

ZIMBABWE

MINISTRY OF ENVIRONMENT, CLIMATE, AND WILDLIFE

WEATHER REPORT AND FORECAST FOR THE PERIOD

TUESDAY 21 MAY 2024 TO MONDAY 27 MAY 2024

1. THE EFFECTS OF LA NINA DURING WINTER

The 2023-24 El Niño peaked during November-January and is now gradually weakening. World Meteorological Organisation (WMO) Global Centres for Long-Range Forecasts indicated El Niño conditions would become increasingly unlikely for April-June, with around 80% chance of ENSO-neutral conditions.



Figure 1: The Climatic Patterns during a La Nina period from June to August

A possible transition from ENSO-neutral to La Niña during June-August is suggested by some climate models, while the chance of El Niño persisting during June-August is low (around 10%). However, as shown by Figure 1.1, La Nina conditions do not affect Zimbabwe much in winter, let alone increase rainfall. NB: no significant rainfall is expected during winter; climatologically, winter is dry over Zimbabwe. The Winter Forecast, given in the side highlight, currently indicates a cooler start and a warmer end to a cold and dry season.

The Meteorological Services Department will closely monitor changes in the state of El Nino and La Nina conditions over the coming months and provide updated outlooks, as needed.

2024 WINTER FORECAST



404550

NN (%)

AN (%)

40 50 60 70 80

BN (%)

Unlike 2023, the end of winter, July to September (JAS)* 2024 is expected to be warmer than average.



However, the beginning of winter, May – July (MJJ)* 2024 is forecast to have a high probability of below normal temperatures

*The Winter Forecast is given in 3 month overlapping subseasons similar to the Rainfall Forecast

2. FROST MITIGATING MEASURES:

Climate variability has seen the need to venture into climatesmart agriculture that mitigates the effects of extreme weather conditions. As winter approaches one of the major threats is frost. Some mitigation measures include:

Irrigation & Sprinklers

Overhead sprinklers or spray irrigation systems are used to coat plants in a layer of water, insulating them from colder air temperatures

Wind Machines Large fans or propellers are used to mix warmer air from above with colder air near the ground, which can prevent frost formation.

Heaters and Smudge Pots Portable heaters or smudge pots that produce heat and smoke are placed throughout the crop area, trapping warmer air near the plants, and preventing frost.

Site Selection andRow Covers andPlant PlacementFabric Mulches

Lightweight fabrics or plastics are draped over plants to trap heat, similar to greenhouses, creating a microclimate several degrees warmer than the surrounding air

Choosing higher elevation, well-drained sites less prone to frost pockets. Spacing plants to allow for air circulation and prevent cold air from settling

Frost Prone Crops

Agronomists have urged horticulture farmers to protect their crops during the winter season to avoid potential damage from frost and discouraged farmers from growing frost-prone crops in winter like: **butternuts, cucumbers, beans, peppers, and tomatoes** unless they are doing these in greenhouses or farming in frost-free areas.



Figure 2: Greenhouse as a covering against frost

Cabbage, peas, lettuce, spinach, carrots, beetroot and cauliflower are less affected by frost and can be grown in winter in frost prone areas. Chronicles, 15 May 2024.

3. REVIEW OF THE WEATHER FOR THE PERIOD TUESDAY 14 MAY TO MONDAY 20 MAY 2024:

The Highveld areas (areas along or near the Mutare to Bulawayo via Harare highway) had cold early morning conditions throughout the week, with slight ground frost in **Wedza (01°C)**, **Rusape (02°C) and Matopos (02°C)**, while all other areas were cool at first. Afternoons were sunny and warm for much of the period, except at the start and the end of the week when the extreme southern parts of the country had a decrease in daytime temperatures as clouds were slowly drifting in.

On Tuesday, 14 and Wednesday 15 May 2024, provinces like **Matabeleland North**, **Matabeleland South**, **Midlands**, **Masvingo and Manicaland**, had cloudy, cool, and windy conditions, with light rain and drizzle in and around Wedza, Nyanga, Mukandi, Chisengu, Zaka, Matopos and West Nicholson. However, when these conditions returned on Sunday, 19 into Monday 20 May, the winds were weaker and as such the clouds only covered the districts of **Beitbridge**, **Chiredzi and Chipinge through to Nyanga**.

4. WEATHER FORECAST FOR THE PERIOD TUESDAY 21 MAY TO MONDAY 27 MAY 2024:

The forecast for this period indicates predominantly clear skies and cool morning conditions across Zimbabwe. In areas along the Highveld, mornings should be cold with slight ground frost expected in areas such as **Henderson**, **Nyanga**, **Mukandi**, **Rusape**, **Marondera**, **Wedza**, **Gweru**, **and Matopos**. Afternoons should be warm, while evenings will become cooler.

On Saturday 25 May, Africa Day, a cool south-easterly airflow should result in windy and mild daytime conditions in **Matabeleland South**, southern parts of Midlands, Masvingo and Manicaland Provinces.

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Impacts of the weather for the review and forecast period.

- Temperatures are slowly declining, more so overnight. This reduces the heat units and affects poultry projects as well as other temperature-sensitive initiatives.
- The Health sector is one of the key sectors of focus as the seasons transition into winter, and respiratory-related illnesses are of concern.
- Africa Day celebrations should be held under mostly sunny and warm conditions, though the morning and evening of Saturday 25 May should be cold.

Actions to take.

Public Awareness and Safety Measures during Winter:

- 1. Adequate and appropriate dressing: Educate the public about dressing appropriately for cold weather such as hats, scarves, and gloves to prevent heat loss.
- 2. **Time Limitations Outdoors:** Raise awareness about the risks of prolonged exposure to cold temperatures, especially late evenings. Educate vulnerable populations, including the elderly, young children, and those with pre-existing medical conditions, about the importance of staying indoors in warm environments.
- 3. **Physical Activity:** Encourage the public to engage in physical activity to generate body heat. Promote the avoidance of prolonged periods of sitting or standing still in the cold.
- 4. Warm Beverages and Foods: Advocate for the consumption of warm, nonalcoholic fluids like tea, coffee, or soup to help maintain body temperature. Promote the importance of consuming warm, nutrient-dense meals to provide energy and warmth.
- 5. **Protection of Vulnerable Individuals:** Develop policies that emphasize the protection of vulnerable populations, such as the orphans and homeless, during winter. Encourage regular welfare checks on the elderly, individuals with disabilities, and young children to ensure they are safe and warm.

Winter Preparedness Policy Implementation:

- 1. Weather Forecast Monitoring: Develop a framework to engage key sectors affected by weather and climate, while ensuring policymakers and relevant stakeholders receive accurate and up-to-date information regarding the timing, severity, and duration of cold conditions for proactive action instead of reaction.
- 2. **Frost Protection Measures:** Establish guidelines and protocols for implementing frost protection measures. Encourage farmers and agricultural stakeholders to utilize methods such as greenhouse farming, overhead irrigation, wind machines, heaters, and crop protection covers.
- 3. **Irrigation System Maintenance:** Establish regulations or recommendations for inspecting and maintaining irrigation systems during winter. Encourage farmers to check for frozen or damaged pipes, valves, and sprinklers. Promote the draining of irrigation systems to prevent freeze damage especially, in frost-prone areas.
- Livestock Protection: Develop training programmes to teach cold protection measures for livestock; from cows, especially dairy cows, to day-old chicks. Advocate for adequate shelter, bedding, and supplemental heating for animals.
- 5. Damage Assessment and Recovery: Establish protocols for monitoring and assessing crop and livestock damage after cold snaps. Develop guidelines for implementing recovery measures such as pruning, fertilizing, or replanting. Provide support and resources for farmers to recover from cold-related losses.

NB: It is still important to consult experts such as Agritex Officers, Agronomists and Medical Practitioners for better advice on the actions to take.

5. EARTHQUAKE REPORT FOR THE WEEK ENDING 20 MAY 2024

No earthquakes were reported this week.

Honorable Minister S. Nyoni. Ministry of Environment, Climate and Wildlife

Date