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Strengthening Climate-Responsive Institutions: Legal Innovations for Sustainable Development in Flood-Prone Lagos

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Abstract: Flooding has become one of the most critical climate-related hazards in Lagos, Nigeria, with the 2025 floods severely impacting Island districts such as Eti-Osa, Lagos Island, and Lekki, displacing thousands and disrupting economic activity. This paper reframes Lagos' flood crisis as primarily a legal and governance challenge rather than a purely infrastructural one. Using a qualitative case study approach, the study reviews Nigeria's Climate Change Act (2021), Lagos State drainage and planning laws, and recent flood impact data. Findings show that despite multiple policy instruments, enforcement remains weak, institutional mandates are fragmented, and dredging, sandfilling, and reclamation activities continue to heighten flood risk. The paper proposes a Lagos State Flood Risk Management Law, cumulative impact assessments for reclamation projects, a multi-agency Flood Governance Council, and participatory risk governance mechanisms. Applying polycentric, adaptive, and risk governance theories, this study demonstrates how legal innovation can strengthen climate-responsive institutions and advance Sustainable Development Goals (SDG 11 and 13).

Keywords: *Lagos Flooding; Climate Change Adaptation; Legal Innovation; Polycentric Governance; Sustainable Urban Development.*

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I. INTRODUCTION

Flooding remains one of the most damaging and recurrent climate-related hazards worldwide, and its frequency is projected to rise due to climate change, sea-level rise, and rapid urbanization. The Intergovernmental Panel on Climate Change (IPCC, 2022) warns that intensified rainfall events and coastal surges will significantly increase flood risks for low-lying cities, particularly in developing regions where infrastructure and governance systems are under strain.

Lagos State, Nigeria's commercial capital and one of Africa's largest megacities, faces a particularly acute flood challenge. Its unique geography characterized by a low-lying coastal plain, an extensive lagoon system, and a high population density of over 20 million, makes it one of the most flood-vulnerable cities in West Africa (Aniramu et al., 2025). In the last two weeks of September 2025, Lagos experienced a severe flood episode that was especially devastating on the Island and coastal districts, including Eti-Osa, Lagos Island, Lekki, Victoria Island, and Ajah. Major roads were submerged, residential estates and business districts were inundated, schools and offices were closed, and thousands of residents were displaced (Vanguard, 2025; Premium Times, 2025).

Although the most recent floods have disproportionately impacted the Island corridor, research shows that flood risk is distributed across the entire state, with mainland LGAs such as Kosofe, Ikeja, Alimosho, and Mushin frequently experiencing flash floods from blocked drains and poorly maintained canals, and peri-urban LGAs like Ikorodu, Epe, and Badagry suffering from riverine and tidal flooding during peak rainfall seasons (Nwokoro et al., 2023). This spatial spread of flood impacts demonstrates that Lagos' vulnerability is systemic and multi-scalar, cutting across residential, industrial, and peri-urban areas.

Yet despite these recurring crises, Lagos' legal and institutional frameworks remain under-equipped to deliver resilience at scale. Drainage and physical planning laws are inconsistently enforced, land-use regulation is fragmented across multiple tiers of government, and institutional coordination is weak (Danhassan et al., 2023). Compounding these challenges are human activities such as dredging, sandfilling, and large-scale reclamation, which have altered

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natural hydrological pathways and reduced the buffering capacity of wetlands and floodplains (Olajide & Lawanson, 2023).

Addressing these challenges requires more than physical infrastructure upgrades. It calls for transformative legal and governance innovations that strengthen climate-responsive institutions, enhance regulatory enforcement, and embed climate risk into urban planning and development control. This paper, therefore, examines Lagos State as a whole while drawing particular lessons from the September 2025 Island floods to analyze institutional and legal gaps and propose reforms that will promote resilience and sustainable urban development.

II. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

- *Climate Change, Urbanization, and Intensifying Flood Risks*

Urban flooding is increasingly recognized as one of the most pervasive manifestations of climate change impacts on cities, particularly in low- and middle-income countries where rapid urbanization intersects with weak governance structures. Evidence from the Intergovernmental Panel on Climate Change (IPCC, 2022) confirms that the intensity and frequency of extreme rainfall events are increasing, leading to heightened flood risk in coastal and deltaic regions. These impacts are not purely hydrological but are socially and economically mediated, producing disproportionate consequences for vulnerable urban populations with limited adaptive capacity (Dharmarathne et al., 2024).

The experience of other coastal megacities provides important insights for Lagos. Jakarta, for instance, faces recurrent compound flooding caused by sea-level rise, land subsidence, and extreme precipitation, displacing thousands annually. Dhaka and Manila record similar patterns, where unplanned settlements on floodplains, clogged drainage systems, and climate-driven rainfall variability have transformed seasonal floods into chronic disasters (Jha et al., 2021). These lessons underscore that flood risk in rapidly urbanizing coastal cities is a function not only of exposure to climatic hazards but also of institutional capacity, land-use control, and infrastructure planning, factors that are highly relevant to Lagos.

- *Flooding and Governance in Nigeria*

Within Nigeria, flooding is consistently ranked among the top climate-related hazards, and Lagos remains the epicenter of recurrent urban inundation. Its geographic position on a low-lying coastal plain, coupled with a dense population exceeding 20 million, places it at significant risk (Aniramu et al., 2025). Studies indicate that flooding is no longer an episodic event but has become a chronic hazard that disrupts transportation, damages infrastructure, displaces households, and generates public health crises (Ajayi, 2025).

The September 2025 flood event was particularly severe on the Island and coastal districts of Eti-Osa, Lagos Island, Lekki, Victoria Island, and Ajah where stormwater overwhelmed drainage channels, submerged roads, and led to large-scale evacuations. However, flood risk is distributed across the state: LGAs such as Kosofe, Alimosho, Ikeja, Agege, and Mushin report recurrent flash floods due to blocked drainage channels, while Ojo, Amuwo-Odofin, and Badagry suffer tidal and riverine flooding during peak rainfall (Nwokoro et al., 2023). This distribution highlights that Lagos' flood governance challenge is systemic and multi-scalar, affecting residential, industrial, and peri-urban zones.

Danhassan et al. (2023) argue that Nigeria's policy environment for flood risk management remains fragmented. While frameworks such as the National Water Resources Master Plan and the Climate Change Act (2021) exist, there is no unified, enforceable national flood policy. This leaves states such as Lagos to rely on state-level interventions that often lack coherence and are hampered by overlapping mandates and limited fiscal capacity.

For governance to move beyond rhetoric, it must be obvious and enforceable within existing laws and institutions, while also functioning as an ecosystem governance framework that links land use, wetlands, waste management, and infrastructure. Effective flood governance requires accurate and accessible data to guide planning, supported by modern tools for predictive modelling and real-time monitoring. Equally important is collaboration: government must cooperate with communities and create strong incentives for private partnerships that develop innovative, sustainable methods of channeling floodwaters without displacing existing settlements, thereby transforming flood governance from a reactive posture to a proactive system of resilience.

- *Institutional and Regulatory Deficiencies*

A significant body of research attributes Lagos' flood vulnerability to deficiencies in planning, regulation, and institutional enforcement. Urban planning and drainage regulations are inconsistently applied, leading to widespread encroachment on drainage alignments and wetlands. Oshodi (2015) notes that overlapping mandates among the Lagos State Ministry of Environment, the Ministry of Physical Planning and Urban Development, and local councils often create regulatory confusion and delayed interventions.

Inadequate routine maintenance further exacerbates the situation: desilting of primary drainage channels is irregular, and solid waste frequently obstructs canals, reducing their conveyance capacity (Adelekan, 2015). Yusuf (2023) highlights that weak enforcement of environmental laws has allowed illegal structures to proliferate along floodplains and drainage channels, compounding runoff during extreme rainfall events. Collectively, these institutional and regulatory deficiencies exacerbate the impacts of climate-induced hydrological stressors, resulting in recurrent, city-wide flooding.

- *Human-Induced Drivers: Dredging, Sandfilling, and Land Reclamation*

Another distinctive driver of Lagos' flood crisis is the scale of anthropogenic interventions that have fundamentally

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altered the city's natural hydrology. Dredging, sandfilling, and reclamation activities have expanded dramatically over the past two decades, particularly along the Lekki-Epe axis and the Lagos Island corridor. These projects, often justified for urban expansion and economic development, have narrowed natural drainage pathways, reduced wetland buffers, and displaced floodwaters into adjoining low-income neighborhoods (Olajide & Lawanson, 2023).

Aligbe (2024) observes that large-scale reclamation projects such as Eko Atlantic City have rarely undergone cumulative impact assessment or systematic stakeholder engagement, resulting in unanticipated hydrological consequences. Informal sand mining and unregulated dredging further destabilize riverbanks, accelerate sedimentation, and reduce channel capacity, heightening the probability of overflow during peak rainfall events. This trend underscores that Lagos' flood problem is not solely climate-driven but also a product of human-induced environmental change.

➢ *Governance and Climate-Resilience Frameworks*

Recent literature emphasizes that infrastructure-based solutions must be complemented by governance and institutional reforms. The IPCC Working Group III identifies governance as a core enabler for climate adaptation, stressing that policies must be supported by institutional arrangements that are inclusive, coordinated, and enforceable (IPCC, 2022).

Polycentric governance theory (Ostrom, 2010) offers a useful lens for understanding Lagos' multi-level institutional landscape, where federal agencies (e.g., NIWA), state ministries, and local councils all play overlapping roles. When effectively coordinated, polycentric systems can foster innovation, redundancy, and adaptive capacity. Adaptive governance frameworks further stress the need for flexibility and learning-oriented institutions that can adjust regulations and interventions in response to evolving climate risks (Renn et al., 2018).

Risk governance theory complements these perspectives by emphasizing the socio-political dimensions of risk management, including transparency, trust-building, legitimacy, and stakeholder participation. This is crucial for Lagos, where community compliance with drainage clearance, waste management rules, and building codes is essential for reducing flood risk.

➢ *Research Gaps and Justification*

This review highlights several critical gaps. First, while numerous studies have examined flood patterns and infrastructure responses, few explicitly frame legal innovation as a proactive instrument for strengthening climate-responsive institutions. Second, there is limited scholarship integrating dredging, sandfilling, and reclamation governance into holistic flood risk management analysis, despite their growing impact on Lagos' hydrology. Third, there is a dearth of replicable institutional models tailored to African coastal megacities that address multi-level governance challenges and embed climate adaptation into urban planning and development control.

This study seeks to address these gaps by offering a Lagos-focused case study that systematically diagnoses legal and institutional weaknesses, evaluates the governance implications of human-induced hydrological changes, and proposes targeted legal reforms to build adaptive, participatory, and accountable institutions. Grounding its analysis in both theoretical insights and empirical evidence from the September 2025 flood event, this paper contributes to advancing scholarship and practice on climate-resilient urban governance in Africa.

III. STUDY AREA

Lagos State is located in the southwestern part of Nigeria, lying between latitudes 6°23'N and 6°41'N and longitudes 2°42'E and 3°42'E. It is the smallest state in Nigeria by landmass, occupying approximately 3,577 km², but it is the most populous, with an estimated population exceeding 20 million, making it one of the fastest-growing megacities in Africa (National Population Commission, 2024). The state is bounded to the north and east by Ogun State, to the west by the Republic of Benin, and to the south by the Atlantic Ocean, giving it a coastline of about 180 km.

The climate of Lagos is characterized by a humid tropical environment, with two main seasons: a wet season from April to October and a dry season from November to March. Annual rainfall ranges between 1,200 mm and 2,000 mm, with peaks in June and September, which often coincide with the most severe flood episodes. Relative humidity remains high (70–90%), and average annual temperatures range from 25°C to 32°C.

Topographically, Lagos is predominantly low-lying, with many areas barely one or two meters above sea level. Its geomorphology consists of barrier-lagoon complexes, sandy beaches, tidal flats, creeks, and extensive wetlands. Major rivers, including the Ogun, Oshun, and Yewa, feed into the Lagos Lagoon, while an extensive network of canals and drainage channels connects to smaller creeks. These features historically provided natural flood attenuation, but rapid urbanization has altered much of the hydrology.

Lagos is the commercial and financial hub of Nigeria, hosting over 60% of the country's industrial and commercial activities. Key urban centers include Lagos Island, Ikeja (the state capital), Ikorodu, Surulere, Apapa, Lekki, Ajah, and Victoria Island. Over the last two decades, extensive sandfilling, dredging, and large-scale reclamation projects such as those along the Lekki-Epe axis and Eko Atlantic City have reclaimed significant portions of coastal wetlands for urban development. While these projects have created new high-value real estate and infrastructure, they have also reduced the city's natural flood buffering capacity and intensified inundation risks in adjoining low-income areas.

The combination of high population density, inadequate drainage infrastructure, unregulated construction in flood-prone areas, and the impacts of climate change has made Lagos one of the most flood-vulnerable cities in West Africa. Figure 1 to 6 shows a schematic map of Lagos State

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highlighting key flood-prone districts, while Table 1 provides a detailed summary of local government areas (LGAs) most affected by flooding, their primary flood drivers, and recent flood impacts.

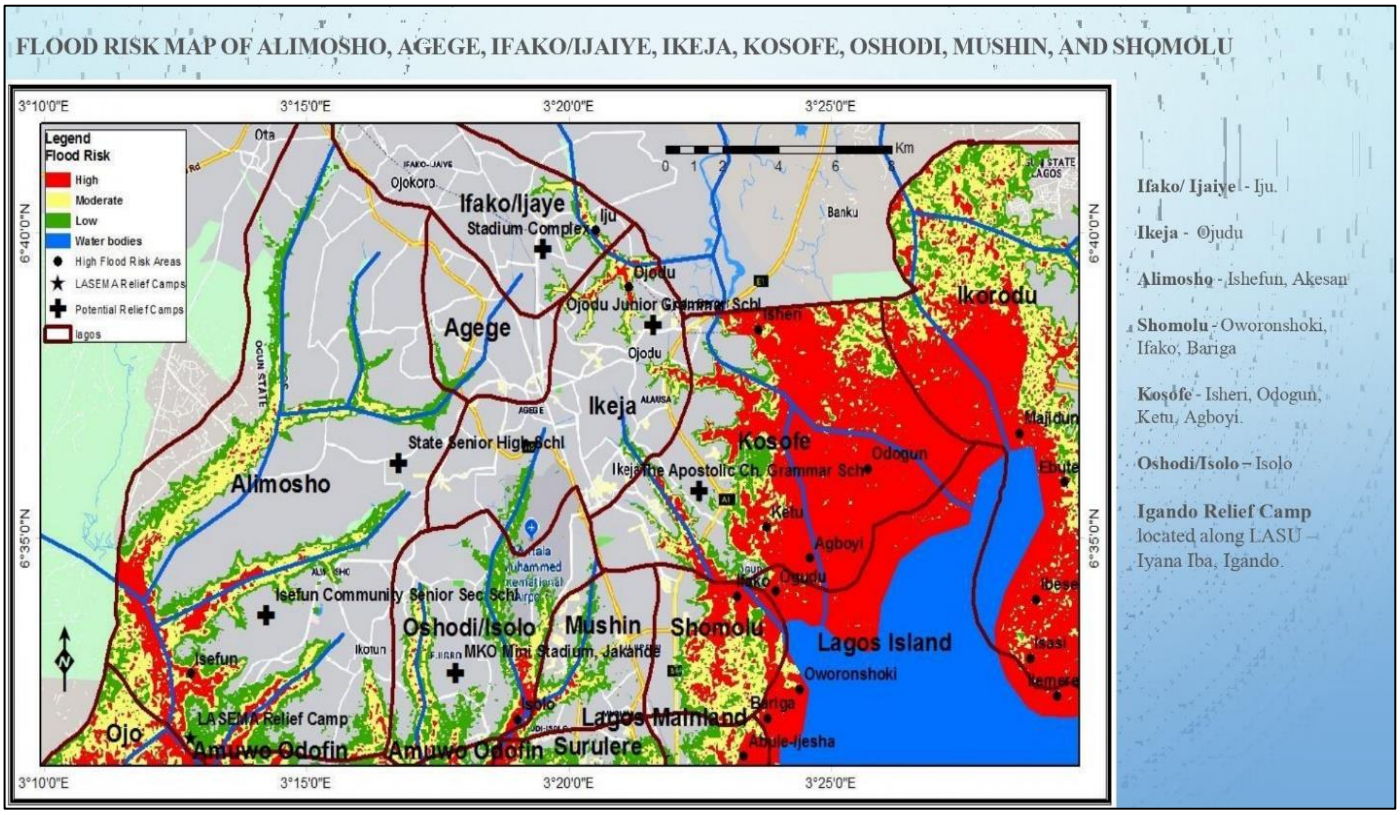

Fig 1 Flood Risk Map of Alimosho, Agege, Ifako/Ijaiye, Ikeja, Kosofe, Oshodi, Mushin and Shomolu
Source: LASEMA

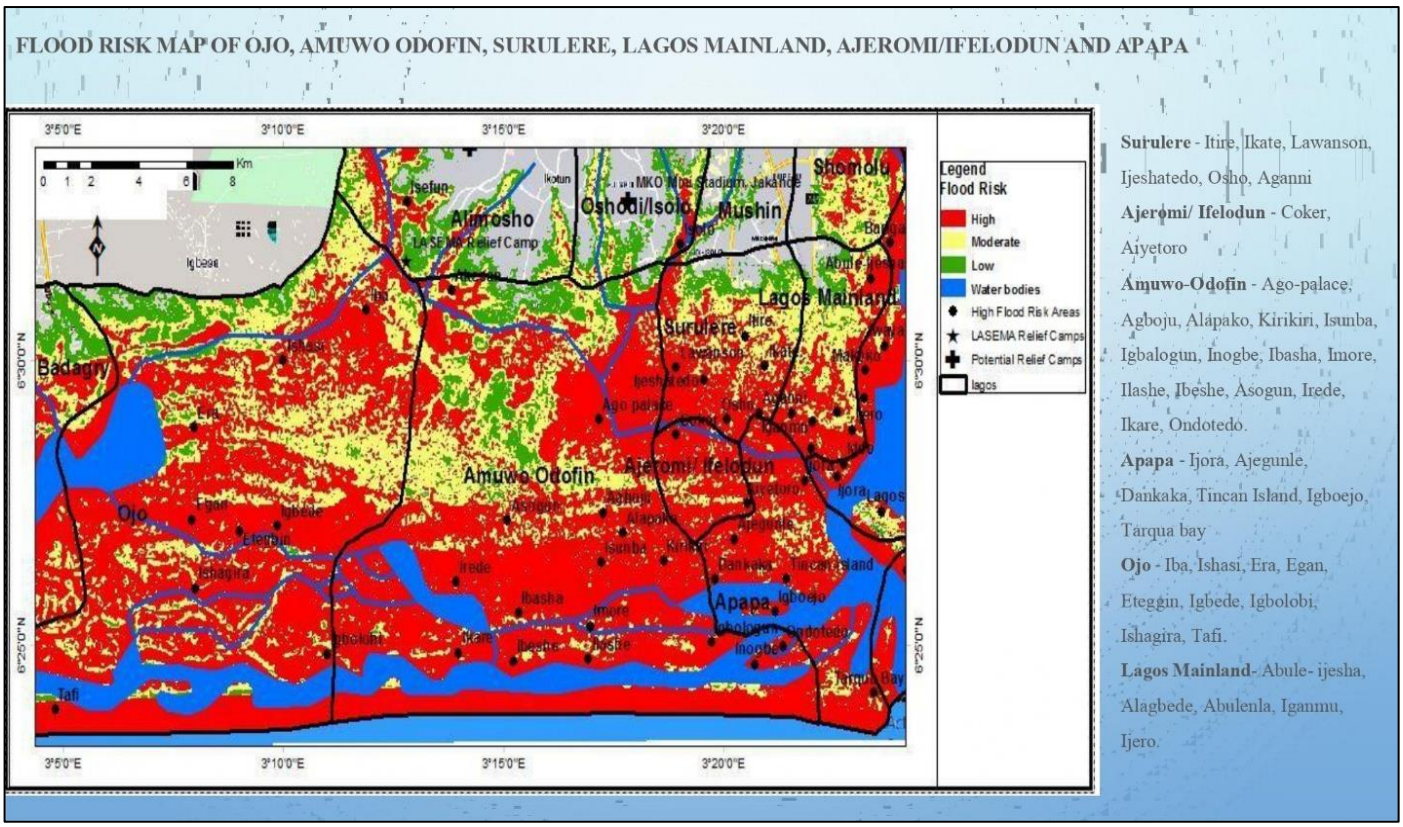

Fig 2 Flood Risk Map of Ojo, Amuwo Odofin, Surulere, Lagos Mainland, Ajeromi/Ifelodun and Apapa
Source: LASEMA

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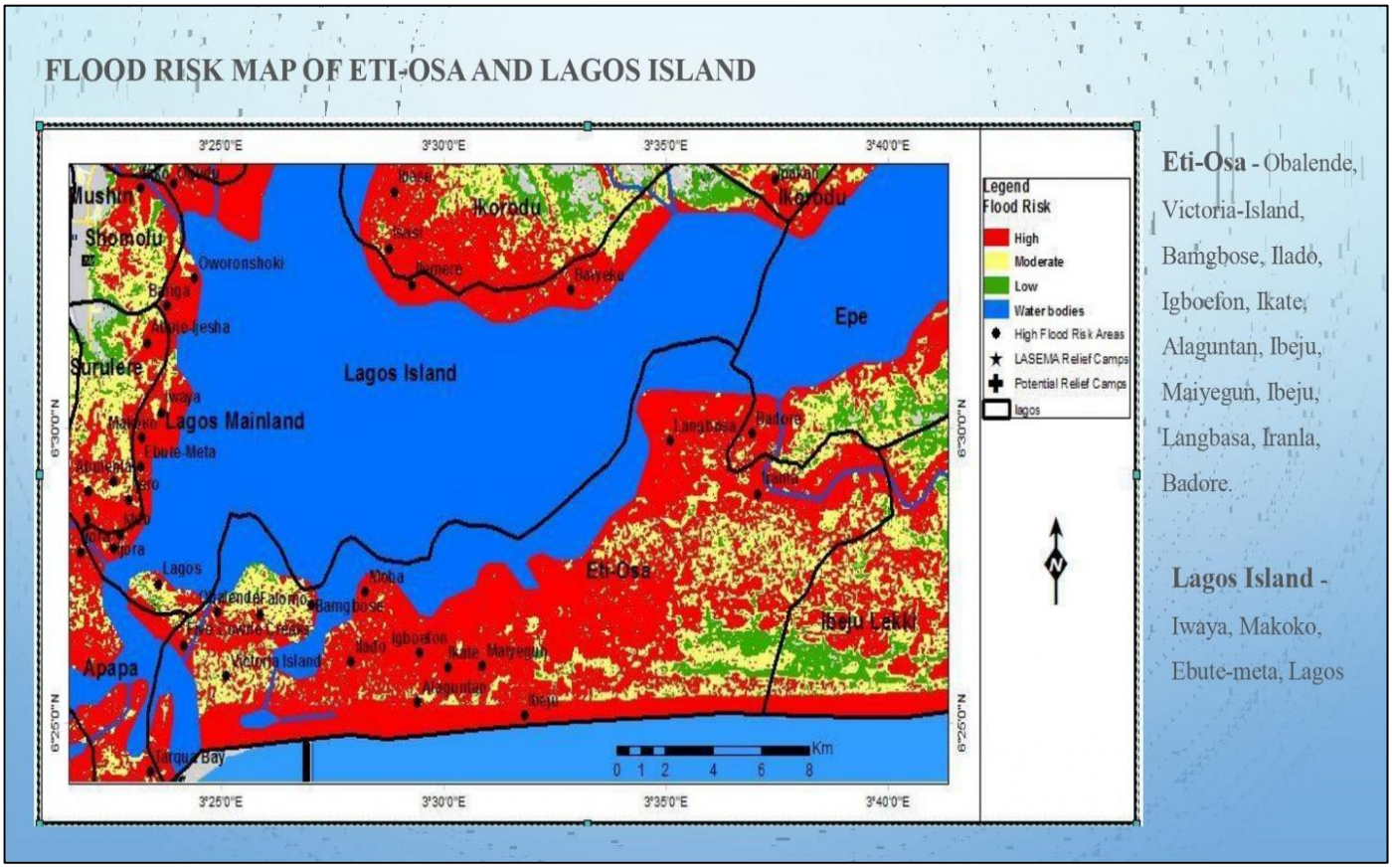

Fig 3 Flood Risk Map of Eti-Osa and Lagos Island
Source: LASEMA

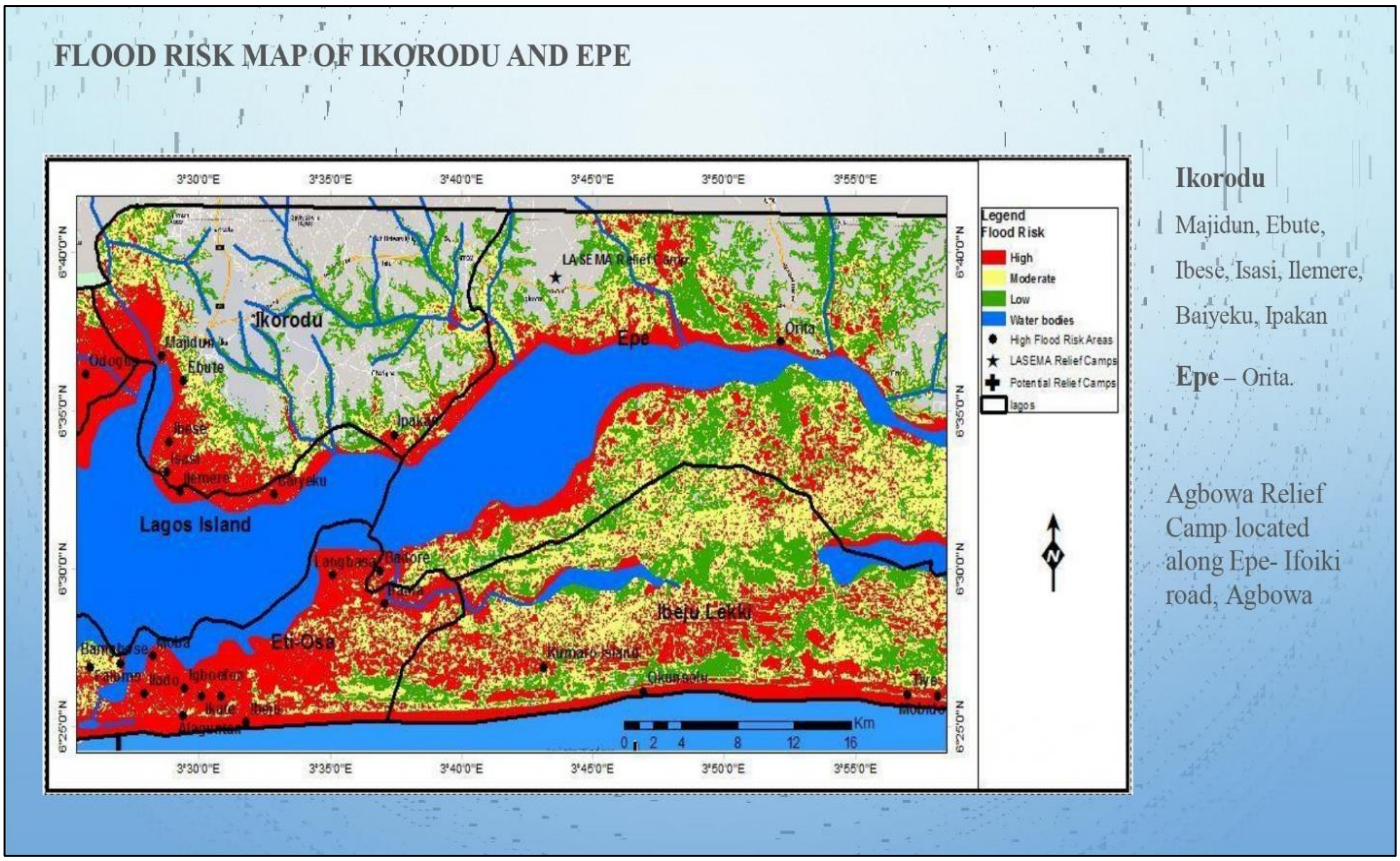

Fig 4 Flood Risk Map of Ikorodu and Epe
Source: LASEMA

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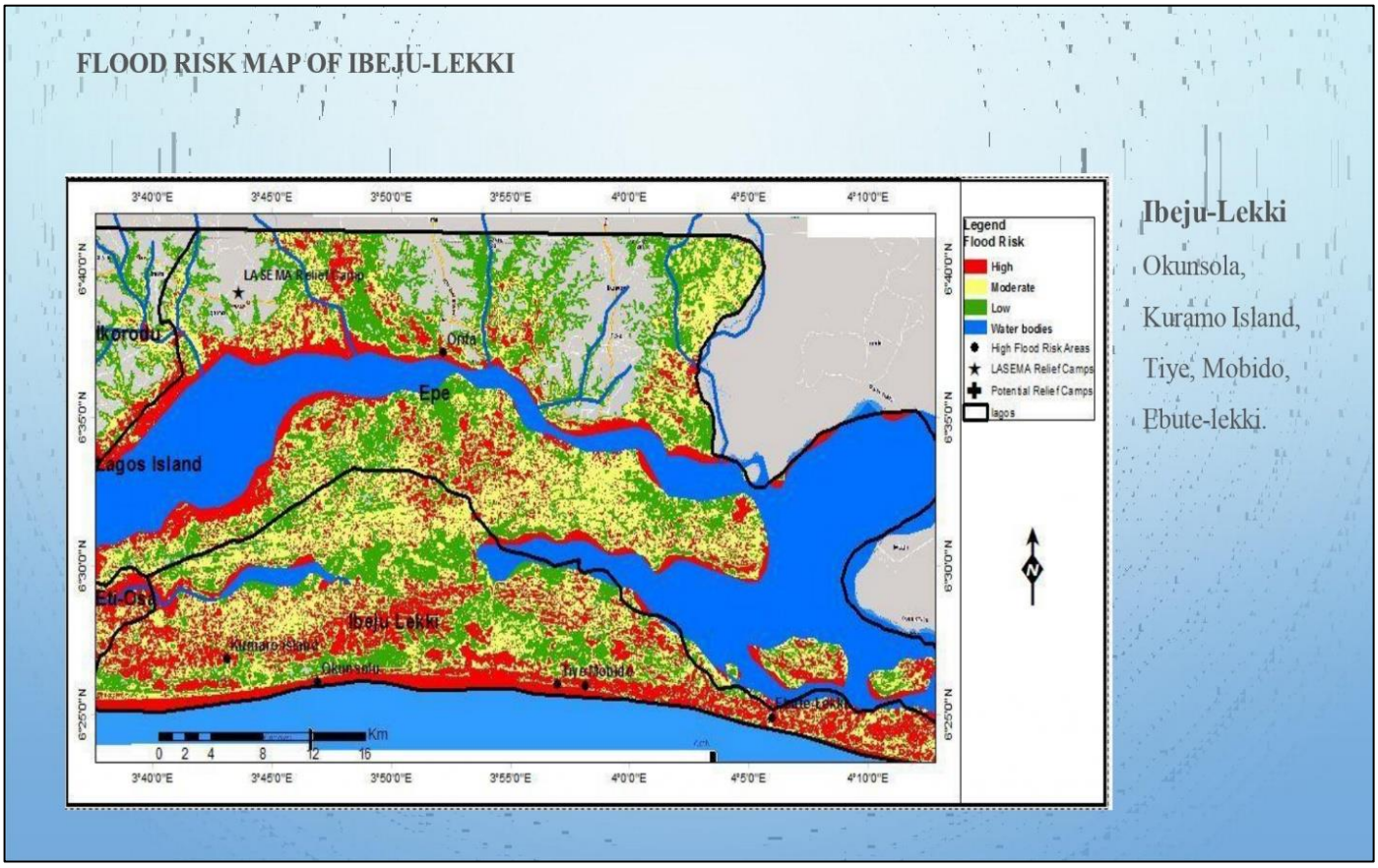

Fig 5 Flood Risk Map of Ibeju-Lekki
Source: LASEMA

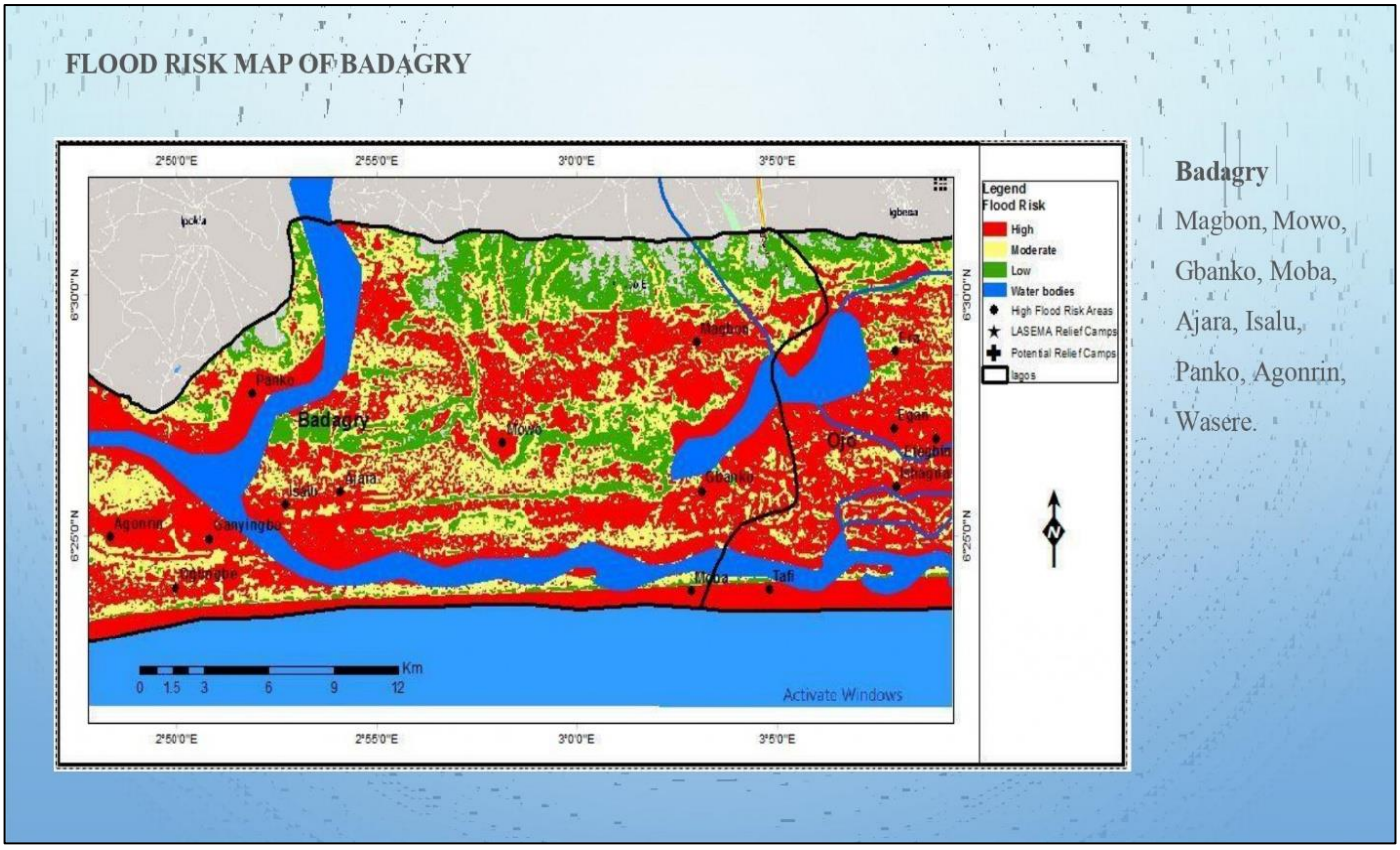

Fig 6 Flood Risk Map of Badagry
Source: LASEMA

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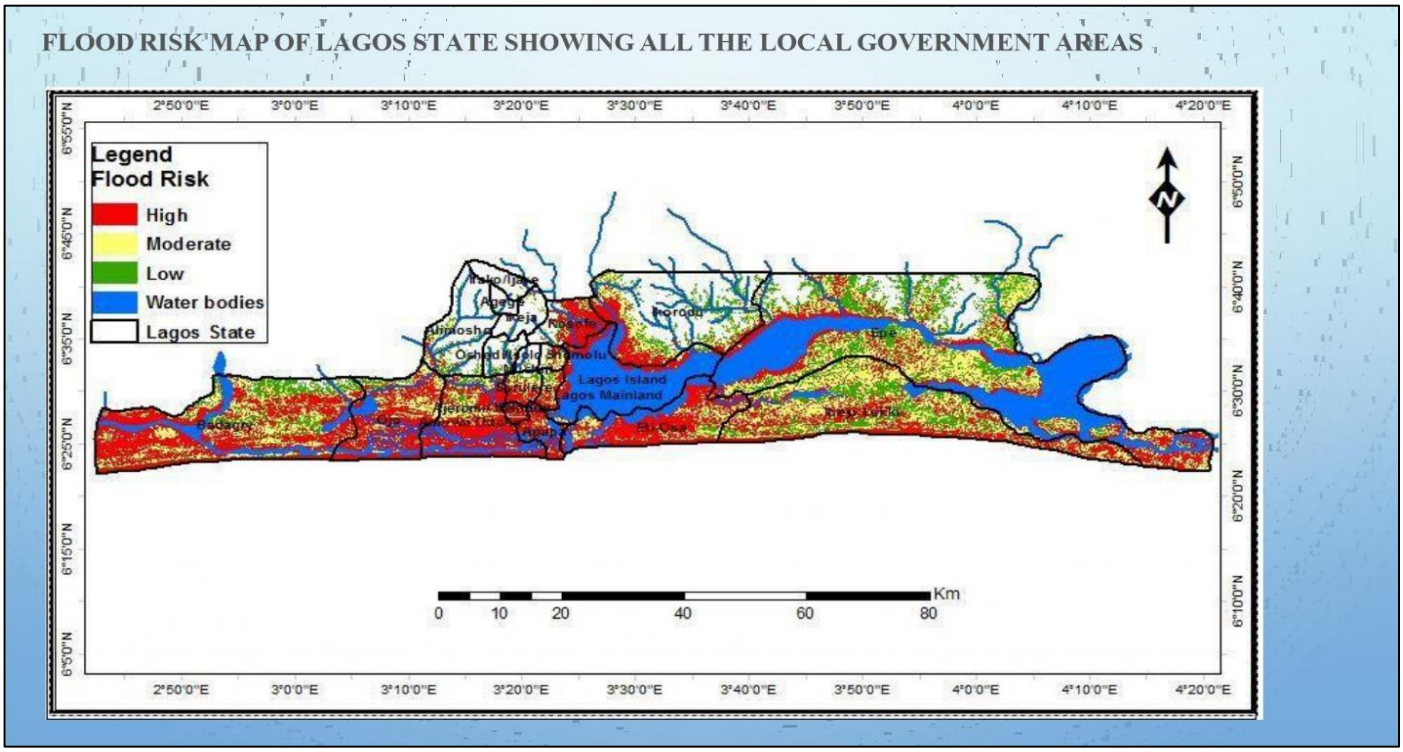

Fig 7 Flood Map of Lagos State Showing all the Local Government Areas
Source: LASEMA

Table 1 Flood-Prone Areas of Lagos State by Local Government Area (LGA)

Flood Risk Zone	Local Government Areas (LGAs)	Key Flood Drivers	Recent Impacts (2022–2025)
Metropolitan Mainland Core	Alimosho, Agege, Ifako-Ijaiye, Ikeja, Kosofe, Oshodi-Isolo, Mushin, Shomolu	High population density, inadequate drainage, solid waste blocking canals, encroachment on floodplains	Recurrent street flooding; 2025 floods submerged major roads in Ikeja and Kosofe, disrupting commuting and businesses
Inner-Port & Industrial Belt	Ojo, Amuwo Odofin, Surulere, Lagos Mainland, Ajeromi-Ifelodun, Apapa	Industrial discharge into drains, sea-level influence near Apapa port, blocked channels	Major flooding along Lagos–Badagry Expressway (Ojo) in 2023–2025; port access roads repeatedly cut off
Island & Coastal Districts	Eti-Osa, Lagos Island	Sandfilling and reclamation projects, sea surge, luxury estate developments constricting drainage	Severe inundation in Lekki Phase 1 & Victoria Island during 2025 event; high property damage and displacement
Northern Peri-Urban Zone	Ikorodu, Epe	Riverine overflow, poor drainage maintenance, unregulated urban expansion	2024 and 2025 floods cut off major roads linking Ikorodu to Lagos metropolis; farms destroyed
Eastern Growth Corridor	Ibeju-Lekki	Heavy reclamation (e.g., Dangote Refinery axis), industrial expansion, shoreline modification	Increased localized flooding during rains, affecting construction sites and access routes
Western Coastal Zone	Badagry	Low-lying terrain, proximity to Atlantic coast, tidal surges	Communities inundated in 2023–2025 rainy seasons, disrupting cross-border trade

Source: LASEMA

➢ *Research Design*

This study employed a qualitative case study design, using Lagos State as a representative example of a rapidly urbanizing African coastal megacity. The 2025 flood event served as an empirical anchor to analyze governance responses and institutional weaknesses.

Data were drawn from multiple sources, including peer-reviewed journal articles, policy and legal documents (e.g., Nigeria's Climate Change Act 2021, Lagos State Physical Planning Laws), Lagos State Drainage Master Plans, and media reports from reputable outlets such as Vanguard and Premium Times. Grey literature, including LASEMA flood impact updates, was also consulted to validate reported flood impacts.

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A systematic document review was conducted using keywords such as *"Lagos flooding," "dredging regulation," "urban governance,"* and *"climate resilience."* Information was thematically analyzed, focusing on institutional coordination, regulatory enforcement, human-induced drivers of flooding, and participatory governance. These themes were examined using polycentric governance, adaptive governance, and risk governance as guiding conceptual lenses.

Triangulation was applied to enhance validity, with findings cross-checked across academic sources, government publications, and media reports. Ethical considerations were maintained by using only credible and publicly accessible data sources.

IV. RESULTS AND DISCUSSION

➢ *Overview of Flood Governance in Lagos*

Analysis of legal and institutional frameworks shows that Lagos has a relatively comprehensive policy environment for flood risk management, including the Lagos State Drainage Master Plan (2016–2035), the Environmental Protection and Management Law (2017), and provisions within the Physical Planning and Urban Development Law that prohibit construction on drainage alignments and floodplains. At the federal level, the Climate Change Act (2021) mandates adaptation planning and emissions reduction, while the National Water Resources Master Plan outlines integrated water resource management strategies (Danhassan et al., 2023).

Despite these frameworks, flooding persists as a chronic hazard, confirming that the primary challenge is not a legislative vacuum but weak enforcement, coordination, and climate responsiveness. Findings show that multiple agencies, Lagos State Ministry of the Environment and Water Resources, Ministry of Physical Planning and Urban Development, local councils, and federal bodies such as NIWA have overlapping responsibilities, which often results in duplication or policy inertia. This governance fragmentation confirms Ostrom's (2010) proposition that polycentric systems can produce either innovation or gridlock depending on the degree of coordination. In Lagos, the lack of a centralized flood governance mechanism means polycentricity currently functions as a barrier rather than an enabler of resilience.

➢ *Legal and Institutional Gaps*

A critical gap identified is the absence of a legally binding, state-wide flood risk management framework that integrates land-use regulation, drainage master planning, disaster risk management, and climate change projections. The existing Drainage Master Plan is a technical blueprint but lacks the legal force and fiscal backing necessary to guarantee implementation (Lagos State MoE, 2023).

Furthermore, laws relating to dredging and sandfilling are fragmented and lack clear cumulative impact assessment requirements. While environmental impact assessments (EIA) are mandated under the EIA Act CAP E12 LFN 2004, compliance is inconsistent, and monitoring of post-approval mitigation measures is weak (Ajayi, 2025). Illegal developments on wetlands and drainage corridors often persist despite demolition orders, highlighting gaps in enforcement and the influence of political economy factors. This finding is consistent with Adelekan (2015), who observed that regulatory capture and weak institutional capacity undermine Lagos' flood mitigation efforts.

➢ *Human-Induced Drivers and Sustainability Concerns*

Findings confirm that human activities significantly amplify flood risk in Lagos. Extensive sandfilling and reclamation along the Lekki-Epe corridor and Lagos Island have constricted natural waterways, reduced stormwater retention capacity, and displaced floodwaters into adjacent communities (Olajide & Lawanson, 2023). These activities have shifted flood risk spatially, with poorer mainland neighborhoods now experiencing deeper and longer inundation.

From a sustainability perspective, this represents a serious environmental justice concern, contravening the principle of equitable resilience advocated under SDG 11 (Sustainable Cities and Communities). Furthermore, unchecked reclamation undermines Lagos' capacity to achieve SDG 13 (Climate Action) by locking in maladaptive urban forms. Global experience shows that poorly regulated coastal development can worsen flood exposure: Jakarta's north coast reclamation project was partially suspended in 2018 after studies linked it to increased tidal flooding in neighboring districts (Colven, 2020). Lagos risks a similar outcome unless dredging and reclamation are subjected to cumulative impact assessments and legally enforceable wetland protection regimes.

➢ *Institutional Capacity and Governance Deficits*

Institutional capacity gaps are a recurring theme. Budgetary allocations for drainage maintenance remain largely reactive, with de-silting activities ramping up only during peak flood seasons rather than as part of a year-round preventive strategy (Lagos State Auditor-General's Report, 2023). Enforcement units are under-resourced, limiting their ability to monitor illegal construction or enforce stop-work orders in real time.

Equally significant is the weak level of public participation and risk communication. Most communities are not meaningfully engaged in decision-making related to dredging permits, land-use plans, or emergency preparedness. Risk governance theory (Renn et al., 2018) emphasizes that legitimacy, trust, and participation are essential to effective disaster risk management. In Lagos, low trust in public institutions contributes to non-compliance with waste disposal regulations, resulting in blocked drains that exacerbate flooding. Community-based monitoring and participatory planning are largely absent, leaving flood risk governance top-down and reactive.

The erosion of community participation in environmental management has further weakened Lagos' adaptive capacity. In earlier decades, structured sanitation

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exercises saw residents collectively clearing drains, a practice that reinforced accountability. Today, however, these initiatives have largely disappeared, weakened by poor enforcement, mounting urban pressures, and declining trust in government institutions.

➢ *Implications for Legal Innovation and Climate-Responsive Institutions*

The findings collectively indicate that Lagos' flood crisis cannot be solved by engineering solutions alone; it demands legal and institutional transformation that mainstreams climate risk into every level of urban governance. This study proposes several key legal innovations:

- Enactment of a Lagos State Flood Risk Management Law: Integrating drainage master planning, land-use zoning, climate projections, and disaster response protocols into a single enforceable framework.
- Stronger Regulation of Reclamation and Dredging: Mandatory cumulative impact assessments, clear spatial zoning for allowable reclamation, and time-bound dredging permits enforced by a dedicated regulatory agency with sanction powers.
- Creation of a Lagos Flood Governance Council: A legally constituted multi-agency platform to coordinate flood management, allocate resources, and resolve inter-agency conflicts, a practical application of polycentric governance theory.
- Community Participation Mechanisms**:** Legal provisions for ward-level flood committees, citizen reporting platforms for blocked drains, and formal inclusion of community representatives in environmental planning boards.
- Climate-Proofing Development: Revision of building codes and fiscal planning instruments to ensure that all new developments incorporate climate-resilient infrastructure and that government budgets allocate a fixed percentage to adaptation and drainage maintenance.

These measures align with the Sendai Framework for Disaster Risk Reduction (2015–2030), which calls for strengthening disaster risk governance and integrating risk reduction into urban planning. They also operationalize SDG 11 and SDG 13 by creating pathways toward inclusive, resilient, and climate-adaptive urban systems.

➢ *Contribution to Knowledge*

This study makes a novel contribution to the literature by reframing Lagos' flood crisis as fundamentally a legal and governance challenge rather than merely an infrastructural deficit. Unlike previous research that focuses largely on drainage construction and engineering interventions (Adelekan, 2015; Ajayi, 2025), this paper advances a comprehensive legal-institutional model that integrates polycentric governance, adaptive governance, and risk governance principles. It links human-induced drivers of flooding such as dredging, sandfilling, and land reclamation with institutional enforcement gaps and offers concrete legal innovations, including a Lagos State Flood Risk Management Law, mandatory cumulative impact assessments, and a multi-agency Flood Governance Council.

Grounding its analysis in the September 2025 flood event and providing a Lagos-wide perspective, this paper delivers actionable insights for policymakers, urban planners, and legal reformers. Its recommendations are not only context-specific but also transferable to other African coastal megacities, thereby contributing to global debates on climate-resilient urban governance and the operationalization of SDG 11 (Sustainable Cities and Communities) and SDG 13 (Climate Action).

V. RECOMMENDATIONS

Based on the findings of this study, the following recommendations are proposed to strengthen climate-responsive institutions and reduce flood risk across Lagos State:

➢ *The Enactment of a Lagos State Flood Risk Management Law*

A dedicated law should be developed to integrate drainage master planning, land-use zoning, climate projections, and disaster risk reduction into a single, legally enforceable framework. This law should clearly assign institutional responsibilities, establish measurable targets, and provide sanctions for non-compliance.

➢ *Strengthening the Dredging Regulation, Sandfilling, and Land Reclamation*

Introduce mandatory Cumulative Environmental Impact Assessments (CEIAs) for all reclamation projects and dredging operations, supported by periodic compliance audits. Establish a specialized regulatory agency or unit with the authority to issue time-bound permits, enforce spatial limits, and apply penalties for violations.

➢ *The Institutionalization of Multi-Level Coordination*

Create a Lagos Flood Governance Council comprising representatives of state ministries, LGAs, federal agencies, civil society organizations, and private developers. This council should coordinate decision-making, streamline permitting, and ensure that flood management strategies are coherent across all levels of government.

➢ *Institutional Capacity Enhancement and Funding*

Allocate a fixed percentage of the state budget to year-round drainage maintenance, monitoring, and early-warning systems. Capacity-building programs should be implemented to train local government officials and enforcement agencies on climate-resilient urban planning and compliance monitoring.

➢ *Promotion of Community Participation and Risk Communication*

Establish legally recognized ward-level Flood Risk Committees that collaborate with government agencies on drain clearance, risk mapping, and early-warning dissemination. Develop citizen-reporting platforms (e.g.,

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mobile apps) to enable real-time reporting of blocked drains and illegal constructions.

- *Mainstream Climate Resilience into Urban Development*

Revise building codes and development control regulations to require flood-resilient infrastructure (e.g., permeable pavements, green buffers). Incentivize private developers through tax credits or planning bonuses for adopting climate-adaptive designs.

- *Alignment with Global Frameworks*

Ensure that Lagos' flood risk management strategies are consistent with the Sendai Framework for Disaster Risk Reduction (2015–2030) and Nigeria's Nationally Determined Contributions (NDCs) under the Paris Agreement. This alignment will attract climate finance opportunities and strengthen international partnerships.

VI. CONCLUSION

Flooding in Lagos is no longer a seasonal disturbance but a systemic challenge that exposes weaknesses in legal frameworks, governance structures, and institutional capacity. The September 2025 flood event highlighted the urgency of addressing these gaps, particularly in the Island and coastal districts most severely impacted.

This study shows that legal innovation including a Lagos State Flood Risk Management Law, stricter dredging and reclamation controls, and a multi-agency Flood Governance Council is essential to building climate-responsive institutions. Transitioning from reactive interventions to proactive, climate-resilient planning will not only reduce economic and social losses but also position Lagos as a model for other African coastal megacities. Embedding climate adaptation into law, policy, and participatory governance, Lagos can move closer to achieving SDG 11 (Sustainable Cities) and SDG 13 (Climate Action), ensuring a safer and more resilient urban future.

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