

Assessment of Community-Led Flood Adaptation Strategies in Lagos Coastal Slums, Nigeria

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Executive Summary

Flooding remains one of the most dominant and devastating natural hazards posing threats to coastal cities like Lagos, Nigeria. This study, titled "Community-Led Flood Adaptation in Coastal Slums of Lagos State, Nigeria", examined the adaptation measures used by three vulnerable slum communities of Ajegunle, Makoko, and Ijora-Badia in response to flood disasters. The study sought to understand how these communities design, implement and sustain flood responses; investigate the role of stakeholders in the adaptation effort; assess the effectiveness of the measures; and provide policy guidelines that will improve flood resilience in informal contexts.

The study employed a mixed-methods design based on pragmatic philosophy, enabling the integration of qualitative and quantitative insights. Quantitative data were gathered through a structured household survey of 1,983 residents in the three coastal slum communities, while qualitative data were gathered through focus group discussions (FGDs), semi-structured interviews, and field observations. Secondary information required for the study was sourced from government reports, policy documents, and peer-reviewed publications to provide additional context and validate the findings. The study was premised on the social capital theory, resilience theory and the Sustainability Livelihood Framework (SLF), which collectively aided the understanding and explanation of how communities utilise internal and external assets to mitigate flood risks and enhance adaptation.

Findings from the study revealed that flood occurrence in the coastal slums of Lagos is both frequent and severe, with more than 90% of the respondents experiencing flooding in the last five years. Ajegunle and Ijora-Badia experience flood occurrence several times during the rainy season, commonly resulting in major damage to properties, livelihoods and well-being. Furthermore, Makoko, being a lagoon-based slum, experiences flooding as a near-daily ecological condition rather than a seasonal event. The causes of flooding were largely linked to the effects of heavy rainfall, poor drainage systems, indiscriminate waste disposal, low-lying topography and sea level rise. This is further worsened by a lack of formal flood prevention systems and weak emergency management frameworks.

In the face of these challenges, the research revealed a pattern of community-based adaptation and resilience. Residents across the three slum communities have developed varied local, low-cost coping strategies that highlight indigenous knowledge of their environment. These include drainage clearance, sandbagging, raising house foundations, construction of flood barriers, temporary relocation during the rainy season, and stilt house construction. These initiatives are usually coordinated through Community-Based Organisations (CBOs), youth groups, and faith-based networks, which form the bedrock of local flood governance. These organisations mobilise collective assets for pre-rainy drainage cleaning, pool community finances to repair damaged houses, and offer community aid during flood crises.

Nonetheless, the study also established that these strategies remain predominantly reactive and limited by structural challenges. These challenges include chronic poverty, poor technical know-how, lack of external funding, limited drainage infrastructure, insecure land tenure systems, and minimal government support. In Makoko and Ijora-Badia, where housing and infrastructure are most vulnerable to flooding, community responses are weakened by resource scarcity and government neglect. This was attributed to the fact that while residents invest in self-help interventions, these are impacted by subsequent floods owing to a lack of durable engineering designs. Furthermore, gender inequality and social inclusion are prominent as women and

vulnerable populations remain underrepresented in decision-making and commonly bear the highest brunt during flood occurrences.

Stakeholder analysis identified a hierarchical imbalance in flood governance. Community-Based Organisations (CBOs) are the most involved actors in the planning and implementation of flood adaptation strategies, while local, state and federal government authorities are perceived as distant or minimally involved. The study also noted that the role of non-governmental organisations (NGOs) and religion-based organizations is supportive but inconsistent, providing relief items and flood awareness campaigns. This fragmentation indicates the lack of an integrated flood management framework that connects local innovations with institutional capacity. The study therefore posits that flood adaptation in Lagos coastal slums remains predominantly bottom-up but under-supported, relying majorly on social networks rather than systemic governance.

Comparatively, Ajegunle showed the most organized and fairly effective adaptation efforts due to stronger social capital and higher educational qualifications. Ijora-Badia highlighted mixed results as residents are very motivated and organized, but suffer from severe infrastructure deficits. Makoko, while rich in socio-cultural adaptation and indigenous knowledge, remains the most marginalized, with limited government presence and major ecological disruption. Across the coastal communities, the success of adaptation was found to depend significantly on the quality of leadership and cohesion, while failure emerged as a consequence of poor institutional connections, poor funding, and lack of technical support

Conclusively, the finding of this study indicates that flood adaptation efforts led by Lagos coastal slum communities exhibit both resilience and vulnerability. This finding highlights the ability of informal settlements to organize themselves when they are structurally neglected and exposes the injustice in urban governance where informal settlements are excluded from formal flood risk planning. For meaningful progress, the policy framework must move from periodic disaster response to sustained, participatory resilience development. The study therefore advocates for co-developed flood management strategies that incorporate local innovation into urban resilience strategies, enhance multi-stakeholder cooperation and offer technical and financial support to local organizations.