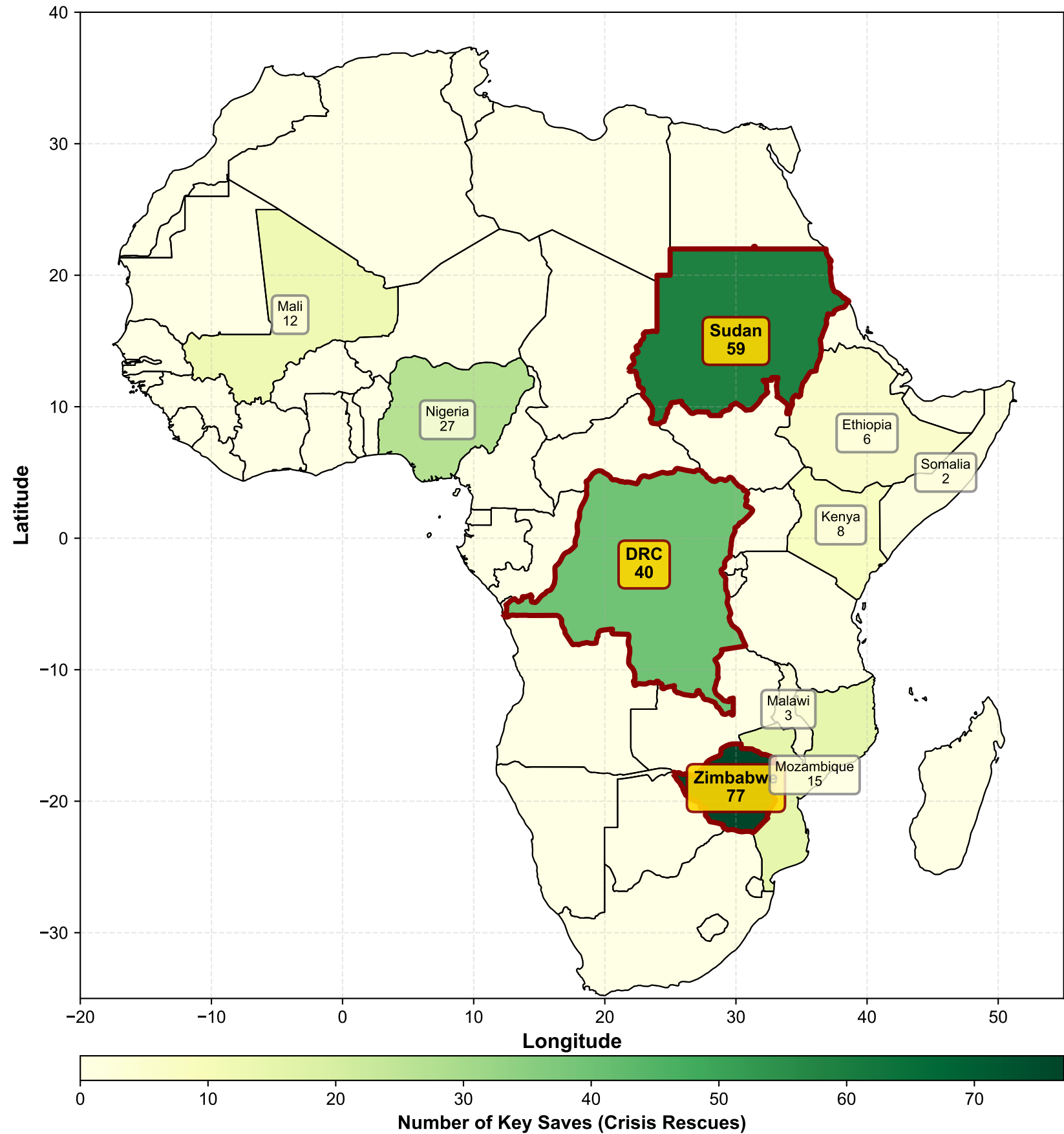
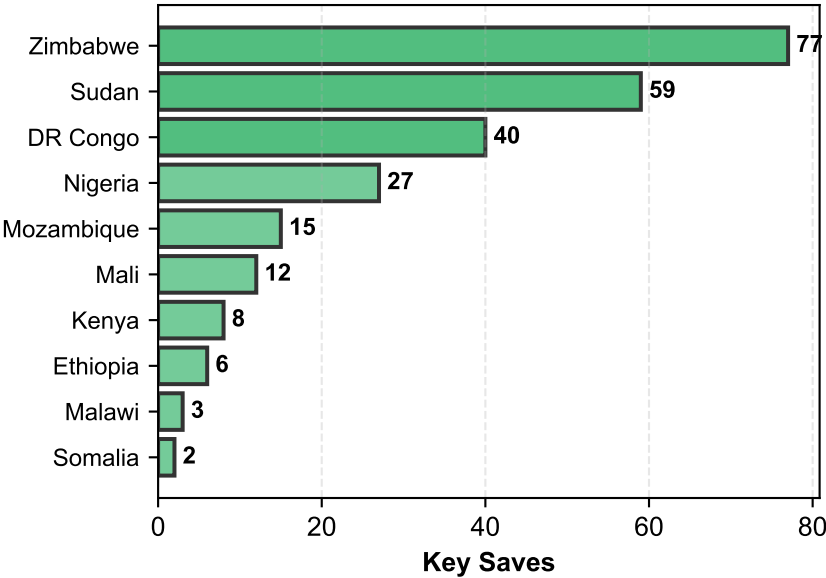


Cascade Breakthrough: 249 Crisis Rescues Across Africa



Top 10 Countries
by Cascade Rescues



CASCADE SUCCESS SUMMARY

Total Crisis Rescues: 249
Countries with saves: 10

TOP 3 CONCENTRATION:

Zimbabwe: 77 saves
Sudan: 59 saves
Democratic Republic of the Congo: 40 saves

Combined: 176 (70.7%)

BREAKTHROUGH CONTEXTS:

- Economic collapse (Zimbabwe)
- Conflict escalation (Sudan)
- Displacement shocks (DRC)

CASCADE ACHIEVEMENT:

Where AR baseline failed due to rapid-onset dynamics, news-based features successfully identified crises 8 months in advance.

Success on the HARDEST cases—precisely where early warning matters most.

Geographic distribution of 249 cascade rescues—crises missed by AR baseline but successfully predicted by Stage 2 news features 8 months in advance. Key saves concentrate in high-coverage contexts: Zimbabwe (77 saves, 30.9%), Sudan (59, 23.7%), DRC (40, 16.1%) account for 70.7% of total rescues. These countries feature dense media ecosystems and clear crisis narratives (economic collapse, conflict escalation, displacement) where dynamic news signals provide genuine early warning value. Success on rapid-onset shocks—economic crises (Zimbabwe hyperinflation 2022-23), conflict escalations (Sudan Apr 2023), displacement events (DRC eastern provinces)—demonstrates cascade breakthrough on the hardest cases where persistence models fail. Strategic deployment insight: concentrate news-based forecasting resources where media coverage density and crisis narrative clarity maximize predictive value, achieving 17.4% rescue rate on AR failures (249 of 1,427 missed crises). Geographic heterogeneity enables optimization: high-impact deployment in Sudan/Zimbabwe/DRC media-rich contexts. 5-fold stratified spatial cross-validation, $h=8$ months forecast horizon.