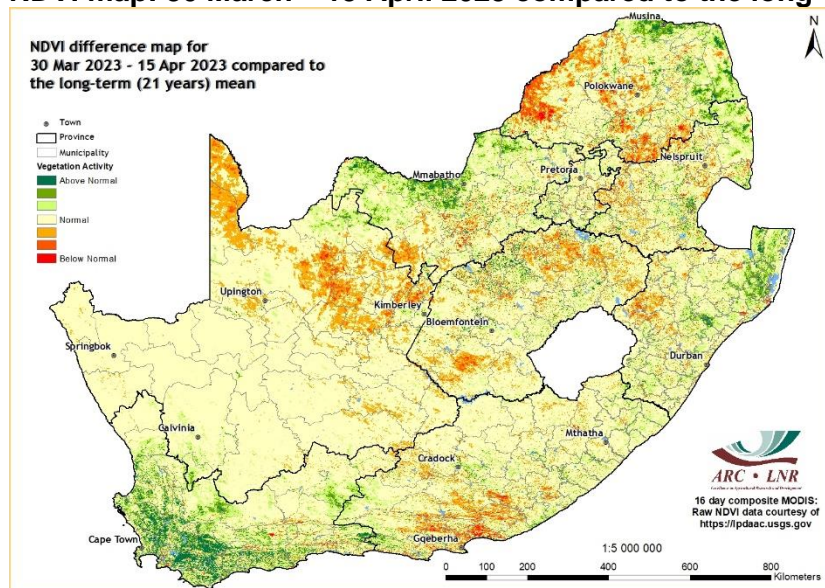


Figure 4



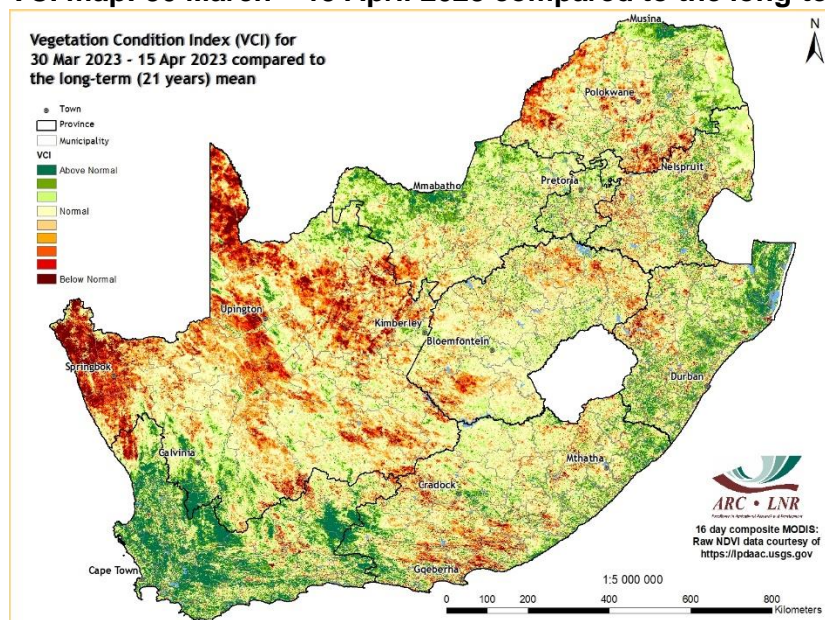
During February, above normal rainfall was received over the central and eastern half of the country as well as the extreme western parts of the country (**Figure 1**). The remainder of the country received normal to below normal rainfall. In March, above normal rainfall was confined to the south-western parts of the country becoming normal in the Eastern Cape and Free State. Other parts of the country received below normal rainfall (**Figure 2**). April was generally dry except for patches of above normal rainfall in the Western Cape and the northern parts of Mpumalanga (**Figure 3**). For the season July 2022 – April 2023, normal rainfall was received countrywide, however there were some patches of above normal rainfall in the central and eastern parts of the country (**Figure 4**). The north-western parts of the Northern Cape received below normal rainfall.

NDVI map: 30 March – 15 April 2023 compared to the long-term mean



Compared to the historical averaged vegetation activity, the 16-day NDVI map for the end of March to mid-April shows several areas where vegetation activity is below normal in parts of the Northern Cape, Eastern Cape, Free State and Limpopo. Other areas across the country experienced normal to above normal vegetation activity.

VCI map: 30 March – 15 April 2023 compared to the long-term mean



The 16-day VCI map for the end of March into mid-April indicates that most of the Northern Cape, parts of the Eastern Cape, Free State and Limpopo experienced below normal vegetation conditions. The rest of the country experienced near to above normal vegetation conditions.

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

II. CONDITIONS IN THE PROVINCES DURING MARCH/APRIL

Eastern Cape

The province received normal rainfall. The conditions of crops are good except in the western segment of the province. However excessive rains delayed planting in some areas, but some crops managed to catch up with those planted earlier. The condition of livestock is good to very good and the grazing veld has improved. The condition of pasture is good but poor in Sarah Baartman due to poor rainfall received. The condition of rangeland is good in O R Tambo and Joe Gqabi Districts but poor in the western side of the province. Damages to infrastructure, cropping land and loss of livestock occurred due to hailstorm and disruptive rains which resulted in flooding. Assessments have been conducted and funding reprioritized for recovery projects. The average level of major dams has increased to 76% in 2023, as compared to 70% of 2022.

Free State

Normal rainfall was received in most parts. Autumn pastures are in excellent condition especially those that are under irrigation. They are green and have developed good growth and bulk development. Livestock condition is still good. Farmers are advised to continue with supplementary feeding as the winter season approaches. Soil preparation for winter wheat and fodder has started and planting operation is due especially in the eastern parts of the province where harvesting of sugar beans has started. The average level of major dams has decreased as compared to the previous year during the same period (98% in 2023; 104% in 2022).

Gauteng

Below normal rainfall was received in March. The above normal rainfall during summer resulted in poor quality of some crops. Many farmers have harvested their summer crops and are preparing fields for winter production. Power outages have resulted in wilting of some crops that rely on irrigation. The veld and livestock remain in reasonable to good condition. Three-day stiffness in cattle has been reported, also foot rot cases due to heavy rains earlier in the year. There were also cases of African Horse Sickness. The incidents have been attended to. The average level of major dams has decreased as compared to the previous year during the same period (99% in 2023; 102% in 2022).

KwaZulu-Natal

Rainfall was below normal for most of the interior. Summer crops are in various stages of being harvested. Other farmers are preparing land and establishing winter pastures. The veld and livestock conditions are reportedly good. Farmers are advised to prepare winter feeding schedules and to regularly evaluate grazing and available feed to avoid overgrazing. As the veld has recovered due to summer rains, farmers have been advised to start earlier with preparation for veld burns and fire breaks. Reports of thunderstorms accompanied by strong wind and hail causing structural damage, vehicles damaged, road closures and displacement of residents in uMhlathuze were received. Assessments are underway. Below normal veld fires were reported in the province. The average level of major dams has decreased as compared to the previous year during the same period (90% in 2023; 92% in 2022).

Limpopo

Below normal rainfall was received. Throughout the province, farmers under irrigation have harvested vegetable crops, while dry land farmers are continuing to harvest late summer crops such as maize, sugar beans and cowpea. In Mopani District farmers are experiencing crop failure due to water shortage. The condition of livestock has improved as well as the veld conditions due to good rains received. Farmers are continuously advised to provide supplementary feed, especially in areas where the veld has not yet improved. Incidences of hailstorm have been reported in Makhado and officials are conducting damage assessments. There was also an incident of flooding which has resulted in crop damages in Mookgophong local municipality within the Waterberg District. Assessments are

being conducted. The average level of major dams was at 89%, the same as in the previous year during the same period.

Mpumalanga

Below normal rainfall was received. Grain crops are growing very well and are in good condition. Farmers are preparing land for cool weather vegetables. Also, in Bohlabela district land preparation for the winter season has begun for farmers under irrigation. Livestock is mostly in fair to good condition. Natural pastures are in good condition as well as the irrigated pastures. The average level of major dams is at 99% in 2023 as compared to 95% of 2022.

Northern Cape

NIL REPORT.

North West

Below normal rainfall was received. The livestock condition is reasonable to good, and the veld is beginning to dry as winter approaches. Farmers were advised to begin putting precautionary measures in place for conditions conducive for veld fires. The average level of major dams has increased as compared to previous year during the same period (90% in 2023; 81% in 2022).

Western Cape

Above normal rainfall was received across the province in March. The average minimum and maximum temperatures were normal. The fruit harvest season is progressing very well. Apples, pears, lemons, table, and wine grapes were being harvested. Veld and planted pasture conditions in many areas are above normal with below normal conditions remaining in Matzikama and the Central Karoo. Livestock is in good condition. Farmers continue to provide supplementary fodder in dry areas. Isolated outbreaks of bluetongue, sheep scab, avian influenza and African horse sickness were reported and attended to. The average level of major storage dams is at 53%, the same as last year during the same period.

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 2023/05/09

III. AGRICULTURAL MARKETS

Livestock domestic markets

ABSA stated that local beef prices have remained constant over the past weeks with weaner prices recovering on the back of lower maize prices. As with beef, local lamb prices remained under pressure as a result of constrained consumer income. Feeder lamb prices, in turn, have recovered notably since the lows of early April as grain producers are demanding lambs for summer crop harvest residues. Local pork prices seem to have stabilized to levels around R30.00 per kg after the consistent price decreases apparent since December 2022. This declining trend was in pace with recent trends in red meat prices. The biggest news in local poultry markets, was the outbreak of bird flu in the Paardeberg region of the Western Cape. The exact strain of this outbreak is still undetermined. In terms of poultry price dynamics, whole bird prices have increased slightly over the past month, whilst IQF prices decreased.

Producer prices for selected livestock commodities	Beef	Mutton	Pork	Poultry
Open market: Class A / Porker / Fresh whole birds (R/kg)	53.0	-	30.66	34.83
Open market: Class C / Baconer / Frozen whole birds (R/kg)/mutton	47.6	58.68	30.01	34.54
Contract: A2/A3* / IQF (*includes fifth quarter) (R/kg)	54.97	84.56	-	31.21
Import Parity (R/Kg)		-	-	-
Weaner Calves / Feeder Lambs (R/kg)	36.52	41.27	-	-

FNB: 2023/05/03

Major grain commodities

Absa stated that maize prices traded sideways for the week ending March 31st. Prices continue to trade below both U.S. and Argentina export parity prices. Wheat prices are expected to trade sideways over the next 3 months. Global wheat plantings are up by 9%, whilst sentiments around the Black Sea grain deal remain uncertain. Soybean prices decreased by 4.7% for the week ending March 31st. They were 13.8% lower compared to a month ago and 5.4% lower year on year. The local production forecast for soybeans increased by 58 470 tons.

Commodity	Future Prices ((2023/05/02) R/ton				
	May-23	Jul-23	Sep-23	Dec-23	Mar-24
White maize	3 495.00	3 481.00	3 565.00	3 681.00	3 731.00
Yellow maize	3 593.00	3 631.00	3 705.00	3 805.00	3 818.00
Wheat	6 468.00	6 430.00	6 398.00	6 347.00	6 472.00
Sunflower	8 140.00	8 348.00	8 560.00	8 800.00	8 750.00
Soybeans	7 330.00	7 500.00	7 663.00	7 832.00	7 914.00

SAGIS: 2023/05/04

IV. SADC REGION

The April Famine Early Warning Systems Network (FEWS NET) reported that across much of the region, the start of the green harvest is beginning to reduce food consumption gaps as the lean season ends. In Madagascar, households in the Grand South are facing Crisis (IPC Phase 3) outcomes as they remain reliant on humanitarian assistance to mitigate worse outcomes, while Crisis (IPC Phase 3) outcomes are present in southern Malawi following widespread flooding from Tropical Storm Freddy, deficit-producing areas of Zimbabwe, southwestern and southern Angola, and the southern lowlands of Lesotho, along with the conflict-affected areas of Mozambique and DRC. However, Emergency (IPC Phase 4) outcomes are present in health zones territories of Djugu, and conflict impacted Rutshuru of DRC. Across the region, the start of the main harvest season in April is expected to improve food availability and access, driving improved food security outcomes across much of the region. Crop conditions remain mixed for main-season cereals as prolonged dry spells and high temperatures in February and March resulted in moisture stress, particularly in southern Angola and southern and central Zimbabwe. In late February and early to mid-March, Cyclone Freddy brought heavy rains, flooding, and strong winds to Madagascar, Mozambique, Malawi, and Zimbabwe, with varying crop effects. However, in Malawi, the impacts of Cyclone Freddy are expected to drive higher levels of acute food insecurity than FEWS NET previously projected in February. The cyclone affected around 20 to 30 percent of the population in southern Malawi, and severely flood-affected districts will likely remain in Crisis (IPC Phase 3) through September.

FEWS NET further reported that in Mozambique and Malawi, flooding from cyclone Freddy, displacements, and damage to water, sanitation, and hygiene infrastructure are leading to cholera outbreaks. In Mozambique, the cumulative number of reported cases increased from 6,329 to over 11,500 cases in March across 38 districts in eight provinces. In the DRC, epidemics have been resurgent in the IDP camps of North Kivu. According to MSF, an average of 90 new cholera cases were reported daily, with nearly 900 cases of measles reported since January in the Nyiragongo health zone alone. Across southern Africa, food prices seasonally increased in March. However, maize prices will likely begin declining in April as market demand for maize grain declines as poor households rely more on their harvests for food. The continued rise in food inflation is driving further increases in headline inflation rates, negatively impacting the purchasing power of poor households across the region. High global oil prices and depreciating domestic currencies also elevate inflation levels. Additionally, power rationing has become a chronic problem for several economies as demand continues to outstrip supply, continuing to impact economic and livelihood activities.

[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

In general, crops, the veld and livestock are in reasonable to good condition. Severe thunderstorms and flooding caused damages to crops and infrastructure in the Eastern Cape, KwaZulu-Natal and Limpopo Provinces. African horse sickness was reported in Gauteng and the Western Cape. Isolated outbreaks of bluetongue, sheep scab and avian influenza were reported and attended to in the Western Cape. The average level of major dams has increased in some provinces and decreased in 3 provinces. Over SADC the start of the green harvest is beginning to reduce food consumption gaps as the lean season ends.

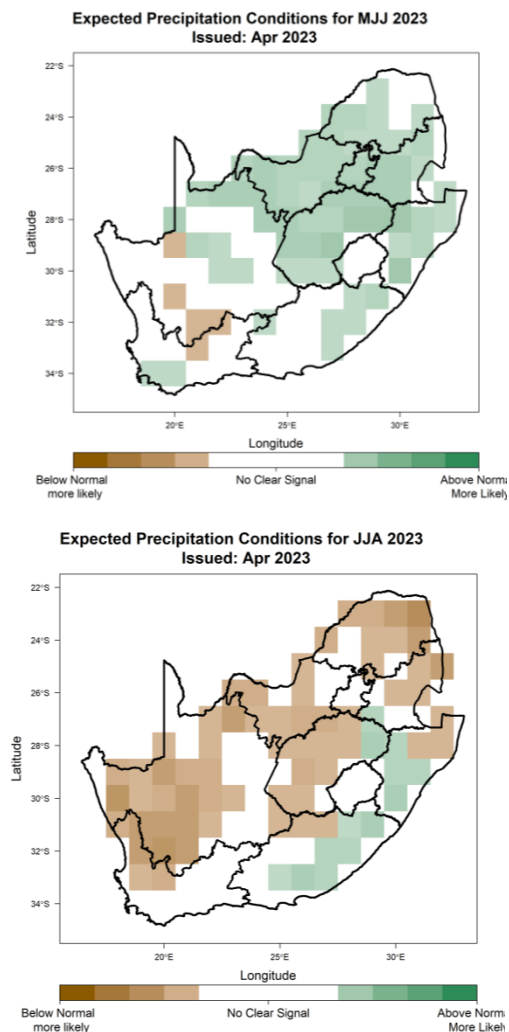
IV. MONTHLY CLIMATE OUTLOOK

Seasonal Climate Watch: May to September 2023

State of Climate Drivers

The El Niño-Southern Oscillation (ENSO) is currently in a Neutral state, and forecasts indicate that it will likely remain in a neutral state during winter, with predictions indicating a higher probability to switch to an El Niño state during late-spring (Jul-Aug-Sep). However, ENSO's impact is limited for the coming seasons until the next summer season which may be impacted by an El Niño state if early predictions are correct. Caution is advised however as changes in the ENSO prediction may change during winter and only monitoring is advised at this stage.

Figure 1 – Rainfall



The multi-model rainfall forecast indicates above-normal rainfall for most of the country during early winter. Of importance for the next two seasons, mid-winter (Jun-Jul-Aug) and late-winter (Jul-Aug-Sep), there is below-normal rainfall expected for the south-west and above-normal rainfall for the southern coastal areas. As most of the rainfall during winter is expected in the far south-west, the below-normal rainfall conditions in those areas are expected to have a significant impact.

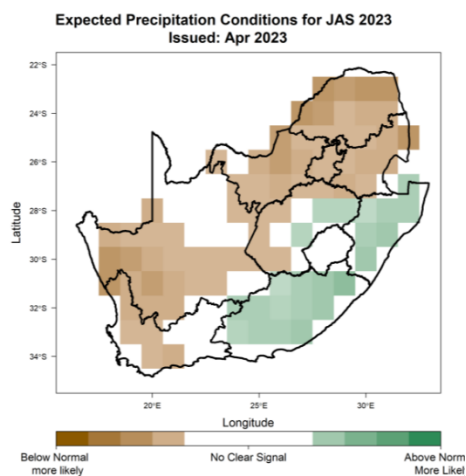
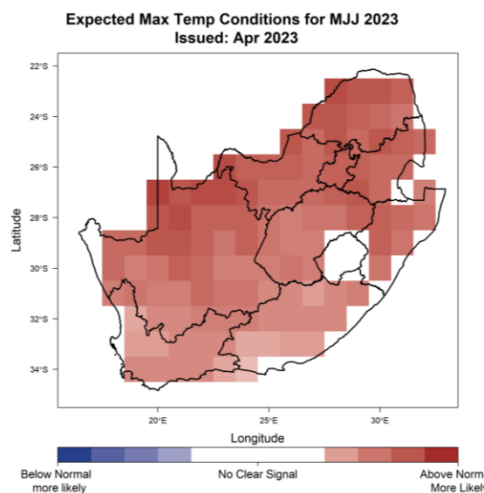
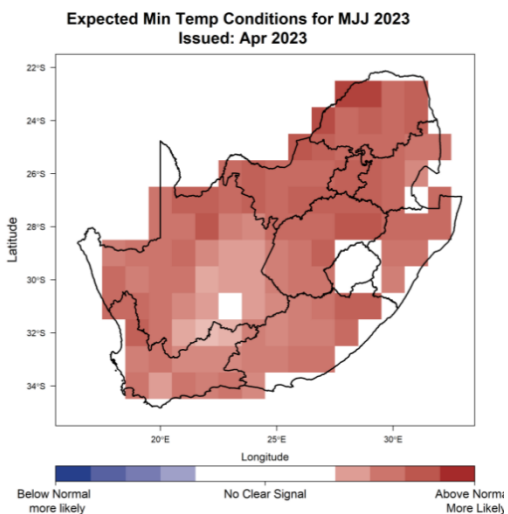
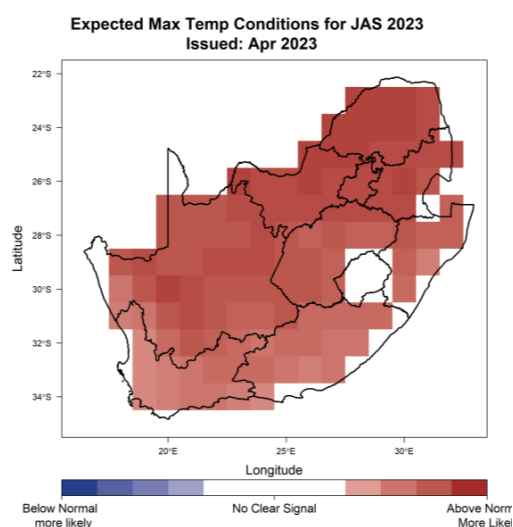
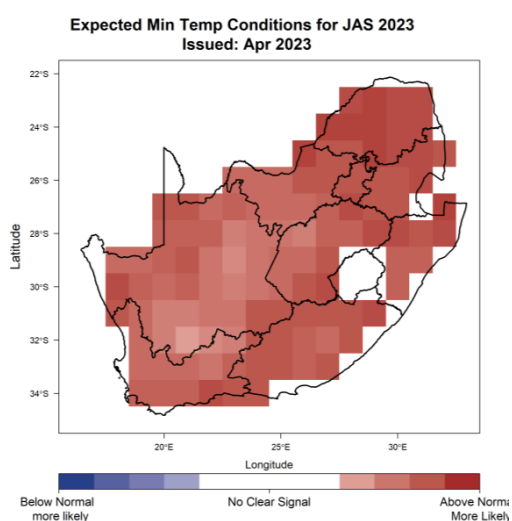
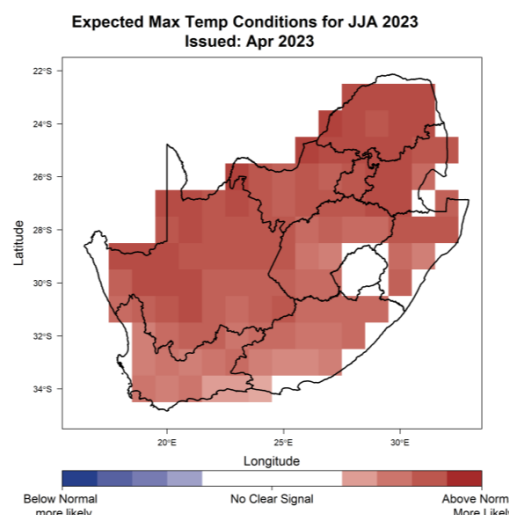
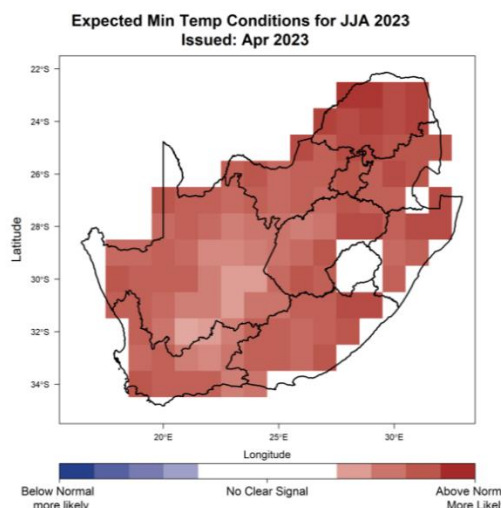


Figure 2 – Minimum and Maximum temperatures





Minimum and maximum temperatures are expected to be mostly above normal countrywide for the forecast period.

In summary below normal rainfall is anticipated for most winter rainfall areas during mid- and late winter, while temperatures are expected to be above normal countrywide. 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:

V. 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 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 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.
- 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

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 must 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 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 riverbanks 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 riverbanks 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.

Summer crops, the veld and livestock are in reasonable to good condition in most areas. However, severe thunderstorms and flooding caused damages to infrastructure. Below normal rainfall is anticipated in most winter rainfall areas during mid and late winter. Temperatures are expected to be above normal countrywide.

With the seasonal forecast in mind, winter crop farmers in winter rainfall areas are advised to wait for sufficient moisture before planting and stay within the normal planting window. As below normal rainfall is anticipated in these areas, 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. The weather and climate forecasts should be followed regularly to make informed decisions. Farmers must continually conserve resources in accordance with the Conservation of Agricultural Resources Act 1983, (Act No. 43 of 1983).

As winter approaches, the veld is drying out in many areas and therefore livestock should be kept in balance with carrying capacity of the veld and provided with additional feed such as relevant licks. Also, the livestock should be provided with enough water points on the farm as well as shelter during bad weather conditions including during very cold 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 strategies 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:-

<p>DALRRD, Directorate: Climate Change and Disaster Risk Reduction Private Bag X250 Pretoria 0001 Tel: 012 319 6775/ 6794 Email: MittaA@Dalrrd.gov.za</p>  <p>agriculture, land reform & rural development Department: Agriculture, Land Reform and Rural Development REPUBLIC OF SOUTH AFRICA</p>	<p>SAWS: Private Bag X097 Pretoria 0001 Tel: 012 367 6000 Fax: 012 367 6200 http://www.weathersa.co.za</p>  <p>South African Weather Service ISO 9001 Certified Organisation</p>	<p>ARC: Institute for Soil, Climate and Water Private Bag X79 Pretoria 0001 Tel: 012 310 2500 Fax: 012 323 1157 Email: iscwinfo@arc.agric.za, http://www.arc.agric.za</p>  <p>ARC • LNR Excellence in Research and Development</p>
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