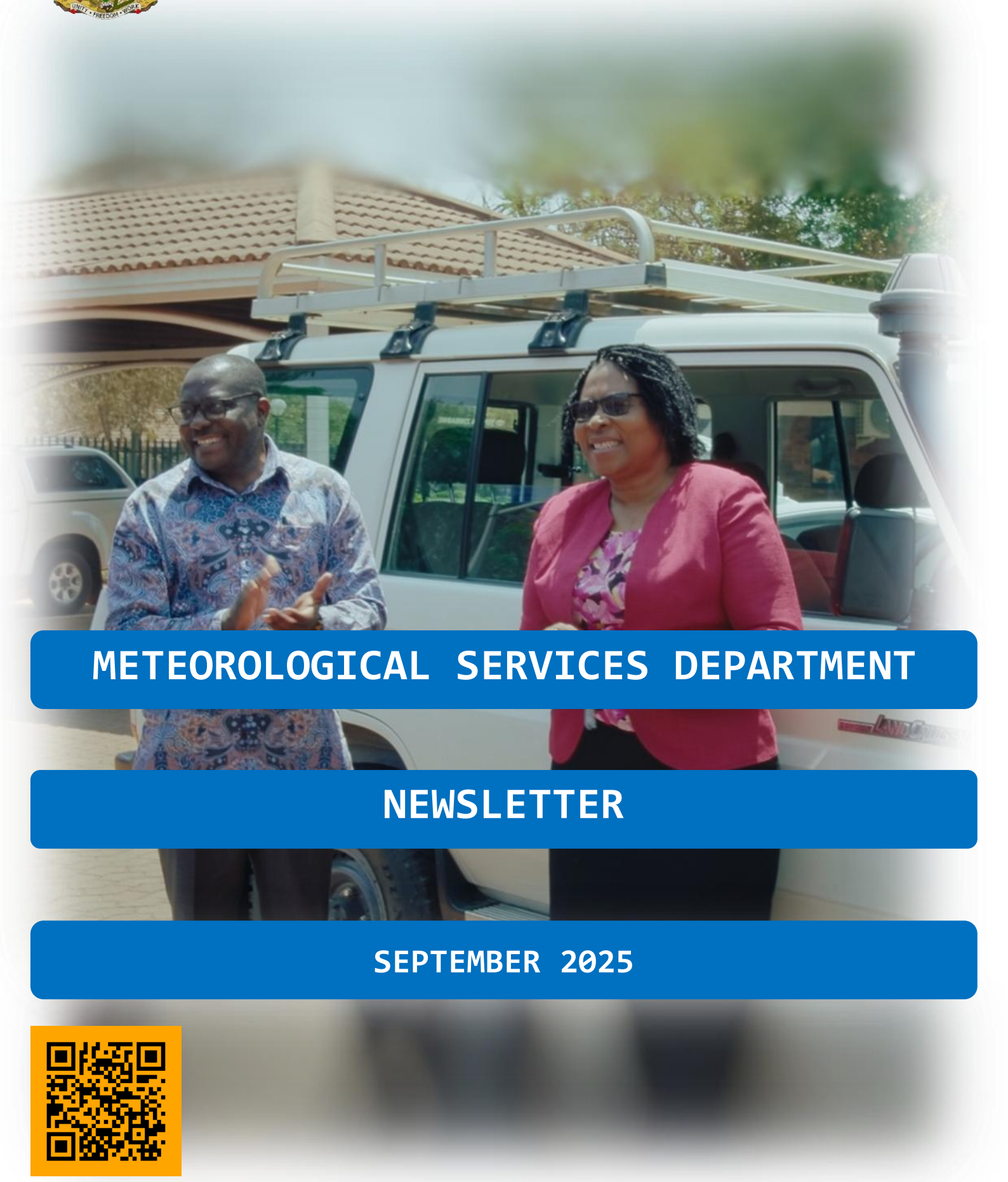


METEOROLOGICAL SERVICES DEPARTMENT

NEWSLETTER

SEPTEMBER 2025

Minimizing Risk Through Science

CONTENTS

Meteorological Services Department of Zimbabwe

Cnr Bishop Gaul Ave & Hudson Ave, Belvedere

Box BE 150, Belvedere, Harare, Zimbabwe

Telephone: +263 (242) 778204 - 6, 778218, 778027

Website: www.weatherzw.org.zw

The Director's Remarks

The month of September has been significant for the Meteorological Services Department as it marked the release of the National Climate Outlook for the 2025–2026 rainfall season. This forecast provides critical guidance for planning in agriculture, water resources, health, energy and disaster risk management, ensuring that decision makers are equipped with timely and reliable information. The Department remains committed to producing forecasts that are scientifically sound and responsive to the needs of all sectors.

September also saw Zimbabwe's active participation in the Climate Experts Meeting and the Thirty-first Southern Africa Regional Climate Outlook Forum held in Lusaka, Zambia. These regional platforms continue to strengthen collaboration among SADC member states, enabling the co-production of consensus-based forecasts and sector-specific advisories. The Department acknowledges the support of Government, the SADC Climate Services Centre and development partners in advancing these important regional processes.

At the national level, the Department welcomed the donation of vehicles from the World Food Programme, a gesture that will enhance our operational capacity in fieldwork, station maintenance and community engagement. This partnership underscores the importance of collaboration in strengthening early warning systems and advancing the Early Warning for All initiative.

The Department also expanded its climate monitoring network through the installation of new rain gauges in Gwanda district. These efforts, coupled with training of local observers, are vital in improving localized data collection and ensuring that communities are better prepared for climate-related risks.

Internationally, the Department participated in the Climate Action Framework in India and the ClimSA training in Johannesburg, both of which provided opportunities to strengthen technical capacity, foster innovation and reinforce the role of meteorological services in building resilience.

September 2025

Zimbabwe National Climate Outlook: October 2025 to March 2026

The upcoming 2025-26 rainfall season for Zimbabwe is projected to be heavily influenced by a strong trend towards a negative Indian Ocean Dipole (IOD), while the El Niño-Southern Oscillation (ENSO) is expected to remain in a neutral state. This specific combination of global climate drivers creates a forecast of significant spatial and temporal variability. The season is anticipated to have a delayed and erratic start, with October and November likely to be drier than normal, particularly in across the country. This initial dry phase is expected to give way to improved rainfall prospects from December onwards.

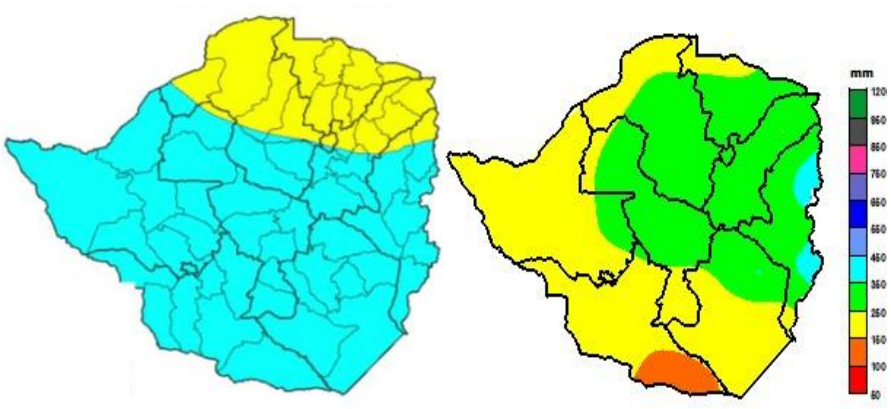
A pronounced north-south split in rainfall distribution is forecast for the initial October December period. Northern provinces, including the Mashonaland provinces, are likely to experience normal to below-normal rainfall accumulation during this time. In contrast, southern and western regions, including Matabeleland, Masvingo, and the bulk of Midlands, are anticipated to receive normal to above-normal rainfall. As the core season progresses from November through February, the likelihood of normal to above-normal rainfall increases for most of the country, although some northern areas may see a return to drier conditions

during the last three months of the season January-March 2025. Given the forecasted erratic nature of the season, stakeholders must implement proactive risk management strategies. The significant intra-seasonal variability also presents substantial risks, including prolonged dry spells after planting and extreme weather events such as violent storms and flash floods. Consequently, continuous monitoring of meteorological updates, implementation of water harvesting programs, and pre-positioning of resources for both drought response in the north and flood preparedness in the south are essential measures to mitigate risks and capitalize on the forecast rainfall.

Rainfall forecast

Tercile Category	Colour Code
Above Normal	Above normal
Normal	Normal to above normal
	Normal to below normal
Below Normal	Below normal

October—November—December



The rainfall forecast divides the country into two main zones:

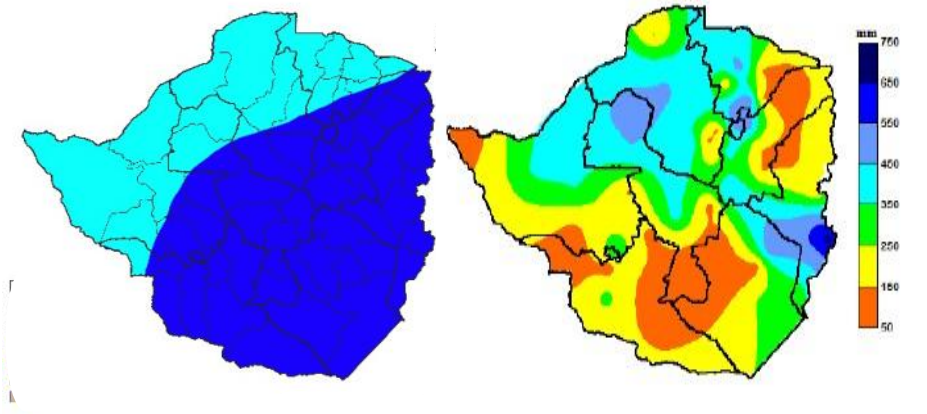
- The northern and western parts are expected to receive normal to below-normal rainfall.
- The southern and eastern parts are expected to receive normal to above-normal rainfall.

Zimbabwe National Climate Outlook:
October 2025 to March 2026

A delayed onset of season is projected as the monthly forecasts indicates that below normal rainfall is expected during the month of October and November 2025. Increased chance of normal to above in the northern parts of the country is projected in December while the rest of the country is expected to have an increased chance of above normal rainfall.

November—December—January

The forecast for November 2025 to January 2026 predicted that the entire country has a high probability of receiving **normal to above-normal** rainfall. This outlook is divided into two main categories:

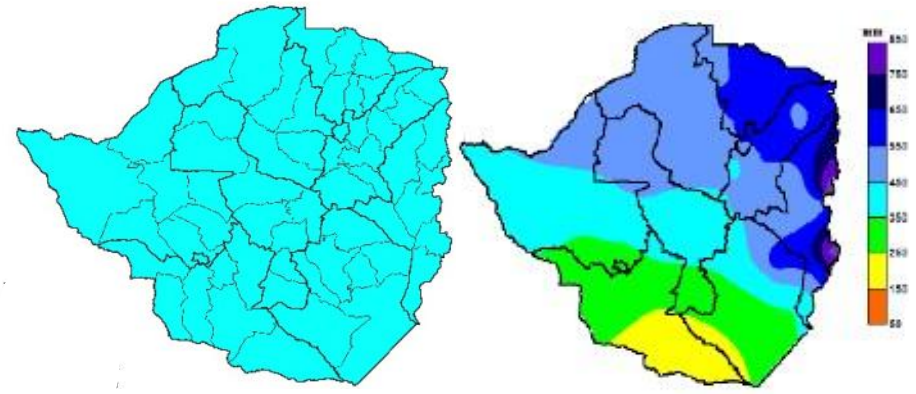


1. **Normal to above normal** rainfall is expected for most of the country.

2. **Normal to above-normal** rainfall is expected for the northern and western regions.

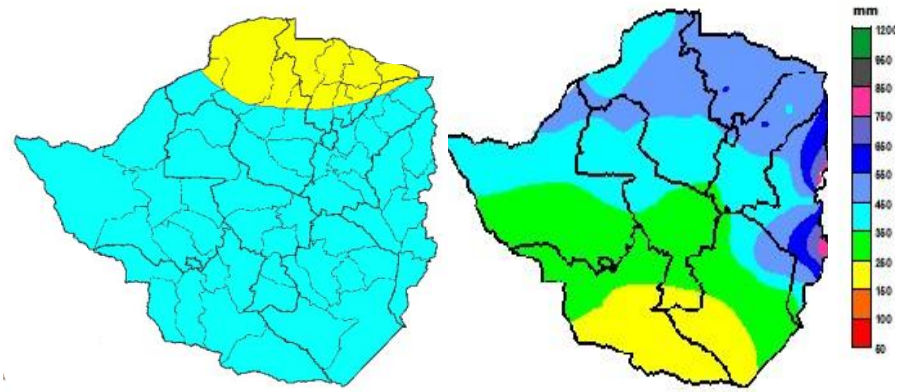
December—January—February

There is an increased chance of **normal to above normal** rainfall across the country during the December to February period



January—February—March

For the period January to March, rainfall forecast indicates an increased chance of **normal to above-normal** rainfall in the bulk of the country. Except for northern parts, covering the bulk of Mashonaland Central and northern parts of Mashonaland West and East, has an increased chance of **normal to below-normal** rainfall.



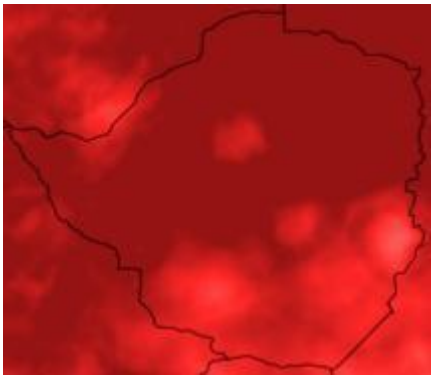
Zimbabwe National Climate Outlook: October 2025 to March 2026

Mean Start and End of Season

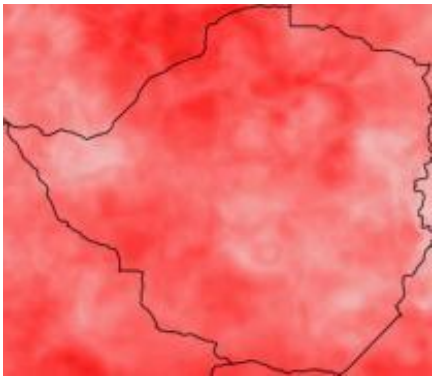
The mean start of rainfall season in Zimbabwe is in the month of November into early December. The bulk of the country normally records the start of season between 10 November and 30 November. The extreme northern and southern parts of the country an average start of season between 01 and 15 December. The climatological end of season ranges between 01 March and 20 March except for few places where the season can stretch as far as 31 March.

Temperature Forecast

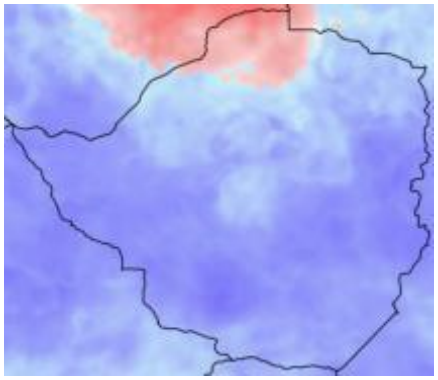
The temperatures are expected to be warmer than normal in the months of October and November, with October expected to be the warmest, and December is expected to experience cooler than average maximum temperatures.



October 2025



November 2025



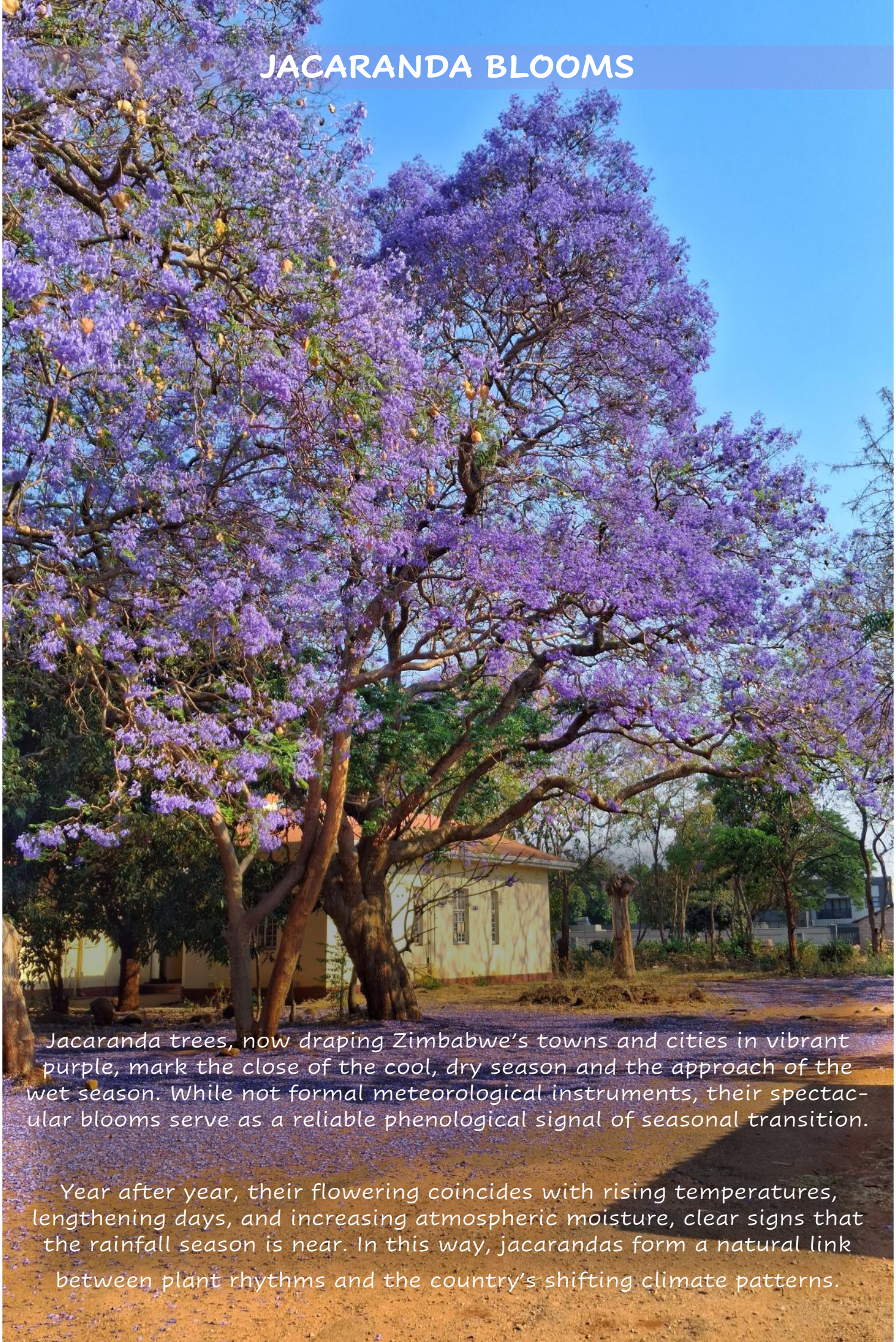
December 2025

Conclusion and Recommendation

The forecast is for cumulative rainfall for three-month periods: OND, NDJ, DJF, and JFM. The monthly forecasts for October, November and December indicate normal to below normal rainfall for both October and November while December shows a likelihood of above average rainfall of the season. Based on the forecast of an erratic rainfall season with a dry start and improved rains later, the following consolidated recommendations are proposed: **General Preparedness:** Implement water harvesting, conservation programs, and irrigation strategies to manage prolonged dry spells. **Extreme Event Contingency:** Develop plans for violent storms, flash floods, and tropical cyclones, including pre-positioning response resources, clearing drainage systems, and issuing early warnings. **Water Authorities:** Conduct pre-season dredging and manage dam levels for flood control. **Health Services:** Launch disease prevention campaigns and stockpile essential medicines. **General Public:** Clear drains, weatherproof structures, use mosquito nets, and stay informed via official updates.

The Meteorological Services Department will continue to monitor seasonal climate indicators which influence Zimbabwe's rainfall as they evolve. Thus, the seasonal rainfall predictions will be updated on a monthly basis. starting the end of October. In addition, there will be daily weather forecasts and 10-day weather bulletins that will take into account any changes. A seasonal forecast is a long-term planning tool and therefore it doesn't replace the need for short term forecasts which are key for capturing the occurrence of short-term weather events such as dry spells, actual onset of season which can not be captured in a seasonal forecast.

JACARANDA BLOOMS



Jacaranda trees, now draping Zimbabwe's towns and cities in vibrant purple, mark the close of the cool, dry season and the approach of the wet season. While not formal meteorological instruments, their spectacular blooms serve as a reliable phenological signal of seasonal transition.

Year after year, their flowering coincides with rising temperatures, lengthening days, and increasing atmospheric moisture, clear signs that the rainfall season is near. In this way, jacarandas form a natural link between plant rhythms and the country's shifting climate patterns.

WFP Donates Vehicles to MSD

One of the Toyota Land Cruisers handed over to the Meteorological Services Department

The enduring partnership between the Meteorological Services Department (MSD) and the World Food Programme (WFP) continues to blossom, guided by a shared vision of building climate resilience for vulnerable households in Zimbabwe. Through transformative initiatives such as the Green Climate Fund SAP007 project, **Integrated Climate Risk Management for Food Security and Livelihoods in Zimbabwe,** the collaboration has been a beacon of hope for communities grappling with the harsh realities of climate change. Over the years, WFP has stood shoulder to shoulder with MSD, supporting capacity-building efforts in seasonal forecasting under the coordination of the SADC Climate Services Centre, and spearheading innovations like the development of anticipatory action triggers. Anticipatory Action is an approach that ensures proactive response to forecast hazards and remains central to safeguarding lives and livelihoods.

This legacy of cooperation reached another milestone on 19 September 2025, when WFP's Deputy Country Director, Mr. Billy Mwiingi, officially handed over three Toyota Land Cruisers to the Director of MSD, Mrs. Rebecca Manzou, at the WFP Arundel Offices. The handover marked more than just a gift of mobility, it symbolized renewed commitment to advancing weather and climate services in Zimbabwe, aligned with the Global Framework for Climate Services now being localized at national level. The vehicles are set to become vital assets, enabling MSD to extend its reach into remote communities, install and maintain critical meteorological equipment, and deepen community engagement. In her acceptance remarks, Mrs. Manzou underscored the importance of continuing to harness synergies with WFP, particularly in bolstering Zimbabwe's early warning systems under the Early Warning for All (EW4All) Initiative.

VEHICLE KEYS HANDOVER

Building Pathways to a Greener Future: Zimbabwe at the Climate Action Framework in India

In the humid warmth of Hyderabad, India, the Environment Protection Training and Research Institute (EPTRI) became a vibrant meeting ground for global minds from 23 July to 5 August 2025. Representatives from 18 countries gathered under one roof, united by a single purpose, to reimagine how developing nations can act decisively in the face of climate change. Among them were three participants from Zimbabwe's Ministry of Environment, Climate and Wildlife, joining experts from civil aviation, meteorology, agriculture, energy, waste management, local governance, academia, and law. The diversity of sectors mirrored the complex nature of climate change itself, demanding collaboration across all fronts.

The *Climate Action Framework for Developing Countries* was more than a training course. It was a platform for exchange, innovation, and inspiration. Discussions moved fluidly between technical detail and shared human experience: how to build resilience in vulnerable communities, how to promote clean energy transitions, and how to ensure that climate justice includes the voices of those most affected. Participants explored how policy, science, and finance could converge to transform adaptation from a concept into concrete, community-driven action. Sessions delved into climate risk assessment, renewable energy promotion, sustainable agriculture, and access to climate finance. Each day brought new insights into how developing countries can bridge the gap between planning and implementation through innovation and strong governance.

Indian Technical and Economic Cooperation training participants posing for a group photo

For the Zimbabwean delegation, the experience provided renewed appreciation for aligning national efforts with the Paris Agreement while emphasizing regional collaboration and data sharing. The training reinforced the crucial role of meteorological and climate data in guiding decisions in agriculture, energy, and urban planning, positioning the Meteorological Services Department and allied institutions at the heart of climate smart development. Beyond the lectures and group work, the atmosphere was one of shared purpose. Stories of local adaptation, community resilience, and homegrown innovation flowed freely among participants, reminding everyone that the path to sustainability is not walked alone but built through partnerships that transcend borders.

As the workshop ended on 5 August, participants gathered for a simple but meaningful ceremony. Certificates were handed out, accompanied by words of encouragement from the EPTRI Director, who urged everyone to

Building Pathways to a Greener Future: Zimbabwe at the Climate Action Framework in India

take the lessons learned back home and translate them into tangible action. The Climate Action Framework left more than knowledge in its wake; it left a sense of possibility. For Zimbabwe, it reaffirmed that through collaboration, innovation, and commitment, a resilient and sustainable future is not just a goal, but an achievable journey. As the workshop ended on 5 August, participants gathered for a simple but meaningful ceremony. Certificates were handed out, accompanied by words of encouragement from the EPTRI Director, who urged everyone to take the lessons learned back home and translate them into tangible action. The Climate Action Framework left more than knowledge in its wake; it left a sense of possibility. For Zimbabwe, it reaffirmed that through collaboration, innovation, and commitment, a resilient and sustainable future is not just a goal, but an achievable journey.

Certificates Handout

SADC Strengthens Co-Production of Agrometeorological Services Through ClimSA Training

Johannesburg, South Africa, 17 - 25 September 2025

At the heart of Southern Africa's climate resilience agenda, the Southern Sun Hotel in Johannesburg became a hub of innovation and collaboration as experts from across the SADC region gathered for the Regional Workshop on the Use of the ClimSA Station to Co-Produce Agrometeorological Services with the Agriculture Sector. Held from 17 to 25 September 2025, the workshop was organized in two intensive parts. The first phase focused on enhancing the technical capacity of National Meteorological and Hydrological Services (NMHSs), while the second integrated representatives from Ministries of Agriculture (MoAs) to foster hands-on collaboration and co-production of agrometeorological bulletins.

Bulletin Features:

- **Climate overview:** For the past ten days
- **Agricultural impacts:** On crops and livestock
- **Forecasts and advisories:** For upcoming weeks

Key Outcomes:

- **Enhanced Technical Capacity:** NMHS officers attained advanced proficiency in using the ClimSA Station and CST for operational service delivery.
- **Successful Co-Production:** All participating countries produced prototype co-developed bulletins, bridging the gap between climate science and agriculture.
- **Actionable Roadmap:** A clear plan for national and regional implementation was finalized to ensure sustained collaboration.
- **Strengthened Regional Network:** A vibrant community of practice emerged, uniting climate and agriculture experts under a shared vision.

Part I: Building Technical Foundations (17–21 September)

The opening days were dedicated to deepening participants' technical mastery of the ClimSA Station, a cutting-edge platform that integrates climate data analysis, visualization, and communication tools. Through detailed sessions on Jupyter Notebooks, data management, and workspace optimization, NMHS officers explored how the system could transform agrometeorological service delivery. Critical reflection followed as participants reviewed existing national bulletins, identifying opportunities to harmonize content and enhance usability.

A clear gap emerged: the need for a *regional, harmonized agrometeorological bulletin template* to promote consistency across all SADC countries. This insight became a central focus of the training. Hands-on sessions saw participants generating rainfall anomaly maps, vegetation indices, and other products directly through ClimSA's Jupyter interface. The phase concluded with a collaboratively developed roadmap for national rollout and long-term sustainability. By midweek, participants transitioned from theory to practice. Through guided exercises, they developed a standardized bulletin template.

Part II: Co-Production with the Agriculture Sector (22–25 September)

The workshop gained fresh energy as delegates from the agriculture sector joined their meteorological counterparts. Attention turned to crop-yield forecasting using the **Crop Statistical Tool (CST)** and the **Anomaly Hotspots of Agricultural Production (ASAP)** platform. Mixed teams from NMHSs and MoAs explored how to merge climate indicators with national crop statistics to model yield performance. They experimented with regression techniques, processed data in batch mode, and produced meaningful forecasts tailored to their countries' contexts.

In the final exercise, each team produced a ***prototype agromet bulletin*** using historical data. The results were shared in plenary, providing a rich exchange of feedback and ideas. The event closed with a reflective session, a regional rollout plan endorsement, and the awarding of certificates to participants who completed the training.

Proceedings of the CEM and SARCOF 31 held in Lusaka, Zambia from the 1st to the 11th of September 2025

Climate experts, policymakers, and partners from across the Southern African Development Community (SADC) convened in Lusaka, Zambia, for a series of pivotal meetings that strengthened the region's collective ability to anticipate and respond to climate-related risks. The meeting spanning from 1 to 11 September 2025, began with the Climate Experts Meeting (CEM) and culminated in the 31st Southern African Regional Climate Outlook Forum (SARCOF-31) under the theme "Closing the Early Warning Gap." The Climate Experts Meeting, held from 1 –7 September, brought together specialists from 15 SADC member states to review the performance of past seasonal forecasts, analyze prevailing global climate drivers, and produce a consensus-based rainfall outlook for the October–December 2025 and January–March 2026 periods. Their technical deliberations laid the foundation for the subsequent regional forum.

Building the Foundation: Climate Experts Meeting

Opening the session, Mr. E. Mukonde, Director of the Zambia Meteorological Department, emphasized the need for scientific rigor and collaboration in generating reliable forecasts that support sectors such as agriculture, water management, and disaster risk reduction. The process followed a structured sequence, from reviewing the 2024/25 seasonal forecast and verifying its performance, to analyzing ocean-atmosphere data using General Circulation Models (GCMs) and the Climate Forecasting Tool (CFT). Member states worked collaboratively to produce national forecasts for four overlapping three-month periods which were later synthesized into a single regional consensus outlook. The resulting forecast indicated a high likelihood of Normal to Above-Normal rainfall across much of the northern and eastern SADC region, offering cautious optimism for the upcoming season while urging vigilance for localized flooding risks.

Regional Collaboration at SARCOF-31

SARCOF-31 expanded participation to include decision-makers, disaster managers, researchers, and development partners. In his opening remarks, Mr. Nkonde reiterated that regional collaboration is essential for building resilience to climate variability. Key addresses included Ms. M. Mokoena, SADC Director of Infrastructure, who highlighted the importance of coordinated action, and representatives from the EU and Germany, who announced an €8 million commitment to support SADC's climate services, noting the need for a follow-up to the ClimSA Programme. Dr. Joshua Ngaina of WMO underscored that *"early warnings are not a privilege but a human right"* and called for stronger digital innovation and partnerships.

SARCOF-31 Delegates Posing for A group Photo

Zambia's **Permanent Secretary for the Ministry of Green Economy and Environment**, **Dr. Douty Chibamba**, reminded participants of SARCOF's origins in the 1990s and its role in helping the region respond to climate shocks.

ZIMBABWE DELEGATES AT SACRCOF-31

Thematic Highlights

1. Health and Climate Nexus: The forum examined the 2023/24 cholera outbreak in Zambia, with over 40,000 cases, linking it to climatic extremes, heatwaves followed by floods. Experts called for better integration of meteorological data into public health systems, community-based monitoring, and early action informed by seasonal forecasts.

2. Early Warnings for All (EW4All) Initiative: A key highlight was the announcement that Zambia will host the EW4All initiative, a landmark step toward ensuring that every person in the region receives timely, actionable early warnings. The framework is built on four pillars, risk knowledge, forecasting, communication, and preparedness, and will focus on bridging the gap between data production and community-level action.

3. Digital Innovation and Sectoral Integration: Several partners showcased digital solutions to enhance climate services. The UK Met Office's WISER Programme promoted co-production with universities and NMHSs, while Alliance Biodiversity & CIAT demonstrated tools that merge climate, soil, and crop data to deliver practical advisories for farmers. The launch of the new SADC Climate Services Centre website introduced interactive dashboards and multilingual interfaces to broaden access to information.

4. Media Engagement: A dedicated session with journalists from Zambia and Zimbabwe revealed the need for clearer, simpler communication of climate information. Proposed actions included training for reporters, establishing media desks within NMHSs, and using podcasts and AI translation tools to reach wider audiences.

The SARCOF-31 process reaffirmed the importance of science-based collaboration in climate forecasting and response. The consensus outlook serves as a vital planning tool for governments and sectors across Southern Africa. The meetings also advanced a shared understanding that effective early warning is inseparable from early action, and that digital innovation, sectoral coordination, and investment in NMHS capacity are indispensable to resilience-building.

As SADC moves toward operationalizing the Early Warnings for All initiative, the spirit of partnership and shared responsibility demonstrated in Lusaka will guide the region toward a future where timely climate information saves lives, protects livelihoods, and drives sustainable development.

Recommendations

Agriculture:

Farmers in regions expecting above-normal rainfall should prepare for potential waterlogging and pest challenges.

Disaster Management:

Authorities in flood-prone areas must activate preparedness plans and strengthen reservoir management.

Health:

Surveillance for water-borne diseases should be intensified in high-risk zones.

Communication:

NMHSs and media partners should produce localized advisories in user-friendly formats and local languages.

2025 Gwanda District Rain Gauge Installation Exercise

From 8 to 13 September 2025, Catholic Relief Services (CRS), in partnership with Caritas Bulawayo and the Meteorological Services Department (MSD), conducted a field mission in Gwanda District under the Ihawu Project, an initiative dedicated to strengthening community resilience against climate-induced disasters. The exercise, which brought together CRS Technical Officer Mr. Edmore Chizororo, MSD Provincial Officer Mr. Rodgers Munyira, Meteorological Technician Mr. Blessing Manyonga, and Ms. Ndlovu, the District Agriculture Extension Officer for Gwanda, focused on installing ten new rainfall gauges, maintaining nineteen existing ones, and training local observers in accurate rainfall measurement and reporting.

Mr. Manyonga and Mr. Munyira conducting Observer Orientation in Ward 17 at Nkashe High School

Building Local Capacity for Disaster Preparedness

The Ihawu Project is rooted in the principles of the Sendai Framework for Disaster Risk Reduction (2015–2030), promoting participatory approaches that place communities at the center of risk management. Through collaboration between CRS, Caritas Bulawayo, MSD, and the Department of Agricultural Extension, the project seeks to strengthen local capacity in data-driven decision-making, enhance coordination among disaster management institutions, and build safety nets such as Zunde Ramambo/Isiphala senkosi. Rainfall data collected from the Gwanda network directly supports smallholder farmers in timing their planting and land preparation, while also feeding into the District Civil Protection Committee (DCPC) for use in early warning systems and seasonal planning. With 19 functional gauges already in place and 10 more installed during this mission, the district is steadily moving toward comprehensive spatial coverage for localized monitoring.

Field Deployment and Calibration Insights

Fieldwork began on 9 September 2025 with a series of calibration tests conducted jointly by CRS and MSD teams. These revealed an interesting technical finding: a measurement discrepancy between CRS-procured gauges and MSD standard instruments. A reading of 12.5 mm on the CRS gauge corresponded to 19.5 mm on the MSD reference cylinder. Further testing indicated that water absorption by the fibre material in the CRS gauge's collecting can may account for a minor loss in volume. While the variance was within manageable margins for community monitoring, the observation underscores the need for continued research on material standards and calibration harmonization between partners to ensure consistency and scientific reliability in rainfall records.

2025 Gwanda District Rain Gauge Installation Exercise

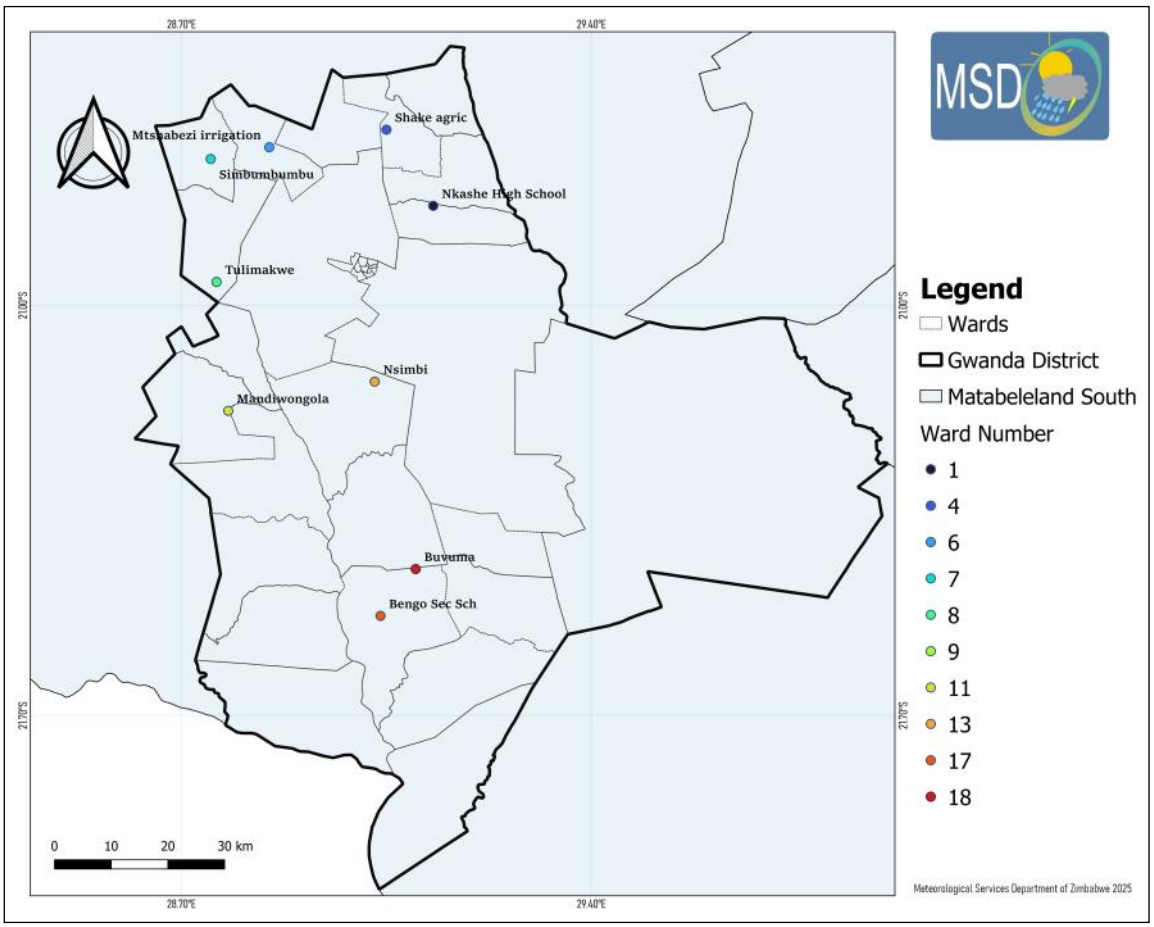
Strategic Placement of Gauges

The ten new gauges were installed in under-served wards across Gwanda District. Site selection prioritized proximity to active farming communities, security of the installations, and availability of trained personnel to manage daily observations. In some areas where AGRITEX officers were few, installations were positioned at schools and officers' residences to guarantee both access and community oversight. An integral part of the mission was the training and retraining of local observers, aimed at ensuring sustainability of the rainfall monitoring network. Ten primary observers, supported by alternatives drawn from local communities, received hands-on instruction in gauge operation, maintenance, measurement techniques, and data reporting protocols. The sessions emphasized practical demonstrations and problem-solving, building confidence among participants and reinforcing community ownership of the project.

Observers showed exceptional enthusiasm, recognizing the value of the data they generate not only for agricultural planning but also for broader climate resilience efforts. Through their commitment, Gwanda's rainfall network will continue to provide timely, reliable, and locally relevant data to guide both farmers and disaster management authorities.

Looking Ahead

The successful completion of the rain gauge installation exercise represents a major stride toward **localized climate intelligence** in Gwanda District. By combining technical expertise, community participation, and institutional coordination, CRS and its partners are advancing a model of **community-anchored climate monitoring** that strengthens resilience from the ground up.



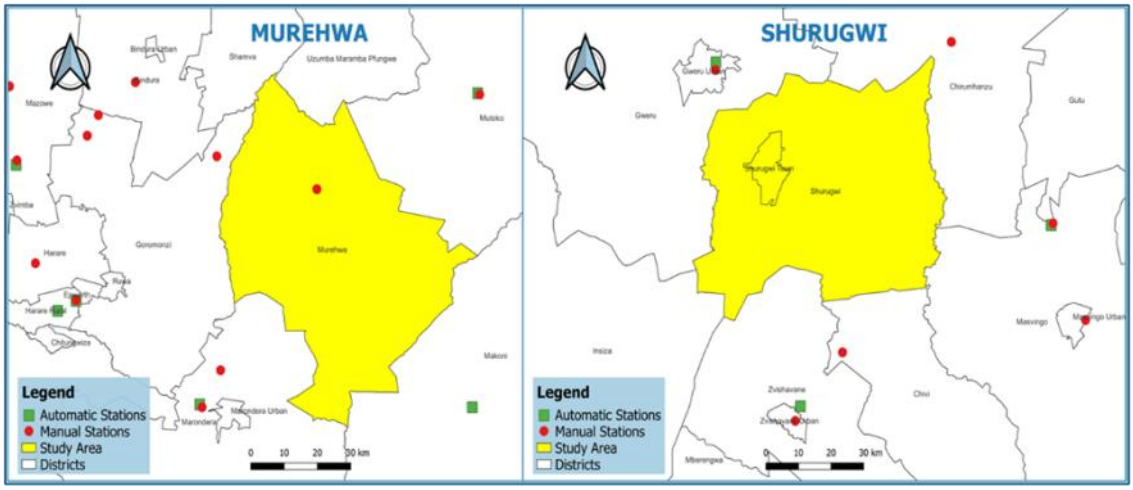
Rain gauge Installation Sites

As the Ihawu Project progresses, the data collected from these gauges will feed into **district and national early warning systems**, support adaptive agricultural planning, and enhance preparedness for climate related shocks, ensuring that the people of Gwanda are not only informed but empowered to act.

Zvitambo Institute for Maternal and Child Health Research & MSD Collaboration

The effects of climate change in Africa have been increasingly evident, and Zimbabwe has not been an exception. Minimum temperatures have risen by approximately 2.6°C over the past century, while rainfall has declined by nearly 5%. In Sub-Saharan Africa, where nearly 80% of agriculture is rainfed, prolonged droughts, altered rainfall patterns, water scarcity, and heat stress are exerting significant pressure on food systems, livelihoods, and nutrition outcomes. This has contributed to a 26% prevalence of stunting among children under five years of age. Despite these challenges, the specific effects of climate change on malnutrition remain poorly studied and inadequately understood. Since the implementation of the Zimbabwe Climate Change Policy, there has been a knowledge gap regarding both the extent of its implementation and its impact on food systems and nutrition outcomes.

Zvitambo engaged MSD on Monday 07 April 2025 seeking a collaboration on a project whose output includes peer-reviewed publications, with participants from MSD as co-authors. Mr. Manjowe and Mr. Chikati were assigned as focal points for this project. The current collaboration focuses on generating evidence of climate change using the Universal Thermal Comfort Index (UTCI), which integrates multiple meteorological variables to assess human thermal stress. The UTCI will be calculated for the period 2011–2023, and deviations from historical means will serve as indicators of a changing climate. This evidence will be linked to the stunted growth of infants in Murehwa and Shurugwi Districts.



Project study areas and the distribution/availability of weather stations.

MSD provided historical records of rainfall, humidity, maximum temperature, minimum temperature, and wind speed from 2011 to 2023. Data was specifically required for the districts of Shurugwi and Murehwa. Since Zvitambo required data in some areas which were outside the effective radius of the available stations Alternative data sources and methods had to be utilized.

For wind speed, humidity, t-max and t-min, ECMWF ERA5 data was utilised. For precipitation, the MSD gridded dataset was utilised. Mr. Chikati developed Python scripts for performing bias correction using the limited but available station data from the nearest functional weather stations to improve accuracy. The Linear Mapping Bias correction technique was utilized as it was the most suitable for the very limited data points which were available.

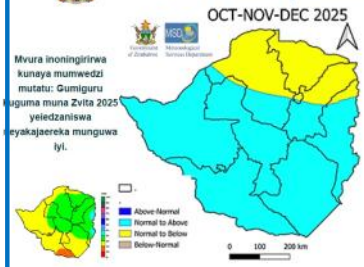
Project summary

- *Compute UTCI calculation for the 2011 to 2023 period.*
- *Conduct deviation analyses against long-term historical averages.*
- *Document findings provide evidence of climate change impacts in the selected districts.*
- *Produce manuscripts for publication with MSD staff as co-authors.*

October - November - December 2025 Forecast In Different Languages

Ministry of Environment, Climate and Wildlife | Meteorological Services Department

OCT-NOV-DEC 2025



Mvura inoningirirwa kunaya mumwedzi mutatu: Gumiguru nguuma muna Zvita 2025 yeledzaniswa neyakajaereka munguwa iyi.

2025-2026 MAEMERE EMWAKA WEMVURA

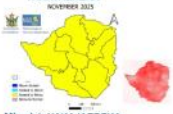
GUMIGURU, MBUDZI NAZVITA (OCT-NOV-DEC) 2025

Mwaka wekunaya kwemvura uchanonoka kutanga. Mwedzi muiri yekutanga, Gumiguru na Mbudzi inoningirirwa kuwana mvura iri pashi peyakajaereka kunaya mundau dzeshe dzenyika. Mvura inoningirirwa kututsira kuwanda kwayo kutanga muna Zvita kuenda mberi. Zvigwimbu zviiri zvemwaka Gumiguru-Zvita, naNdira-Kurume zveshe zvinoningirirwa kunaya mvura iri pashi peyakajaereka mundau dziri kumaodzanyemba kwenyika kwozoti ndau dzimweni dzasara kuchanaya mvura yakwanda kudarika yakajaereka. Kuchapisha kudarika zvakajaereka muna Gumiguru naMbudzi, kwozotonhorera kudarika zvakajaereka mumwedzi waZvita.

Kuti muzwe zvakawanda, reketai nevanoona ngezvemaemere ekubanze panumber idzi: **+263 778 125 199 (call/WhatsApp), kana padandemutande: www.weatherzw.org.zw**

MAWANDIRE ACHAITA MVURA MWEDZI WEGA WEGA

Gumiguru: SHOMANI PANE YAKAJAEREKA



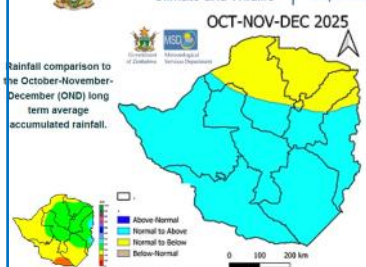
Mbudzi: YAKAJAEREKA YAKARERERA KUSHOMA

Zvita: Yakawanda kudarika yakajaereka kuchamhembe; yakajaereka yekarerekera kuneyakawanda.

NDIRA – KURUME 2026

Ministry of Environment, Climate and Wildlife | Meteorological Services Department

OCT-NOV-DEC 2025



Rainfall comparison to the October-November-December (OND) long term average accumulated rainfall.

NYIMELE YA MVULA YA KHALANŇAWAHA YA 2025-2026

(OCT-NOV-DEC) 2025

Khalaṅwaha ya mvula i ḓo lenga u thoma, afho hu khou lavhelelwa mvula ṭhukhu u bva nga Tshimedzi uya kha Ḽara kha yo ḓoweleaho. Naho zworalo u bva nga Nyendavhusiku uya phaṋḓa, naho hu khou lavhelelwa mvula i fhiraho yo ḓoweleaho shango lothe, naho zwazwo vhupo hune ha nga tshipembe hu tshi ḓo wana mvula ṭhukhu u thira ya tshifhinga tsho fhiraho. Ngauralo hu ḓo fhisa u fhira zwo ḓoweleaho, nga Nyendavhusiku hu ḓo rotholela.

U wana mafhungo nga vhuḓalo na u dzula vha tshi a wana vha nga kwama:

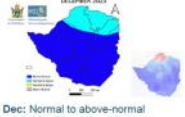
+263 778 125 199 (call/WhatsApp),

www.weatherzw.org.zw

MONTH ON MONTH VARIATION

Oct: Below-normal to normal

Nov: Normal to below-normal

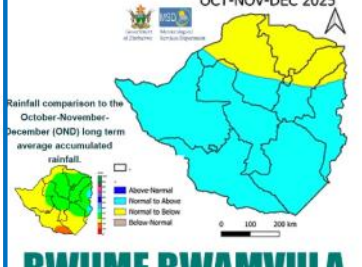


Dec: Normal to above-normal rainfall for the north; while the south is expected to receive above-normal to normal rainfall

JAN – MAR 2026

Ministry of Environment, Climate and Wildlife | Meteorological Services Department

OCT-NOV-DEC 2025



Rainfall comparison to the October-November-December (OND) long term average accumulated rainfall.

BWIIME BWAMVULA MUMWAKA WA 2025-2026

KUZWA MU KAVUMBI KANINI KUYOSIKA MULI NALUPALE 2025

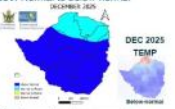
Kuzwa mu Kavumbi kanini kusika mu Vumbipati kulangililwa mvula nche kuli eyo ilangililwa myaka yoonse munyika yoonse mbizulwa. Aboobo mweelwe wakupya ulangililwa kwindilila kwinda oyo ulangililwa mumyeezi eyi munyika yoonse mbizulwa. Mul Nalupale masena miingi munyika kulangililwa imvula njelelela kaziya kuniyingi kunze kwamasena aliku Kunyika atazojane mvula njelelela yamyaka yoonse. Muli Nalupale mweelwe wakupya kwazuba uzoselela kuzopye bwelelede.

Kuti mujane zyiingi atala amakani aya alimwi akumakani mapya ciindi coonse mutujate ku: **+263 778 125 199 (kufona/WhatsApp), kana apupululwa twaambo: www.weatherzw.org.zw**

MONTH ON MONTH VARIATION

Oct: Below-normal to normal

Nov: Normal to below-normal

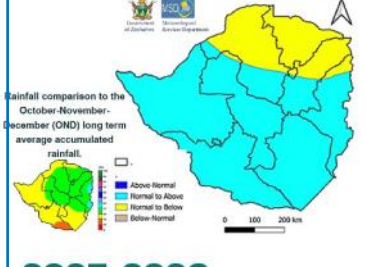


Dec: Normal to above-normal rainfall for the north; while the south is expected to receive above-normal to normal rainfall

JAN – MARCH 2026

Ministry of Environment, Climate and Wildlife | Meteorological Services Department

OCT-NOV-DEC 2025



Rainfall comparison to the October-November-December (OND) long term average accumulated rainfall.

2025-2026 SEASONAL RAINFALL FORECAST

OCTOBER, NOVEMBER, & DECEMBER 2025

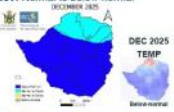
A delayed, erratic start with initial dry conditions in October-November is expected, while prospects improve nationally from December onwards, though northern areas may dry out again later in the season. Relatedly, temperatures will be warmer than average in October and November, followed by a cooler December. Thus overall, for the first half of the season, the southern and western regions are anticipated to receive normal to above-normal rain; while the northern provinces will have normal to below-normal rainfall.

For more details and regular updates contact: **+263 778 125 199 (call/WhatsApp), @MSDZIM or www.weatherzw.org.zw**

MONTH ON MONTH VARIATION

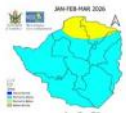
Oct: Below-normal to normal

Nov: Normal to below-normal



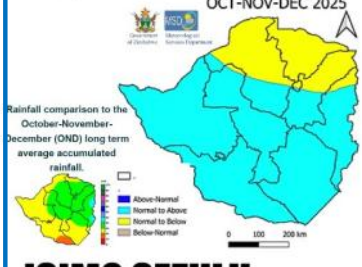
Dec: Normal to above-normal rainfall for the north; while the south is expected to receive above-normal to normal rainfall

JAN – MARCH 2026



Ministry of Environment, Climate and Wildlife | Meteorological Services Department

OCT-NOV-DEC 2025



Rainfall comparison to the October-November-December (OND) long term average accumulated rainfall.

ISIMO SEZULU NGOMNYAKA KA 2025-2026

KUSUKELA NGO MFUMFU KUSIYA KUMPALAKAZI 2025

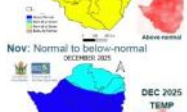
Kusukela kuMfumfu (Oct) kusiyaku Lwezi (Nov) kukhangelelwe izulu elilutshwana kulelijwayelekileyo (normal to below normal) elizweni lonke jikelele. Ngokunjalo izinga lokutshisa lona likhangelelwe ukukhuphuka ukwedlula alijwayelekileyo ngalezi inyanga elizweni lonke. NgoMpalakazi, indawo ezinengi zelizwe kukhangelelwe izulu elaneleyo kusiya kwelinengi kulelijwayelekileyo (normal to above normal), ngaphandle kweNyakatho yelizwe lapha okuzakuba lezulu elijwayelekileyo (Normal). NgoMpalakazi izinga lokutshisa lizakwehla liye phansi kwelijwayelekileyo.

Ukuze uthole okunengi ngalokhu kanye lezindaba ezintsha izikhathi zonke sithinte ku: **+263 778 125 199 (call/WhatsApp), kumbe emsakazweni: www.weatherzw.org.zw**

MONTH ON MONTH VARIATION

Oct: Below-normal to normal

Nov: Normal to below-normal

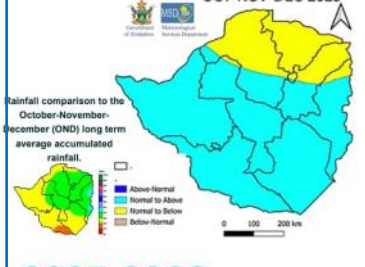


Dec: Normal to above-normal rainfall for the north; while the south is expected to receive above-normal to normal rainfall

JAN – MARCH 2026

Ministry of Environment, Climate and Wildlife | Meteorological Services Department

OCT-NOV-DEC 2025



Rainfall comparison to the October-November-December (OND) long term average accumulated rainfall.

2025-2026 MAMIRIRO EMWAKA WEMVURA

GUMIGURU, MBUDZI NAZVITA (OCT-NOV-DEC) 2025

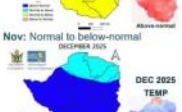
Mwaka wemvura uchati nonokei kutanga, apo zvinotarisirwa kuti mwedzi waGumiguru (Oct) naMbudzi (Nov) mvura inenge yakati shomekei pane yakajairika; asi tarisiro yemunaZvita (Dec) zvichiendamberi, mvura ichadarika yakajairika munyika yose, kunyange zvazvo nzvimbo dzirikuchamhembe (north) dzichitarisirwa kuva nemvura yakatidzikirei kumwero wakajairika. Zvine chekuita neizvi, kuchatipisei kupfuura zvakajairika munaGumiguru naMbudzi, kozotonhorera munaZvita.

Kuti uwane rumwe ruzivo uye kugadzirira nguva dzose, taura nesu parunhare runoti: **+263 778 125 199 (call/WhatsApp), kana padandemutande: www.weatherzw.org.zw**

MONTH ON MONTH VARIATION

Oct: Below-normal to normal

Nov: Normal to below-normal



Dec: Normal to above-normal rainfall for the north; while the south is expected to receive above-normal to normal rainfall

JAN – MARCH 2026

Expanding Local Climate Monitoring: Rain Gauge Installation and Training in Binga

Between 13 and 22 September 2023, a team comprising Benjamin Kwenda (Disaster Preparedness Officer), Austin Masikinye (Provincial Officer, Meteorological Services Department), and Farisai Komboni (Project Coordinator) conducted a field mission under the Climate Smart Resilience (CSR) Project. The exercise focused on installing rainfall gauges and training community volunteers and AGRITEX officers in five wards of Binga District, Saba, Sianzyundu, Siachialaba, Simatelele, and Manjolo. Although these stations were installed in 2023, they were only assigned, Station Identifiers (I.D) this year, in 2025.

Strengthening Community-Based Climate Intelligence

The CSR Project supports localized rainfall measurement and recording as a cornerstone of climate adaptation. By collecting daily data across multiple wards, the initiative enables farmers and local authorities to make evidence-based agricultural and disaster risk reduction (DRR) decisions. Beyond immediate planning, these records will also contribute to a growing repository of long-term climate information, crucial for understanding changing rainfall patterns and strengthening early warning systems. During the mission, volunteers and AGRITEX officers received hands-on training in the installation, calibration, and maintenance of rain gauges, as well as in the correct recording of data in rainfall registers. The sessions also covered how to identify and report extreme weather events, ensuring that local observations feed promptly into the national early warning network.

Adaptive Strategies and Community Involvement

Given the limited number of AGRITEX officers in some wards, most rain gauges were installed at the homesteads of active community volunteers, many of whom are also lead farmers. This approach ensures broad geographic coverage while embedding data collection directly within the farming communities who depend most on the information. Each site was carefully selected based on accessibility, security, and community engagement. In addition, backup observers were trained to maintain daily readings whenever the primary volunteers were unavailable, guaranteeing continuous data collection.

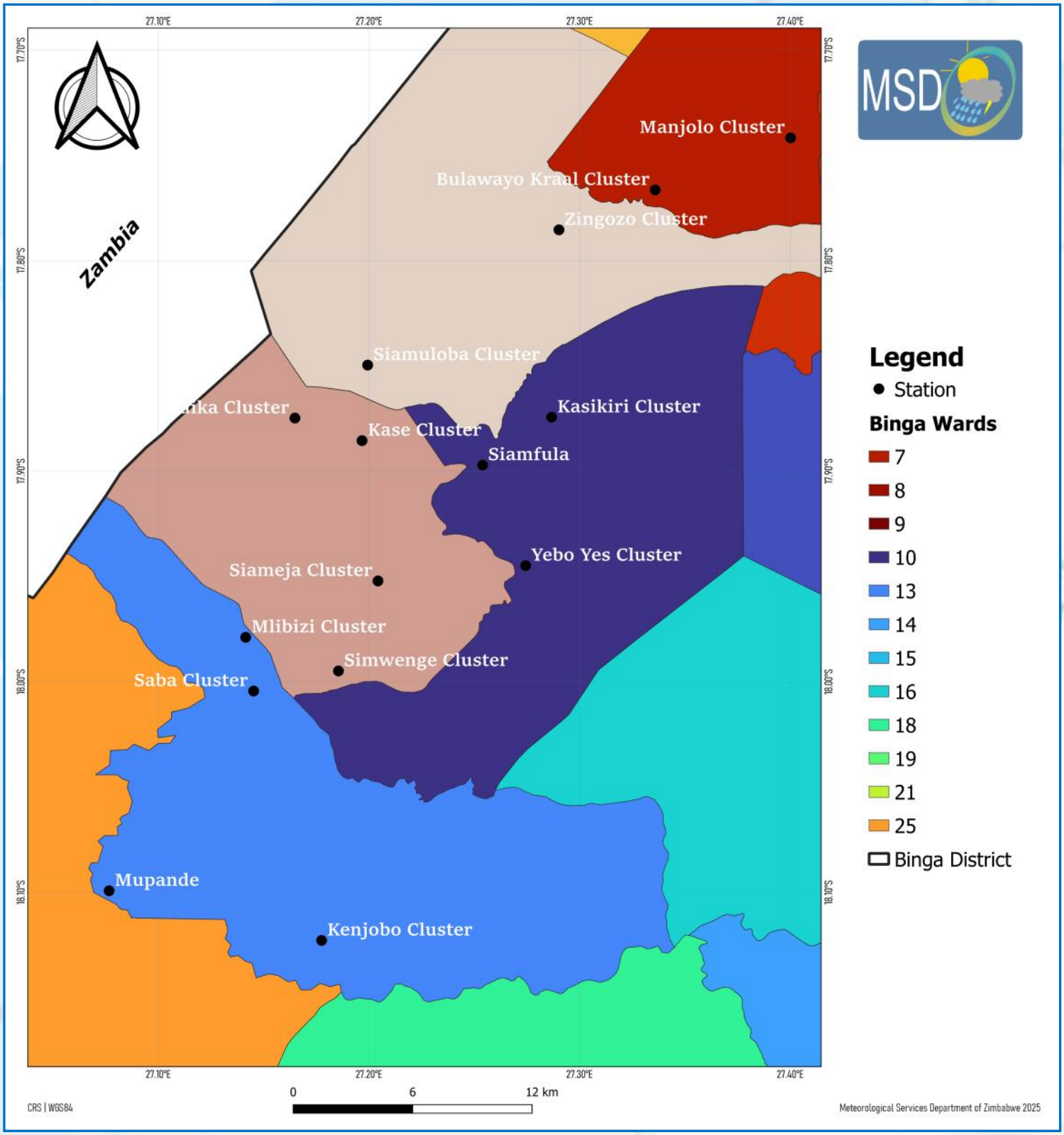
A WhatsApp communication platform was also established to streamline real-time sharing of rainfall observations among volunteers, AGRITEX officers, district stakeholders, the MSD, and the CSR Project Team. This digital link strengthens coordination, facilitates rapid reporting during extreme events, and enhances the integration of local data into district-level analysis.

Laying the Groundwork for Climate Smart Agric

The installation team noted that one of the sites already had a conical flask rain gauge, which will now be complemented by the new standardized MSD type gauge for consistency and accuracy. District stakeholders commended the initiative, emphasizing that the standardized gauges will significantly improve the quality and comparability of local climate data. By grounding agricultural decision making in accurate and localized rainfall measurements, the initiative supports climate-smart farming practices, enabling farmers to align their planting, irrigation, and harvesting cycles with real-time environmental conditions.

The Binga rain gauge installation and training mission marked a significant milestone in the rollout of the Climate Smart Resilience Project. Through collaborative planning, community ownership, and practical training, the project is nurturing a new culture of data-driven climate resilience, one where every drop of rain contributes to informed decisions, stronger livelihoods, and a safer, more climate-ready community.

Binga Rain Gauge Installation Sites



Dpt. Director Eng. Mazhara Partaking in The September Clean up

ZIMBABWE

METEOROLOGICAL SERVICES DEPARTMENT

'Where Science Meets The Sky'

MSD

Vision

A world class provider of meteorological, climatological and seismological products and services by 2025.

Mission Statement

To provide customer and stakeholder driven quality seismological, weather and climate services for socio economic development.

Core Values

- **Teamwork:** We value unity of purpose
- **Equality:** We offer equal status, rights and opportunities to all
- **Customer focus:** We prioritize and address customer needs.
- **Transparency:** We are open to scrutiny
- **Integrity:** We have strong moral principles
- **Creativity:** We focus on innovation and continuous improvement.
- **Accountability:** We take responsibility for one's own actions.

facebook.com/MSDZIM/

x.com/MSDZIM

Facebook.com/MSDZIM