

A Community-Built Machine-Learning Flood Forecasting Prototype for Kasese District, Uganda

AI in the Public Sector · Good practice · Uganda

Quality score: 33/100

Evidence strength: Descriptive / self-reported

Summary

Researchers and Kasese District stakeholders built a low-cost, sensor-fed machine-learning prototype (linear regression and k-nearest neighbours) that forecasts Nyamwamba River flood risk from rainfall, temperature and humidity, sending SMS alerts, but the published study frames

Key dimensions

Dimension	Score
Evidence of impact / measured public value	1/3
Transparency, fairness & accountability	2/3
Transferability / demonstrated replication	0/3
Scalability beyond pilot	1/3
Governance, capability & sustainability	1/3

Evaluated by C-NAPSE

Data sources

[C-NAPSE web research](#) — accessed 2026-08-17

[Kasese District Local Government \(with local university researchers and community stakeholders\)](#) — accessed 2026-08-17

[Journal of Flood Risk Management \(Wiley, 2025\)](#) — accessed 2026-08-17

[PreventionWeb \(UNDRR\) publication record](#) — accessed 2026-08-17

Cite this — Evidoria. *A Community-Built Machine-Learning Flood Forecasting Prototype for Kasese District, Uganda*. Persistent ID: b8c924a6-e842-419f-8587-0d5ee526c115.