

# National Agro-meteorological Committee (NAC) Advisory on the 2021/22 summer season Statement from Climate Change and Disaster Risk Reduction 05 DALRRD 2021

#### **07 February 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

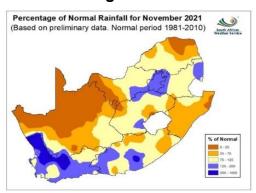


Figure 3

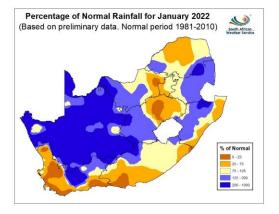


Figure 2

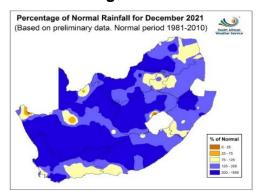
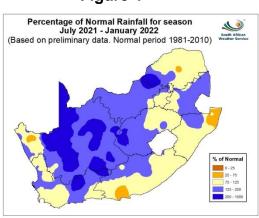
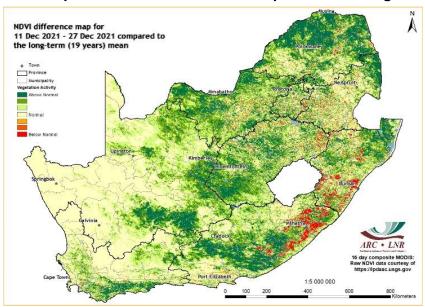


Figure 4



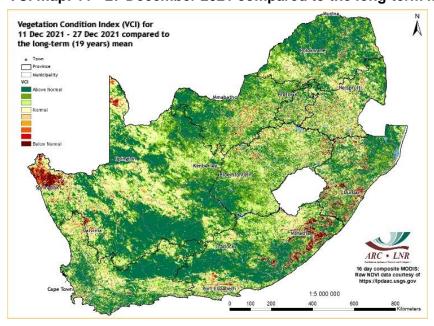
During November, near-normal to below-normal rainfall was received over most parts of the country with above-normal rainfall received over the Western Cape and Gauteng as well as some areas in the Eastern Cape, Mpumalanga, North West and Free State (Figure 1). During December, rainfall increased resulting in above-normal rainfall over the country (Figure 2). The rainfall continued to be above-normal mainly over the Northern Cape, parts of the Free State, North West and some eastern parts of the country in January 2022. The remainder of the country received near-normal to below-normal rainfall (Figure 3). The season July 2021 to January 2022 received above-normal rainfall over most of the central and western parts of the country but normal elsewhere (Figure 4).

NDVI map: 11 - 27 December 2021 compared to the long-term mean



Compared to the 19 years long term mean, the 16-day NDVI difference map for December shows that the country experienced mostly normal to above-normal vegetation conditions with pockets of below-normal conditions in isolated areas.

VCI map: 11 - 27 December 2021 compared to the long-term mean



The 16-day VCI map for December indicates that improved vegetation conditions have spread over many parts country, the although pockets of poor vegetation is observed in isolated areas in the Northern Cape, Eastern Cape and KwaZulu-Natal Provinces.

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

# II. CONDITIONS IN THE PROVINCES DURING DECEMBER/ JANUARY

#### Eastern Cape

The province received normal to above-normal rainfall that resulted in an early cropping season. However, excessive rain resulted in waterlogging of maize fields in O R Tambo and the eastern part of Amathole, as well as damaging vegetable gardens. Furthermore, pineapple fields in the Buffalo City Metro area were eroded by floodwater. Joe Gqabi District reported that crop (maize), vegetables and Lucerne are in very good condition. In Sarah Baartman District, crop conditions range from fair to good in areas like Graaff-Reinet due to shortage of water. In Ndlambe Local Municipality the chicory plant is performing very well and is in very good condition. Almost all districts reported very good livestock condition with the exception of Sarah Baartman District that reported fair to good livestock conditions, and fair conditions in Chris Hani District. Good to very good rangeland and pasture conditions were reported in almost all Districts, except in Chris Hani District where reasonable conditions were reported. Incidences of Brown locust swarms were reported in the district municipalities along the Karoo region and were controlled. Stock theft and jackals are problematic on small stock while bush pig and baboons destroy crops in parts of Sarah Baartman District. The average level of major dams has increased to 62% in 2022 as compared to 56% of 2021.

#### Free State

Above-normal rainfall was received. Conditions have drastically improved in the western and southern parts of the province especially areas that were burnt in the last summer by veld fires but water restrictions are still in place. The veld is in very good condition due to above-normal rainfall. Livestock condition is good. Farmers are advised to continue with supplementary feeding and dosing of flocks against worms especially sheep. Summer pastures are in excellent condition especially those that are under irrigation. Soil preparation operations that were in form were severely interrupted by flooding that has affected farming operations in the whole province for the 2021/22 growing season. The harvesting of wheat has been affected by rain and a lot of wheat was damaged and malted while still on the field. The pre-agricultural floods assessment that was conducted has revealed that seeds and fertilizer in most farms has been washed away. There was waterlogging, broken terraces, diversions and waterway were visible, numerous access farm roads and bridges were damaged as well as machinery, sheds and stores. There was a report of Brown locust in Phillipolis, Springfontein, Bethulie and part of Trompsburg. The swarms were successfully controlled. The dam levels continued to improve due to rains received. The average level of major dams has increased as compared to the previous year during the same period (104% in 2022; 101% in 2021).

#### Gauteng

Above-normal rainfall was received that resulted in flooding that affected crops, in particular vegetables and maize. Infrastructure was also damaged especially tunnels and storage areas. The veld is in good condition. Outbreaks of the highly pathogenic avian influenza (HPAI) (13) and Cestrum laevigatum (2) are being monitored. The average level of major dams has increased as compared to the previous year during the same period (102% in 2022; 97% in 2021).

#### KwaZulu-Natal

Very wet conditions were experienced in most parts of the province. However, places far in the northern areas such as Ulundi and Makhathini as well as some coastal areas recorded below-normal rains. The wet conditions caused by widespread showers, flooding, hail and severe thunderstorms with excessive lightning have caused damages to crops, horticulture, livestock, property and infrastructure. The drought monitor for mid-December shows that conditions remain at Level 2, drought advisory for the whole province. Summer and perennial pastures are in good

condition. Planting of summer crops is complete. Crops planted in flood plains have been damaged and will need to be replanted where possible, mainly vegetables, as it is now too late for maize. Livestock condition across all sectors is good and maintaining in the northern areas. Tick burdens are high. Regular dipping and deworming is very important during a season like what is being experienced. Veld and vegetation conditions were mostly near-normal across the province. Fall Army Worm and Stalk borer have been identified in Umzinyathi, Ugu, Mkhanyakude, Ethekwini, King Cetshwayo and Umgungundlovu. In Mkhanyakude, maize plants appear to be targeted by both Fall Army Worm and Stalk Borer, where Fall Army Worm damage is far more visible. Below normal veld fire incidents were reported in the province. The average level of dams has increased as compared to previous year (85% in 2022; 63% in 2021).

#### Limpopo

The province received normal to above normal-rainfall. Most irrigation farmers in Waterberg and Capricorn have harvested their vegetables while dryland farmers in those districts including in Vhembe and Mopani are currently planting summer crops. Grazing and veld conditions are improving especially in areas that received above-normal rainfall. The conditions of livestock are also improving, especially in some areas in Vhembe and Waterberg Districts where grazing has improved. Farmers are continually advised to purchase feed for supplement and to sell older livestock to minimise mortalities. The province still has bush encroachment challenges especially in Waterberg and Capricorn Districts. Incidents reported in Waterberg District was a case of dystocia in Boskop village and another two cases of prolep at Kauletsi village where some cattle do not have energy to push offspring when giving birth due to body conditions. Veld fire damages occurred on four farms in Vhembe, while damages on chicken houses was reported in Mopani due to a hailstorm. The average levels of major dams have increased to 89% in 2022, as compared to 71% of 2021.

# **Mpumalanga**

The province received above-normal rainfall during December. In Nkangala and Gert Sibande Districts planted vegetables are in good condition, although some cabbages in other areas have been damaged by water logging resulting from the heavy rainfall received. Grain crops such as maize are currently above knee level in most parts of the province. Maize crops are being monitored for Fall Army Worm and Stalk borer particularly in the Mkhondo Local Municipality. The livestock and veld are in good condition. The average level of major dams is at 93% in 2022 as compared to 77% of 2021.

# Northern Cape

**NIL REPORT.** 

#### North West

Above-normal rainfall caused flooding that disrupted planting of crops. The veld and livestock are in good condition. The average level of major dams is higher at 76% as compared to 67% of 2021.

Western Cape

**NIL REPORT.** 

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

Available: https://www.dwa.gov.za/Hvdrology/Weekly/Province.aspx

Dam levels as at 2022/01/31

#### III. AGRICULTURAL MARKETS

#### Livestock domestic markets

According to FNB good rainfall encouraged good grass cover and producers have held back on their stock for herd rebuilding. However this comes with its own risks with animal health costs likely to increase due to increased incidences of animal pests and diseases. Sheep showed gains across all categories; however feeder lambs are still 3% higher than above 3 years average for this time of the year. The pork market indicated downward pressure on prices due to the seasonal decline in demand and increased availability. The broiler market remains higher compared to last year; limited stock and increased in tariff and lower imports continue to provide upside support for the poultry market.

Producer prices for selected livestock commodities	Beef	Mutton	Pork	Poultry
Open market: Class A / Porker / Fresh whole birds (R/kg)	57.08	87.96	26.67	30.47
Open market: Class C / Baconer / Frozen whole birds (R/kg)	47.10	70.24	27.39	29.28
Contract: A2/A3* / Baconer/ IQF (*includes fifth quarter) (R/kg)/ Beef contract price (includes hides) (R/kg)	54.89	85.13	32.82	27.95
Import parity price (R/kg)	53.63	97.15		29.31
Weaner Calves / Feeder Lambs (R/kg)	41.05	40.82		

FNB: 2022/02/03

# Major grain commodities

ABSA indicated that local maize prices traded sideways. The Crop Estimates Committee published the preliminary area planted estimate that indicated a 5.29% decrease in area planted for maize compared to the previous season because of delayed plantings and crop damage in certain regions due to excessive rains. Wheat prices traded sideways and the Crop Estimates Committee forecast indicated a 2.59% increase in the production for wheat at 2.153 million tons. If realised this will be the largest wheat crop since 2002. Soybean prices increased and the Crop Estimates Committee indicated that the preliminary area planted for Soybeans is 10.02% higher than the previous season.

	Future Prices ((2022/02/01) R/ton							
Commodity	Feb-22	Mar-22	May-22	Jul-22	Sep-22			
White maize	3 652,00	3 609,00	3 549,00	3 557,00	3 615,00			
Yellow maize	3 790,00	3 773,00	3 663,00	3 657,00	3 714,00			
Wheat	5 840,00	5 887,00	5 920,00	5 938,00	5 880,00			
Sunflower	10 600,00	9 670,00	8 994,00	9 065,00	9 129,00			
Soybeans	8 494,00	8 410,00	8 284,00	8 393,00	8 490,00			

SAGIS: 2022/02/03

# IV. SADC REGION

The Famine Early Warning Systems Network (FEWS NET) issued in January 2022 reported that the October to December rainfall in much of the northeastern sector of the region as well as Madagascar was among the driest on the historical record. January rainfall, while erratic, did result in some decreases in rainfall deficits. Meanwhile, rainfall in the central and southern sectors of the region has been average to above average. Planting in central and southern Madagascar, much of Malawi, central and northern Mozambique, and northern Zimbabwe has been delayed by over a month. For those crops planted in January, consistent rainfall through the end of the rainy season in March is needed for crops, specifically maize, to reach maturity. High concern persists for households' ability to access food and income in southern Madagascar as most households are heavily reliant on humanitarian assistance for food due to consecutive droughts. Most households are experiencing Crisis (IPC Phase 3). These outcomes are expected to continue through April with large-scale planned humanitarian aid. The ongoing drought conditions and poor vegetation during the ongoing rainy season are driving poor 2022 harvest prospects and further declines in livestock body conditions are expected.

FEWS NET further reported that agricultural labor typically provides income for poor households to purchase market foods. Currently, in areas where rainfall through January was poor and erratic, these opportunities, including planting and weeding have been significantly impacted. Overall, in much of Madagascar, parts of Zimbabwe, Malawi, and Mozambique have lower than average agricultural labor opportunities. Due to these limited opportunities, labor supply is likely to increase, resulting in a decrease in labor wage for many poor households. As labor wages decrease and prices of basic commodities increase, households likely have weak purchasing power facing difficulty accessing market foods. Households in areas of Zimbabwe, central Mozambique, and southern Malawi where rainfall was poor for the 2020/21 season are market reliant on food during the ongoing lean season. Due to the delays in the start of the season, income from agricultural labor is below average, with many poor households in these areas experiencing Crisis (IPC Phase 3) outcomes. In some areas of Zimbabwe, Mozambique, and Malawi, humanitarian assistance is decreasing food consumption gaps and Stressed (IPC Phase 2) outcomes are ongoing. Crisis (IPC Phase 3) outcomes are ongoing and expected to persist in northern Mozambique, and Ituri, Tanganyika, North and South Kivu, and Kassai provinces of DRC as conflict disrupts 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

Above-normal rainfall was received across the country that resulted in flooding causing water logging in crop fields. Other crops were washed away and infrastructure damaged in many provinces. However, crops are in good condition in areas that were not flooded. Veld and livestock are also reported to be in good condition in most parts of the country. Harvesting of wheat has been affected by excessive rain in the Free State. Incidents of Fall Army Worm and stalk borer have been reported in KwaZulu-Natal while other provinces continue to monitor. Brown locusts have been reported and controlled in the Free State and Eastern Cape Provinces. Reports of dystocia and prolep have been received from some villages in Limpopo. Veld fires have also been reported in Limpopo. Dam levels continue to increase throughout the country.

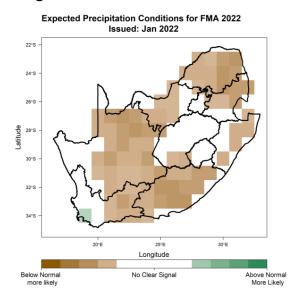
# V. MONTHLY CLIMATE OUTLOOK

# Seasonal Climate Watch: February to June 2022

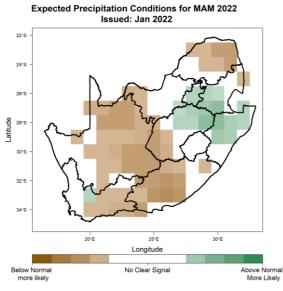
# **State of Climate Drivers**

The El Niño-Southern Oscillation (ENSO) is currently in a La Niña state and the forecasts indicate that it will likely remain in a La Niña state throughout the autumn seasons. During autumn, the presence of ENSO has less of an impact on rainfall. However, it may still affect summer rainfall areas up to the mid-autumn season. Thus, the presence of a La Niña during mid-autumn may still be favourable for above-normal rainfall for the summer rainfall areas.

Figure 1 - Rainfall



The multi-model rainfall forecast indicates mostly below-normal rainfall for the larger part of the country during the early-autumn (FMA), with some parts of the eastern interior changing to above-normal rainfall to be expected during mid-autumn (MAM). Parts of the north-eastern area of the country is also expected to receive above-normal rainfall during late-autumn (AMJ).



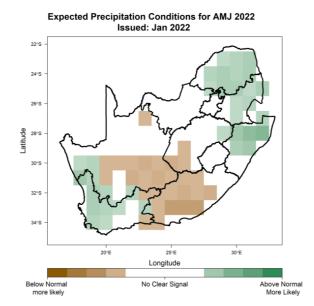
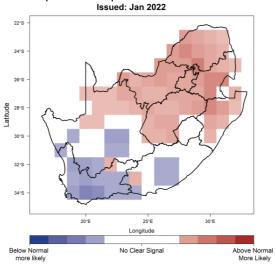


Figure 2 – Minimum and Maximum temperatures

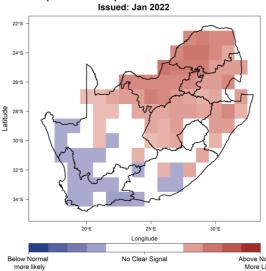
#### **Minimum**

# **Expected Min Temp Conditions for FMA 2022** Issued: Jan 2022 28°S 32°S 30°E 25°E Below Normal more likely No Clear Signal Above Normal More Likely

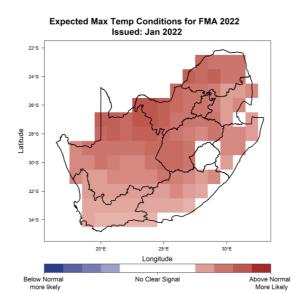
# **Expected Min Temp Conditions for MAM 2022**



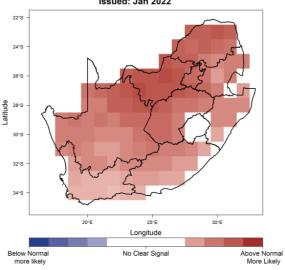
# **Expected Min Temp Conditions for AMJ 2022**



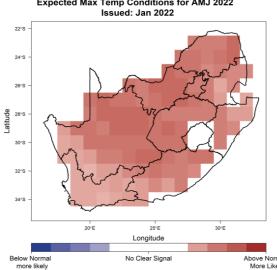
#### **Maximum**



#### **Expected Max Temp Conditions for MAM 2022** Issued: Jan 2022



**Expected Max Temp Conditions for AMJ 2022** 



Mostly above-normal minimum temperatures are expected across the northern parts of the country and below-normal over the southern parts during autumn. Maximum temperatures are expected to be above-normal across the whole country for all of the autumn seasons.

In summary, rainfall is expected to decrease becoming below-normal at the beginning of autumn in summer rainfall areas. During mid-autumn some north-eastern areas might receive above-normal rainfall. Temperatures are expected to be above-normal but the southern parts of the country can anticipate below-normal minimum temperatures during autumn. 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

# **Crop management**

- Control weeds regularly.
- Scout for pests and diseases regularly and control where necessary.
- Practice water harvesting techniques e.g. construction of basins, contours, ridges.

# 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:
  - o 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.
  - o Sow grass.
  - o 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.
- Appling 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
  - o Maximize retention of crop residues.

#### I. Heat stress – bad for productivity

- Signs of heat stress:
  - Bunching in shade, high respiratory rates, open mouth breathing.
- What to do:
  - o Offer shade.
  - o 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.

#### J. Severe thunderstorms/flash floods

Building resilience:

- Identify resources/facilities within 50 km 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, and after each event.

Above-normal rainfall was received in many summer rainfall areas and has resulted in flooding that in turn damaged crops and infrastructure. The veld and livestock are in reasonable to good condition. Below-normal rainfall is expected at the beginning of autumn. However, some northeastern areas of the country can anticipate above-normal rainfall during mid-autumn. Temperatures are expected to be above-normal. In the southern parts of the country, below normal minimum temperatures can be expected.

With the current conditions in mind as well as the seasonal forecast, farmers are advised to continue to put measures in place for pests and diseases particularly those associated with wet and hot conditions. It is also important for farmers to follow the weather forecast regularly so as to make informed decisions. Farmers using irrigation should comply with water restrictions in their areas. Farmers must continually conserve resources in accordance with the Conservation of Agricultural Resources Act 1983, (Act No. 43 of 1983).

Farmers are advised to keep livestock in balance with carrying capacity of the veld, and provide additional feed such as relevant licks. They should also provide enough water points on the farms as well as shelter during bad weather. Conditions conducive for veld fires remain in winter rainfall areas. Therefore, the maintenance of fire belts should be prioritized as well as adherence to veld fire warnings. Episodes of flooding resulting from rain bearing weather systems are likely to continue and preventative measures should be in place. As above-normal maximum temperatures are anticipated, heat waves could occur and therefore measures to combat these 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: <a href="https://www.dalrrd.gov.za/">https://www.dalrrd.gov.za/</a>.

#### For more information contact:-

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