



MINISTRY OF NATURAL RESOURCES AND CLIMATE CHANGE
DEPARTMENT OF CLIMATE CHANGE AND METEOROLOGICAL SERVICES

Activity Brief

The Verification and Review Workshop for the 2024/2025 Rainfall Seasonal Forecast was organised by the Department of Climate Change and Meteorological Services (DCCMS), with financial support from the Climate Risk and Early Warning Systems (CREWS) project. The workshop took place in Thyolo from 30th June to 4th July 2025. It brought together climate experts to evaluate the accuracy and performance of various forecast tools, including pyCPT, CPT, CFT, and SEAFORDS. The sessions focused on analysing forecast verification results and identifying opportunities to improve the reliability of seasonal rainfall forecasts. The workshop aimed to strengthen climate service delivery to better support decision-making in agriculture, water management, and disaster preparedness.

[30TH June – 4TH July 2025] [Thyolo] Publication No: [T.R2025/05]

Title of the Activity

Verification and review of 2024/2025 rainfall seasonal forecast.

Objective of the Activity

The primary objective of the working session was to verify and review the performance of the 2024/2025 rainfall seasonal forecast issued by the Department of Climate Change and Meteorological Services (DCCMS). The verification component focused on evaluating the accuracy of the forecast by comparing predicted values with observed rainfall data across the country. This involved assessing the performance and skill of the different forecasting models used, including pyCPT, CPT, CFT, and Seafords. The review component aimed at critically analysing the strengths and weaknesses of the forecast, identifying areas for improvement in modelling techniques, interpretation, and dissemination. Ultimately, the session sought to enhance the reliability and effectiveness of future seasonal outlooks in supporting climate-sensitive decision-making across key sectors.

Key Activities Conducted

- The verification and review workshop involved a series of technical and collaborative activities aimed at evaluating the accuracy and performance of the 2024 2025 rainfall seasonal forecast. These included expert-led presentations on forecast verification methods and model performance assessment, focusing on tools such as the Ranked Probability Skill Score, Heidke Hit Score, and Hit Miss analysis. Participants took part in plenary sessions and brainstorming discussions that facilitated open exchange of ideas on forecast accuracy, model strengths and weaknesses, and interpretation of results. The workshop also involved a detailed comparison of outputs from various models, including pyCPT, CPT, CFT, and SEAFORDS, against observed rainfall data for the 2023 2024 season.



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Partners/Project

- [Climate Risk and Early Warning Systems (CREWS)]

Key Takeaways / Outcomes

- Participants recognized the need for monthly updates of the Seafords forecast to improve the timeliness and accuracy of seasonal predictions.
- It was agreed that increasing the number of meteorological stations used in Seafords is crucial for achieving better spatial representation and forecast reliability.
- The workshop proposed the formation of a dedicated expert team, led by Mr. Tawakali, to manage Seafords data preparation and oversee monthly forecast updates.
- The idea of zoning the Seafords forecast was highlighted as a way to enhance its regional relevance and accuracy for different parts of the country.
- Participants expressed concern over the potential bias in forecasts influenced by ENSO signals, noting the importance of critically reviewing ENSO-related interpretations to avoid misleading projections.
- The need for capacity building through hands-on training sessions was emphasized, to strengthen the skills of technical officers in using verification tools and interpreting forecast products effectively.

Photo Highlight



Participants posing for a group photo.



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DCCMS Officers Involved

[Dr. Lucy Mtilatila, Director]
[Clement Boyce, Deputy Director]
[Charles Vanya, Deputy Director]
[Amos Mtonya, Deputy Director]
[Keeness Mangànda, Chief Meteorologist]
[Hussein Milanzi, Chief Meteorologist]
[James Julio, Principal Meteorologist]
[Tolani Kanyenda, Principal Meteorologist]
[Anne Kazembe, Principal Meteorologist]
[Edwin Tadeyo, Meteorologist]
[Mphatso Tawakali , Meteorologist]
[Patrick Linos , Meteorologist]
[Fatsanao Dzingomvera , Senior Assistant Meteorologist]
[Francis Alexander, Senior Assistant Meteorologist]
[Esau Gadenala, Senior Assistant Meteorologist]
[Loncy Banda, Secretary]
[Hajira Mwengo, Intern Meteorologist]

For More Information

Visit our website: www.metmalawi.gov.mw

Contact: metdept@metmalawi.gov.mw

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