Time-Series Forecasting Model for Risk Reduction in Tanzanian Field Research Stations Systems,

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Abstract

This Data Descriptor describes a time-series forecasting model applied to risk reduction in field research stations in Tanzania. A time-series forecasting model was constructed using historical data from -. The ARIMA (AutoRegressive Integrated Moving Average) model with robust standard errors was employed to forecast future risk levels in the field of agriculture. The ARIMA model demonstrated a significant reduction in forecasting error, indicating improved accuracy in predicting system risks over time. The developed model provides a reliable tool for assessing and mitigating risks at Tanzanian agricultural research stations. Further research should explore the application of this model across different regions to validate its effectiveness and adapt it for real-world scenarios. Agricultural Research Stations, Time-series Forecasting, Risk Reduction, ARIMA Model The empirical specification follows $Y = \beta_{0+\beta}^{\rightarrow} p\, X + varepsilon$, and inference is reported with uncertainty-aware statistical criteria.

ABSTRACT-ONLY PUBLICATION

This is an abstract-only publication. The complete research paper with full methodology, results, discussion, and references is available upon request.

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