PALM-TREEs
A Pan African And Transdisciplinary Lens on the Margins:
Tackling the Risks of Extreme Events (palm-trees)

IMPROVING CLIMATE INFORMATION ACCESS, COMMUNITY ENGAGEMENT, AND GOVERNANCE TRUST IN KWARA STATE

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EXECUTIVE SUMMARY

Effective climate adaptation depends not only on infrastructure and resources but also on access to timely information and trust in governance systems. Climate adaptation in Kwara State is significantly constrained by two systemic failures: limited access to climate information and low public trust in governance systems. Evidence from the PALM-TREEs study shows that only 8% of rural populations receive climate or early warning information, while 40% lack confidence in government responses. These gaps directly contribute to poor decision-making, avoidable agricultural losses, and low uptake of government programmes. Without timely and trusted information, farmers cannot adjust planting cycles, manage risks, or adopt climate-smart practices. Without urgent reforms, Kwara State risks continued inefficiencies in climate adaptation investments and worsening rural vulnerability. This policy brief draws on PALM-TREE's findings and relevant literature to propose a shift toward people-centered climate communication systems and participatory governance, ensuring that climate information is accessible, actionable, and trusted. This brief recommends:

- Establishing a coordinated climate communication system
- Scaling last-mile information delivery
- Strengthening participatory governance
- Building trust through accountability mechanisms

Methodology

This policy brief is based on findings from the PALM-TREEs (Pan-African and Transdisciplinary Lens on the Margins) project, conducted in Kwara State, which adopted a mixed-methods, transdisciplinary research approach. The study combined physical climate analysis with social and governance assessments. Physical analysis included satellite datasets (Sentinel-1, Landsat, MODIS), climate data (CHIRPS, ERA5), and drought indicators (SPI, SPEI, SMI), which were used to assess climate variability and hazard exposure. The social science component engaged over 900 respondents across more than 500 communities in 94 wards, using structured surveys, focus group discussions, and participatory community consultations. This enabled a detailed understanding of access to climate information, communication channels, and perceptions of government response. The study also applied integrated data analysis, linking climate risks with institutional, communication, and governance factors. This approach provided insights into how information access and trust influence adaptive behaviour and policy effectiveness. This policy brief synthesizes these empirical findings and complements them with national and global literature to develop actionable policy recommendations.

Policy Context

Climate information systems in Nigeria are primarily centralized, with key data generated by national agencies such as the Nigerian Meteorological Agency (NiMet) and the Nigeria Hydrological Services Agency. While these institutions produce valuable climate and weather information, the translation of this data into locally relevant and actionable formats remains a major challenge (World Bank, 2021). At the state level, Kwara lacks a comprehensive and coordinated climate communication strategy. Responsibilities for communication are dispersed across ministries such as Environment, Agriculture, and Information, with limited coordination. This fragmentation results in inconsistent messaging and weak outreach to rural communities. Globally, effective climate governance increasingly emphasizes the importance of people-centered early warning systems, which integrate risk knowledge, monitoring, communication, and response capabilities (World Meteorological Organization [WMO], 2022). However, in Kwara State, communication systems are largely top-down and poorly adapted to local contexts.

Community engagement in policy processes is also limited. Decision-making is often centralised, with minimal involvement of local stakeholders. This reduces ownership and weakens the relevance and effectiveness of policies. Trust in government institutions is a critical factor influencing policy uptake. Where communities perceive government responses as inadequate or unresponsive, trust declines, leading to reduced cooperation and engagement. The PALM-TREEs findings highlight these challenges, showing limited access to climate information and weak confidence in government responses. To address these issues, climate governance in Kwara State must shift toward integrated communication systems and participatory governance frameworks.

Key Issues and Evidence

The PALM-TREEs study reveals a significant gap in access to climate information in Kwara State. Only 8% of respondents reported receiving any form of climate or early warning alerts, indicating that the vast majority of rural populations operate without timely or reliable information. This information deficit has major implications for adaptation. Farmers are unable to adjust planting schedules, prepare for extreme weather events, or adopt climate-smart practices. As a result, avoidable losses occur, reinforcing vulnerability.

In addition to the information gap, the study identifies a trust deficit in government responses, with approximately 40% of respondents expressing lack of confidence in government actions on climate change. This reflects both perceived and actual gaps in service delivery, communication, and responsiveness. The interaction between these deficits creates a reinforcing cycle: limited information reduces adaptive capacity, while low trust reduces engagement with government programmes.

The study also highlights inequalities in access to information. Remote and marginalised communities, as well as women and vulnerable groups, often have less access to communication channels. This exacerbates existing vulnerabilities. Furthermore, communication methods are often not tailored to local contexts. Technical language, lack of translation into local languages, and inappropriate dissemination channels reduce the usability of information. These findings align with global evidence showing that effective climate communication must be accessible, inclusive, and locally relevant to support adaptation (WMO, 2022; World Bank, 2021).

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Policy Implications

The findings demonstrate that climate information and governance trust are central determinants of adaptation effectiveness. First, the extremely low level of information access implies that investments in climate data generation will have limited impact unless accompanied by effective dissemination systems.

Second, the presence of a trust deficit suggests that technical solutions alone are insufficient. Policy must address the relational dimension of governance, building trust through transparency, accountability, and responsiveness.

Third, there is a need for a "last-mile delivery approach" to climate information, ensuring that information reaches vulnerable populations in accessible and actionable formats. This aligns with global best practices in early warning systems (WMO, 2022).

Fourth, participatory governance must be institutionalised. Engaging communities in decision-making processes improves policy relevance, strengthens ownership, and enhances accountability.

Fifth, integrating gender and social inclusion into communication systems is critical for equitable access and outcomes.

Finally, strengthening communication systems will have cross-cutting benefits, improving the effectiveness of interventions in agriculture, water, disaster risk management, and social protection.

Priority Policy Recommendations

1. Develop a State Climate Communication and Information Strategy (SCCIS)

Specific Actions

- Within 3 months, mandate the Ministry of Environment (with the Ministry of Information & Planning) to develop a State Climate Communication and Information Strategy (2026–2030).
  - Establish a Climate Communication Steering Committee, including the Ministry of Environment (Lead), Ministry of Information, Ministry of Agriculture, Kwara ADP, and SEMA
  - Develop a statewide communication protocol covering weather alerts, flood warnings, and agricultural advisories
- Create a central Climate Information Desk within the Ministry of Environment to coordinate all messaging.

2. Strengthen Last-Mile Delivery Systems

Specific Actions

Multi-Channel Dissemination

- Partner with 3–5 community radio stations to broadcast:
  - Daily/weekly weather forecasts
  - Seasonal advisories
- Deploy SMS alert system reaching at least 200,000 farmers and households
- Integrate climate messaging into extension agent visits (minimum twice per season per community).

Localization

- Translate all advisories into Yoruba and major local dialects in Kwara
- Simplify messages into actionable guidance (e.g., "Delay planting by 2 weeks")

Inclusion

- Use voice-based messages (IVR) for low-literacy populations.

3. Establish Community-Based Climate Information Platforms

Specific Actions

Local Climate Information Centres

- Establish **1 Climate Information Centre per LGA (16 LGAs)**
  - Locate centres within LGA offices, agricultural service centres and community hubs

Community Climate Facilitators

- Train 5–10 facilitators per ward (approx. 500+ facilitators statewide)

Peer Learning Systems

- Create farmer learning groups for climate information sharing
- Organise quarterly community forums on climate risks

4. Integrate Climate Information into Extension and Development Systems

Specific Actions

Extension Integration

- Mandate all extension agents to deliver:
  - Climate advisories during farm visits
  - Seasonal planning guidance
- Equip agents with tablets or smartphones preloaded with climate data tools

Programme Integration

- Embed climate information into:
  - Agricultural programmes
  - Water management initiatives

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- Social protection systems

Continuous Engagement

- Issue monthly climate bulletins
- Conduct pre-season and mid-season advisory campaigns

Responsible MDAs

- Ministry of Agriculture (Lead)
- Kwara ADP

Ministry of Environment

5. Build Trust Through Transparency and Accountability

Specific Actions

Regular Public Communication

- Publish quarterly climate action updates by the State Government
  - Use radio broadcasts, social media and community meetings

Feedback and Grievance Mechanisms

- Establish toll-free hotline and community feedback desks at LGAs
- Track and respond to complaints within 7–14 days

Monitoring and Reporting

- Develop public dashboard showing, climate interventions, beneficiaries reached and outcomes achieved.

Responsible MDAs

- Ministry of Agriculture (Lead)
- Kwara ADP
- Ministry of Environment

6. Promote Participatory Governance Mechanisms

Specific Actions

Community Consultations

- Institutionalise biannual community consultations in all LGAs
- Include farmers, pastoralists, women groups, youth

Local Adaptation Committees

- Establish Ward-Level Climate Adaptation Committees

7. Strengthen Institutional Capacity for Climate Communication

Specific Actions

Capacity Building

- Train **200+ state and LGA officials** in:
  - Climate risk communication
  - data interpretation
  - community engagement

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