



WORLD BANK AND DECENTRALIZED CLIMATE FINANCE: IMPLEMENTATION GAPS IN LAMU, KENYA

Fatuma Bwanaheri Abdulrahman^{1*}, Dudy Heryadi², Siti Aliyuna Pratisti³

Faculty Social and Political Sciences; Universitas Padjajaran; Indonesia

*email: fatuma24001@mail.unpad.ac.id

Abstract

This paper analyses the World Bank initiatives in promoting its role in decentralizing climate finance through the Financing Locally-Led Climate Action (FLLoCA) and the Kenya Climate-Smart Agriculture Project (KCSAP) in Lamu County, Kenya. A qualitative case study is used to examine the substantial tension between the Bank's perception of its institutional function, its actual bureaucratic performance, and the pressing demands, through the intersection of Function of Role Theory and Climate Resilience Theory. A significant implementation gap is revealed from the empirical findings, highlighting that the creation of the local ward committees in the projects purportedly regularizes climate governance. However, the strict procurement regulations provided by the Bank, systemic delays in the release of funds, and strict environmental standards have compromised local sovereignty. Misplaced expectations are frequently encounters through these efforts and the occurrence of elite capture, hindering marginalized groups from cultivating genuine and transformative resilience. This paper concludes that the international development finances must abandon rigid technological imposition in favour of adaptable funding models and genuinely integrate local survival knowledge to thrive in extremely fragile socio-ecological zones.

Keywords: climate finance; climate resilience; decentralization; Kenya; World Bank

Introduction

Climate change remains the most severe threat to global socio-economic stability, significantly affecting developing countries with fragile economies that are heavily reliant on natural resources (IPCC, 2022). The Arid and Semi-Arid Lands (ASALs) of Kenya are the most affected regions with adverse climate challenges, characterized by low and erratic rainfall, high temperatures, and frequent drought challenges, which constitute approximately 89% of its land mass (Government of Kenya, 2017). Unlike other ASAL counties that mainly rely on pastoralism, Lamu has a diverse economy. This economy includes rain-fed agriculture, small-scale livestock farming, and artisanal fishing. While this combination offers some ways to make a living, it also exposes the County to various climate-related risks. Characterized by erratic rainfall, soaring temperatures, saline water intrusion and recurrent droughts, these factors have all negatively impacted agricultural productivity and food security. Therefore, these factors have worsened poverty in the area.

According to the Kenya National Bureau of Statistics, over 60% of Lamu's residents depend on small-scale farming and livestock for their livelihoods. Fluctuating climatic conditions expose farmers to recurrent crop failures and livestock mortality, significantly undermining household sources of income (Kenya National Bureau of Statistics, 2019). Lamu County, located along the northern coast of Kenya, is frequently faced with a distinctive intersection of ecological sensitivity, socio-economic fragility and climatic vulnerability. The County possesses ecologically vast mangrove habitats, low-lying islands, and flat floodplains that lie between an altitude of zero and 50m above sea level, except for the coastal dunes and the Mundane sand hills, which hardly exceed 100 m above sea level.

The flat topography makes the County prone to flooding during the rainy seasons and periods of high tides, significantly exposing it to both the marine and terrestrial climate risks ((County Government of Lamu, 2023b). The County covers about 6,607 square kilometres, including a large mainland area and 65 islands that make up the Lamu archipelago. Five of these islands are home to people: Lamu, Manda, Pate, Kiwayu, and Ndau. It has a coastline of approximately 130 km and is renowned for its rich biodiversity and unique ecosystem that combines both marine and terrestrial wildlife. The County integrates the ASAL characteristics with coastal susceptibilities encompassing sea-level rise, saline intrusion, and storm surges. These simultaneous exposures render Lamu one of the most climate-vulnerable regions (County Government of Lamu, 2023b).

The County is geographically remote and faces challenges due to underdeveloped infrastructure, exacerbating its difficulties in adapting. The communities are constrained with

access to markets, climate-resilient technology and institutional assistance due to a lack of all-weather roads, inadequate health care and communication infrastructure facilities, and poorly resourced agricultural extension systems. However, these inherent disadvantages, along with persistent flooding, saltwater intrusion, and predictable weather patterns, have made Lamu particularly vulnerable to climate-related disruptions in agriculture, transportation, and economic stability. Consequently, attracting international development partners, prioritize Lamu for targeted climate resilience interventions (County Government of Lamu, 2023a)

In recent years, flooding has emerged as one of the most urgent environmental issues in Lamu, occurring with greater severity and frequency. The County experiences Seasonal and flash floods, frequently caused by the overflow of sea waves and the Tana River, which destroy the nearby local communities. The December 2023 severe flooding destroyed an extensive portion of the Lamu-Witu-Garsen (A7) highway, causing a great disruption to the communities seeking essential services. The massive flooding displaced over 600 households in Chalaluma, Moa, and Dide Waride villages, resulting in livestock mortality and impacting over 7000 residences across the County (Business Daily, 2024). These events have resulted in a rise in health crises, with reported outbreaks of cholera and diarrhoea following flood contamination (AllAfrica, 2023; Citizen Reporter, 2023; The Star, 2024). The infrastructural constraints of Lamu, poor drainage, lack of flood-resistant roads, and weak health systems have constrained local response capacity, aggravating these calamities. Another great impact is the intrusion of saline water, compromising agricultural soils and limited freshwater supplies, drastically reducing food production and increasing poverty (Okello et al., 2015; The Star, 2021).

International financial institutions, such as the World Bank, have currently emerged as crucial in funding climate resilience worldwide. Lamu has received significant support from the World Bank in implementing climate-smart practices, such as drought-resistant crop varieties, effective water harvesting technologies and sustainable soil management methods with the local farmers through the Kenya Climate-Smart Agriculture Project (KCSAP) that was launched in 2017. The programs facilitate agribusiness connections and extension services that enhance value chain resilience in the County. In addition to this, the World Bank's Financing Locally Led Climate Action (FLLoCA) Program initiative plays a critical role in strengthening county-level climate governance by integrating climate objectives in planning and budgeting processes. This effort has led to the creation of County Climate Change Funds and Climate Change Committees, which are now actively supporting localized adaptation projects within the County. (National Treasury, 2023; World Bank, 2017).

Therefore, this study addresses the gap by critically evaluating the World Bank's involvement in the decentralization of climate finance within Lamu County despite policy

documents highlighting Lamu as a major beneficiary of international climate funding. Hence, revealing a glaring deficiency in empirical, grassroots research evaluating what happens after the funds arrive. Analysis of programmatic frameworks, including the Financing Locally-Led Climate Action (FLLoCA) initiative and the Kenya Climate-Smart Agriculture Project (KCSAP), the study ascertains whether decentralized financial models effectively circumvent the rigid local bureaucratic obstacles, while genuinely improving the absorptive, adaptive, and transformative capabilities of Lamu's most at-risk communities.

Methodology

Literature Review

The World Bank emerged as a central actor as it aligned its global climate action agenda with Kenya's Vision 2030 and the National Climate Change Action Plan. Among other counties in Kenya, Lamu County has benefited from other international agencies, including UNDP, FAO, and USAID, which took the lead in providing support for policy reforms, technical assistance, and implementing pilot projects. However, the World Bank has distinguished itself by executing significant, country-driven investments that amalgamate funding, community engagement and governance, specifically in Lamu. Reports from the World Bank and policy documents reveal that Lamu is a primary beneficiary of extensive projects, including KCSAP and FLLoCA, as reported by the World Bank and policy documents from the Government of Kenya. (Food and Agriculture Organization of the United Nations, 2025; Government of Kenya, 2017; United Nations Development Programme, 2017).

In Bangladesh, the World Bank's disaster-preparedness initiatives, encompassing coastal infrastructure and early warning systems, have generated discussion concerning the long-term viability of these projects and the extent of community ownership, notwithstanding the programs' demonstrated capacity to bolster resilience (Smit & Wandel, 2006). In Ethiopia, Empirical research highlights how the implementation of Climate-Smart Agriculture enhances household resilience. The practices of Community Supported Agriculture (CSAs) in the Central Rift Valley significantly improved food security and reduced poverty in several ways. This highlights the transformative impact of focused efforts in areas vulnerable to climate change (Ali et al., 2023). Additionally, Malawi's Climate Smart Agriculture, supported by the World Bank to mitigate the combined hazards that jeopardize rural livelihoods due to continuous droughts and diminishing soil fertility (World Bank, 2016), have markedly enhanced resilience and household food security in vulnerable agricultural areas through conservation and agroforestry farming. Concurrently, in Peru, the World Bank interventions supported the adoption of Climate-Smart Agriculture,

specifically to tackle challenges of soil degradation, water scarcity, and climate variability, as per the report (World Bank, 2014). However, these reports provide general policy recommendations without sufficiently assessing the long-term sustainability of these interventions in community settings.

In contrast, other academic critics argue that the actions of international institutions often face problems with legitimacy and accountability at the local level. Despite playing a critical role in promoting development agendas, they are seen as an extension of great power interests. (Pratisti et al., 2024) argue that the success of these interventions is significantly hindered by weak institutional capacity, top-down planning, and limited community involvement. Research undertaken in the Frontiers Kenya highlights national programs such as FLLoCA, aligned with international standards, frequently promote standardized solutions such as "Climate Smart Agriculture", by utilizing marginalized indigenous pastoralist knowledge (Eriksen et al., 2021). The ASAL Counties demonstrate a detrimental impact of climate change, mostly in counties such as Turkana, Isiolo, and Garissa (Lutta et al., 2023). Reports by the World Bank and Kenya's Ministry of Agriculture demonstrate investments through programs such as the KCSAP, FLLoCA, and CSA (Office of the Auditor-General, 2023). Moreover, local research suggests that Lamu County shows a connection between conflicts over resources and climate-related problems (Zachary et al., 2023).

Nevertheless, a fundamental gap is highlighted in this scholarly research between the global objectives and outcomes of the international financial institutions, specifically the macro-level studies published in Energy Research & Social Science, which support contentious debates over resilience, sustainability, and governance. This research demonstrates a gap in implementation, highlighting frequent top-down project planning that prevents effective adaptation on the ground through the World Bank's successful mobilization of climate finance (Elmallah & Rand, 2022). Therefore, by understanding the mechanism and the reasons behind this top-down disconnect, occurring at the local level, the study demands a rigorous analytical approach, which necessitates the theoretical framework guiding this paper.

This study operates at the theoretical intersection of International Relations (IR) and environmental sociology, explicitly fusing Role Theory with Climate Resilience Theory, aiming to elucidate a comprehensive framework for this research. The Role Theory is the principal theoretical framework, being supplemented by Climate Resilience Theory as a supporting evaluative concept in this research. The Role Theory justifies the research's primary focus on the contribution of the World Bank in building climate resilience in Lamu County. It facilitates an analysis of how the World Bank implements and formulates its role, interactions of these positions within the context of global and national climate governance and negotiations of roles by Kenya

and Lamu as recipients and implementers. While the Climate Resilience delineates the desirable outcomes of various roles in terms of system capacities.

Most researchers on climate resilience focus on adaptation and vulnerability reduction outcomes; however, they often overlook the influence of international institutions in shaping those results. Conversely, international organizations' research generally focuses on governance and legitimacy, methodologically not connecting these to local resilience capacities. Integrating these theories bridges the gap between the analysis of international role performance and the assessment of local climate resilience.

Role Theory in International Relations

Role Theory was formulated to explain how individuals behave in accordance with socially prescribed roles, with roots in sociology and psychology (Biddle, 1986). The concept was introduced by Holsti (1970), who argued that governments, like individuals, operate based on role conceptions that shape their foreign policy behaviour. These role perceptions are influenced by internal variables, such as national identity and interests, as well as external factors, including the expectations of other states and international institutions. Holsti's work identified several types of state roles, such as "regional leader," "norm promoter," and "bridge-builder," which states assume within the international system. Although Holsti's seminal work primarily focused on state actors within the bipolar framework of the Cold War, subsequent scholars have significantly expanded the analytical scope of Role Theory to include the increasingly prominent role of international organizations in contemporary global governance.

Archer (2001) noted that the framework often diminishes international organizations to mere passive tools of a technical service provider (functionalism) or solely state power (realism). Therefore, to comprehend the involvement of the World Bank in Lamu, it is essential to transcend the conventional international relations paradigms presented in this concept. Additionally, contemporary ideational frameworks, such as those represented by Ervik (2009), stress the dissemination of ideas rather than the challenges of practical implementation by providing an advanced perspective for examining how institutions shape policy discourses. Similarly, Engstrand (2011) applies role theory to environmental politics, focusing on the incremental process of learning and role evolution over time. Therefore, this research needs a framework adept at analyzing the immediate social and political disconnections that are evident in the field.

Therefore, the approach and analysis of this research utilize the extensive role theory framework as its principal theoretical perspective, developed by Harnisch (2011) in Role Theory in International Relations. The framework has been selected due to multiple compelling reasons

that distinguish it from other works in role theory. The framework includes not only states but also international organizations, demonstrating their operation as role-bearers within global governance, illustrating the way entities, including NATO, the European Union, and international financial institutions such as the World Bank, formulate their own role conceptions, navigate through multifaceted role expectations, and execute roles that may differ substantially from member state preferences. Therefore, Harnisch (2011), organizational approach is particularly relevant to this research, as the World Bank, which serves as an international financier, is a complex multilateral institution characterized by independent bureaucratic structures, autonomous financial resources, and intricate relationships with both donor and recipient countries. Harnisch's organizational framework focuses on 21st-century global governance issues, such as climate change, transnational cooperation, and multilateralism, thereby providing one of the most comprehensive and contemporary applications of Role Theory. Furthermore, Harnisch (2011) emphasizes the Integration of Role Theory with major International Relations concepts, including communicative action, learning, and socialization. This framework demonstrates strong explanatory capacity in understanding how organizations adjust their strategies based on experience, internalize global norms, and negotiate roles through dialogue with multiple stakeholders.

The Harnisch et al framework creates the analytical approaches of this research by implementing three interconnected perspectives. In the role conception, the actor perceives their obligation and functions within the international system, referred to as the "ego part" of roles by Harnisch. The World Bank may conceive itself as a leader in climate financing that is dedicated to assisting vulnerable countries in adapting to climate change through project designs, strategic frameworks, mission statements, and official languages. Additionally, role expectation pertains to the anticipated performance demanded by other actors through multiple stakeholders such as donor governments, recipient states, and local communities. Many stakeholders frequently possess conflicting or contradicting expectations that result in intricate situations that necessitate negotiations and prioritization. The Role performance refers to the real behaviour and execution of what the organization does practically. This framework asserts that legitimacy is contingent upon three dimensions, whereby when role performance aligns with both conception and expectations, significant legitimacy is reinforced, whereas when substantial gaps exist, it leads to legitimacy crises, resistance develops, and a compromise in effectiveness (Harnisch, 2011).

Therefore, the Role Theory provides a robust framework explaining how global and local actors negotiate the roles by maintaining legitimacy and acquiring knowledge within the context of climate governance. This research will analyze the role of the World Bank with its proclaimed

objectives and its financial contributions. Further, it will examine how the actor is perceived, anticipated and challenged by Kenyan institutions and local communities in Lamu County.

However, it is comparative to recognize the 'Intermestic' (International-Domestic) framework in assessing the World Bank's role in local climate resilience as a nature of global environmental governance. The frameworks demonstrate that the foreign donor mandates are interconnected with domestic political economies, local sociocultural realities and decentralized governance structures. Consequently, the ultimate ability of the community to adjust to climate shocks is significantly influenced by the success of managing this intermestic tension, which encompasses the intersection of global bureaucratic role performance and grassroots realities.

Climate Resilience Theory

Harnisch's Role Theory is the main theoretical framework used in this study to comprehend the World Bank and Kenyan stakeholders' political dynamics. This research incorporates Climate Resilience Theory fundamentally as a critical supporting theory to assess the context of these operations. Climate Resilience Theory serves as a qualitative standard to evaluate what is being provided by the Role theory, through operationalizing the idea of role performance. In contrast, the role theory demonstrates a structural framework that critically examines how actors interact through role conception and role conflicts.

It is therefore essential to identify the specific type of resilience to establish this benchmark. While the original Resilience Theory, formulated by Holling (1973), stresses the examination of ecological systems; it specifically utilizes Climate Resilience Theory to critically examine the relationship between societal vulnerability and environmental shocks. Specifically, the Climate Resilience focuses on the degree to which socio-ecological systems can adapt to hazardous climate trends and catastrophes, contrary to the general system theory (Smit & Wandel, 2006).

To critically evaluate the World Bank's intervention in Lamu, the Climate Resilience theory asserts that resilience is a multifaceted process with three distinct capacities that move beyond simple "bounce-back" mechanics, namely Transformative (provide changes in governance structure), adaptive (provide adjustment on livelihoods to change the trends) and absorptive (immediate shocks management, such as floods) (Béné et al., 2012).

The technical application of these three aspects frequently overlooks the human capacity. Therefore, this research utilizes (Robert & Brears, n.d.) Sociocultural Framework in the theory, which demonstrates that climate resilience involves more than just physical infrastructure, such as sea walls, but it is profoundly culture-bound. Therefore, there is a need for technical

interventions to be in line with the local values, place attachments and history to achieve true climate resilience.

This study may accurately examine the World Bank's performance through the sociocultural lens of Climate Resilience framing. The role of the World Bank explicitly enhances the absorptive, adaptive and transformational capacity in the face of climate change, as well as maintains the system stability through generic resilience without undermining their sociocultural identity. Therefore, integrating these theories provides the ability to precisely examine whether the Bank's "hegemonic" definition of resilience contradicts the local realities that the people of Lamu expect or aligns with them.

Research Method

This research employs a qualitative case study methodology to critically assess the localized interactions between climatic vulnerability and financial decentralization in Lamu County, Kenya.

Design

The qualitative approach is deemed suitable and aligns with Creswell's (2018) argument that case studies enable an in-depth analysis of intricate social phenomena within their real-life context, hence an in-depth exploration of perceptions and narratives of both individuals and organizations that directly or indirectly engage with resilience-building. Therefore, the design is suitable for understanding resilience-building, which quantitative metrics cannot entirely represent. This method specifically focuses on Lamu County, which is suitable as it enables a comprehensive examination of context-specific dynamics of vulnerability in Arid-semi-arid and coastal settings and is a direct beneficiary of major World Bank projects such as the Kenya Climate-Smart Agriculture Project (KCSAP) and the Financing Locally-Led Climate Action Program (FLLoCA) in building resilience.

Participants and Setting/Unit of Analysis

The methodology employed one-on-one interview techniques, specifically Key Informant Interviews (KIIs), to capture unfiltered human experiences. The study obtained responses from 15 unique participants while utilizing a purposive sampling technique to specifically select individuals with direct operational or experiential knowledge of the World Bank's regional interventions. The subject participants were divided into three unique categories to maintain analytical clarity.

County Officials (n=8): This group, comprised of a Senior County Climate Administrator, alongside local Climate Change Officers, Senior project officers and Ward Administrators, who are specifically responsible for monitoring and overseeing programmatic compliance for both FLLoCA and KCSAP. The officers represent the top-down bureaucratic perspective. Community Representatives (n=3): To guarantee that the data adequately represented the impacts of marine and agricultural projects, this foundational empirical study consists of a local farmer, a pastoralist and artisanal fisherfolk. The respondents were particularly drawn from wards such as Mkunumbi, Faza, Hongwe, Witu/Didewaride, and Kiungathat, which were heavily targeted by the donor interventions.

Civil Society (n=4): These respondents function as independent watchdogs primarily focused on environmental advocacy project oversight and social accountability. They represent active Non-Governmental Organisations (NGOs) and Community-Based Organizations (CBOs) of Lamu County.

Data Collection

The research employs primary and secondary data sources. The primary data is generated from stakeholders directly engaged in or impacted by the World Bank's decentralized Climate Finance via one-on-one interview techniques, specifically Key Informant Interviews (KIIs). Interviews were conducted with the targeted community members, including farmers, fisherfolk and pastoralists, as well as county government officials, project officers, and representatives of civil society groups. On the other hand, Secondary data is obtained through a review of policy documents and project reports, including the World Bank project reports, specifically the FLLoCA, and KCSAP reports, the county development plans (CCCAP, CIDPs, ADP), government policy documents (NCCAP, County Climate Change Act) and national climate frameworks such as the NCCAP. These sources will furnish the appropriate institutional and policy framework to situate field-level findings.

Data Analysis

Making sense of the raw field data required a highly systematic, two-tiered thematic approach. The author employs a structured two-tiered thematic approach. A comprehensive verbatim transcription was conducted for all the field recordings, and the transcription of Kiswahili transcripts was carefully translated into English. The texts were then subjected to manual thematic analysis for qualitative validity, searching for both the manifest statements and the deeper meanings hidden between the lines.

The analysis is guided by the theoretical framework of the study, whereby the coding execution occurred in two distinct phases, specifically the Role Theory and Climate Resilience Theory. Role Theory provides guidelines in analyzing the World Bank's role conception, expectations, and performance in Lamu County, Kenya. Climate Resilience Theory evaluate the outcomes of these roles relating to absorptive, adaptive, and transformative capacities.

Subsequently, the second phase shifted to inductive coding. This methodological pivot allowed completely unpredictable, organic themes to emerge naturally from the raw transcripts. This is precisely how crucial, unscripted realities like "elite capture," "bureaucratic bottlenecks," and "maladaptation" were formally identified from the ground up.

Trustworthiness

The research employs Lincoln & Guba's (1985) criteria to ensure trustworthiness. Credibility was pursued through the Integration of data sources, which was ensured through interviews and documents, further extended during the prolonged engagement with respondents. The author attained transferability by providing a comprehensive detail of Lamu settings and the World Bank interventions. Dependability was highly ensured by preserving a record of how data was collected and the analysis procedures.

Result

The analysis in this section presents empirical findings derived from interviews with key stakeholders and project documentation. It examines the World Bank-funded FLLoCA and KCSAP projects' operational obstacles and localized impacts in Lamu County.

Project Prioritization and Bureaucratic Realities

A key conflict is noted between the rigid regulatory structures on project execution and the theoretical objective of decentralized community-driven climate adaptation. An illusion of decentralized selection is witnessed through funded projects such as the FLLoCA, where its Grant Manual explicitly advocates for community-driven project identification, while in the actual circumstances at the ward level are significantly constrained. The manual states that the Ward Climate Change Planning Committees (WCCPCs) are required to suggest initiatives; however, findings show that they are omitted from the final selection process. Proposed projects must closely conform to the programmatic requirements of the County Climate Change Action Plan (CCAP), County Integrated Development Plan (CIDP) and the Annual Development Plan (ADP).

However, these bureaucratic regulations frequently override local priorities. In Lamu East, local communities continuously prioritize the construction of seawalls for tidal protection. But

these proposals can not be implemented by the FLLoCA funding due to the classification of seawalls as high-risk investments under the Environmental Management and Co-ordination Act (EMCA). Hence, such infrastructure could only be implemented if co-funded independently by the county government.

In the KSCAP project, bureaucratic realities were exacerbated by political forces. Political elites contended that agriculture was a devolved function from the national government to the county government, asserting that the County should independently manage the funds. This contributed to institutional resistance, affecting the project's management and significantly leading to the postponement of operations.

Administrative Delays and Funding Bottlenecks

Local governance frameworks and project progress were undermined due to the emergence of protracted delays in fund disbursement and administrative chokepoints. An officer from the FLLoCA project noted that financial allocations from the national treasury were markedly inconsistent. Further, funds meant for Creek 2 resilience investment funds arrived in February, rather than the anticipated timeline before the previous June, delaying for almost an entire year. The KCSAP project had significant difficulties with political friction, causing the delay of the disbursement of micro-project funds for four years, limiting actual financial releases to the last phase of the project in 2023.

Therefore, these temporal gaps created significant compliance pressures and administrative strain. Delaying the FLLoCA fundings in February necessitated that officials swiftly allocate the budgets before the financial year concluded in June to fulfil the annual Annual Performance Assessment (APA) indicators. Hence, officials identified it as a significant operational challenge.

Conversely, the FLLoCA project faced administrative gaps due to limited funding of the WCCPC, directly undermining grassroots oversight. The grassroots committees could not process their anticipated planning meetings due to the absence of their institutional support grants. The WCCPC receives no facilitation if a ward lacks an active project, thereby exclusively linking the budget to active project bills of quantities. One of the committee members stated that Faza ward committees hail from several villages, making it challenging to convene due to the lack of transportation; they have to pocket their own funds for transportation.

Grassroots Project Outcomes

Outcomes observed at the grassroots level demonstrated concrete and diverse effects on community resilience, despite extensive administrative bottlenecks. Empirical data reveal a

significant influence of the outcome through indigenous realities, alongside alignment of technical interventions. Farmers under the KSCAP project indicated that initiatives, including proper crop spacing and water conservation, along with direct market linkages under the instruction of Climate-Smart Agriculture (CSA), significantly increased harvests and stabilized incomes. The provision of modern fishing boats and safety gear effectively enhanced daily earnings. It enabled fisherfolk to traverse deeper waters, hence significantly contributing to the economic change as the project bypasses obstacles.

Integration of Indigenous Knowledge incorporated into the bureaucratic planning phase significantly improved Infrastructure outcomes. The FLLoCA project effectively established a Djabia (water catchment and reservoir) along traditional routes through direct consultation with local elders, guaranteeing the infrastructure retains water through dry spells, thereby saving herds and mitigating violent conflicts between pastoralists and farmers. Conversely, unsuccessful grassroots outcomes contributed to implementation Failures and Sustainability Gaps of the project, especially when the project lacked post-implementation frameworks or misunderstood local contexts. In Hongwe, a KCSAP water pan was desiccated and accumulated silt, therefore becoming entirely inoperative during droughts due to the absence of a maintenance plan. Further, officials observed that most of the Common Interest Groups (CIGs) established under KCSAP collapsed once the grant funding was ceased, proving resilience to be temporary. Civil societies noted that overall project outcomes often overlooked the immediate needs of the communities, offering interventions that did not correspond with actual localized needs, hence creating distinct mismatches in expectations.

Figure 1 – Summary of Administrative Delays and Funding Discrepancies in Lamu

Project & Fund Category	Expected Timeline / Protocol	Actual Execution / Disbursement	Duration of Delay / Bottleneck	Administrative & Local Impact
FLLoCA: Creek 2 Resilience Investment Funds	Disbursement expected before June (prior to the close of the financial year).	Funds arrived in the county accounts in February of the following cycle.	Approx. 8 Months	Created severe compliance pressure; forced officials into rushed budget allocations to fulfill Annual Performance Assessment (APA) indicators.
KCSAP: Micro-Project Funds	Gradual release intended to align with early project implementation phases (approx. 2019).	Actual financial releases were withheld until the final phase of the project in 2023.	4 Years	Institutional resistance and political friction stalled agricultural initiatives, completely missing multiple seasonal planting windows.
FLLoCA: WCCPC Operational & Meeting Funds	Baseline facilitation expected for grassroots committee planning and oversight.	No institutional support granted unless linked to an active project Bill of Quantities (BoQ).	Indefinite / Structural	Grassroots oversight paralyzed; committee members forced to use personal funds for transport, preventing regular planning meetings.

Created with Datawrapper

Source: Author's own construct, based on primary data analysis and fieldwork, Lamu County

Discussion

Role Conception vs. Bureaucratic Realities

Findings derived from climate interventions in Lamu County highlight a significant systematic conflict between the idealized 'role conception' and the strict bureaucratic realities of the World Bank's projects. Programs such as the Financing Locally-Led Climate Action (FLLoCA) and the Kenya Climate-Smart Agriculture (KCSAP) are structured to exclusively operate as a decentralized, locally-led framework. In contrast, the funding institution perceives itself as an adaptable financial enabler that empowers grassroots decision-making. Data from the primary source, however, reveals a paradoxical reality in which the Bank operates as a fixed technical

authority that implements strict administrative conditions that clash with local capabilities and devolved political institutions.

This bureaucratic precision and rigidity are clearly seen in the project prioritization. Findings from one of the senior officers in the KCSAP Project demonstrate that the selection of priority value chains for Lamu County is led by the national—level technical consultant, who prioritized the value chain of the County to an ultimate identification of cotton, cashew nuts, dairy, fish, and indigenous poultry. Despite the theoretical involvement of the local stakeholders, their contributions were rigorously constrained through a strict standardized technical evaluation framework. This illustrates a prevailing tendency among global entities to favour standardized scientific criteria; however, this hierarchical epistemological approach is not absolute, as exceptions occur when indigenous sociocultural insights are actively integrated into the planning phases. Additionally, the FLLoCA project is also afflicted with the same dynamics in which the community requests essential infrastructure, such as seawalls to avert coastal saline intrusions, which are consistently denied. A FLLoCA officer highlighted that coastal defence constructions trigger intricate environmental assessments in accordance with the national rules, therefore completely excluding them from the donor's pre-packaged, low-risk financial parameters and rigid sectoral quotas. Rural populations are compelled to forgo their primary adaptation requirements in favour of secondary measures that readily fulfil the funder's administrative checklists consistently.

These conflicts between the global bureaucratic aspirations and the local political governance promote an implementation stagnation, which is viewed in an illustrative instance of the role conflict during the KCSAP lifecycle. Findings revealed that the local political elites actively oppose the program's oversight procedures. They argued that the county government should have the discretion to disburse climate funding, as agriculture is a completely devolved responsibility under the Kenyan constitution. This completely immobilized the project entirely due to a structural impasse, from a frontal confrontation about institutional legitimacy and financial control. As a result, the communities were subjected to a benefit from the project at the conclusion of the cycle after a local regime shift in 2022 due to the postponement of the disbursement of crucial micro-project grants, which were delayed for four consecutive years.

Consequently, the KCSAP project had to be effectively active for merely one year until its termination due to prolonged bureaucratic stalemate. This resulted in the project's monitoring and evaluation framework being necessitated to evaluate just the surface absorption of financial inputs instead of assessing any significant long-term effects on household yields or climate resilience. However, KSCAP highlighted success in the micro-project despite the limitations of institutional evaluation. These generated strong, localized impacts on climate resilience and household yields.

Farmers who underwent Climate-Smart Agriculture training reported markedly enhanced harvests and stabilized incomes, whereas the fisherfolk experienced a considerable increase in daily revenue when provided with modern safety gear.

The administrative grassroots capacity and the donor's bureaucratic requirements were fundamentally incompatible. The donor aimed to support, while at the same time demonstrating significant political opposition. For example, the requirement for rural Common Interest Groups (CIGs) to develop complex project proposals and go through the official banking procedures created a significant barrier to entry, specifically for uneducated farmers. This compelled the farmers to privately compensate field extension officers to aid them in generating suitable documentation due to excessive bureaucratic constraints.

Therefore, this has revealed a paradox between the World Bank's role conception and its bureaucratic actuality, which diminishes the transformative potential of decentralized climate funding in Lamu County. Therefore, when global institutions such as the World Bank enforce rigorous administrative rules that exceed the technical knowledge of local communities, such as Lamu and provoke opposition from devolved government, it results in unintentionally obstructing the adaptation process. Consequently, the current environment is characterized by a strict compliance with donor-mandated bureaucratic protocols that entirely override the timely, context-specific delivery of climate resilience.

Role Performance and the Implementation Gap

To achieve an accurate evaluation of effective decentralized funds, the global institutions need to transition from the conceptualization of mandates to the concrete implementation of such mandates. The "role performance" in the Role Theory specifically assesses the execution of assignment duties within a particular sociopolitical environment. The bureaucratic inertia in Lamu County and the systemic friction characterize the World Bank's performance and the effective function of the local government. Conversely, the credibility of climate initiatives has been undermined, creating a disjunction between macro-level policy design and micro-level implementation, thereby obstructing the authentic adaptive capacity at the grassroots level.

Subsequently, the principal reason for the implementation gap has been due to the ongoing stagnation of the macroeconomic fiscal framework. FLLoCA Grant Manual under Section 3.2 reveals these conventional frameworks governing interventions advocate for adaptability, explicitly emphasizing "flexibility in implementation" to facilitate swift community adaptation. Further, a delay in funds disbursement prolongs the year-long postponement that consistently forces the county technical units to function within limited, urgent implementation timelines.

Thereby, prioritizing the rapid allocation of funds before the end of the year, rather than guaranteeing the ecological sustainability of the infrastructure being constructed.

A substantial discrepancy with institutional challenges is highlighted in the primary data, indicating that Lamu County achieved an outstanding score of 97 out of 100 in the latest World Bank Annual Performance Assessment (APA). Despite financing delays and subsequent cancellation of community-led micro-projects, the achievements place the County among the leading national implementers. This signifies a fundamental inadequacy in the global monitoring system, noting a metaphysically mismatch between an almost flawless bureaucratic performance score and stagnant reality. Therefore, this demonstrates that the donor's evaluative framework is fundamentally oblivious to whether the targeted demographics received timely resilience assistance, focusing instead on evaluating administrative compliance, such as the proper submission of procurement documentation and baseline fiscal absorption.

The Jurisdictional impasse between the county-level political elites and the project's technical implementation unit exposes how localized political involvement significantly worsens the stagnation of decentralized finance, revealing that the implementation gap is not solely due to global bureaucratic inflexibility.

Furthermore, the donor's inability to synchronize its stringent administrative requirements with the actual technical capacities of the rural actors it seeks to empower has exacerbated the implementation gap. For example, data highlighted that Local construction firms frequently lack the sophisticated administrative capacity necessary to adhere to the World Bank's intense environmental and social safeguarding compliance, leading to abandoned or heavily delayed infrastructure works. Whereas at the community level, the prerequisite for rural Common Interest Groups (CIGs) to draft highly technical funding proposals erected near-insurmountable barriers to entry.

Therefore, when these strict compliance obstacles and delayed disbursement intersect, significant social distrust is generated at the village level while at the same time undermining the World Bank's decentralized framework. Although successful projects such as the indigenous-aligned Djabia water catchment demonstrate that significant improvements in climate resilience are possible, the overall performance of the institution predominantly reinforces a system that remains highly fragmented, exclusive, and overly bureaucratic.

Decentralized Finance Outcomes: The Intermestic Friction of Two Programs

The diverse climate resilience outcomes in Lamu County are effectively analyzed by the 'Intermestic' (international-domestic) theoretical framework. The mandates of the donor fundamentally connect to decentralized institutions, domestic political economies and local

social-ecological context in global environmental governance. As demonstrated by the divergent results of the KSCAP and FLLoCA project, the administration of this intermestic friction determines whether communities attain genuine adaptive capacity or systemic maladaptation.

The final shift of the KSCAP project to an autonomous, direct-to-community funding model, while circumventing county-level administrative choke points, effectively cultivated strong economic adaptive capacity. Conversely, by localizing micro ecological needs effectively with aligned capital, it transitions communities from reliance on donors to economic self-reliance and economic self-sustenance. This is demonstrated by the KSCAP model, which reveals that bypassing bureaucratic administrative structures inadvertently removes important technical oversight. Therefore, decentralized funding that lacks established long-term maintenance structures eventually leads to infrastructural maladaptation, as proven through the failure and rapid silting of an autonomously funded water pan in Hongwe. In contrast, FLLoCA illustrate a paradox of the rigid intermestic Integration, which leads to regional inequities and elite capture due to its reliance on centralized county treasuries. This exposed resources to sociopolitical manipulation as observed in agricultural distributions in Hongwe. Nevertheless, significant success has been attained after its stringent bureaucratic norms were effectively subordinated by local indigenous knowledge. For example, consulting traditional elders on the placement of a Djabia (water catchment) in Witu, putting the infrastructure conformed to ancient migration pathways, underscores the vital need for operational resilience through intermestic compromises and merging technical finance with indigenous epistemology.

The Lamu artisanal fisherfolk demonstrate that the gravest outcome of intermestic discord is systemic maladaptation. Global infrastructure, such as the LAPSSET port expansion, physically blocked access to traditional fishing grounds, completely neutralizing the gains of the fisherfolk, while micro-level international interventions provided temporary absorptive capacity through fishing equipment. Simultaneously, this undermines the socio-ecological foundation while fragmenting the governance framework that achieved technical project objectives theoretically.

Ultimately, Intermestic hierarchies such as KSCAP programs are analyzed to improve the economic transformation and incorporate indigenous knowledge. At the same time, the FLLoCA program guarantees ecological congruence, which is a lack of alignment between macro-state infrastructure and microlivelihood preservation. This leads to a decline in community resilience, proving that a mere allocation of international climate finance within national structures does not automatically cultivate resilience.

Conclusion

A significant structural discord is observed in the execution of decentralized climate finance in Lamu County between the World Bank's desired role as a dynamic financial facilitator and its actual bureaucratic performance on the ground. This paper concludes that the assessment of these initiatives through the lens of Role Theory and Climate Resilience Theory, strict global compliance frameworks frequently conflict with domestic socio-political circumstances, leading to a significant implementation gap.

Additionally, the Kenya Climate Smart Agriculture Project demonstrates that when international funds regulations bypass strict county-level bureaucracies and are then channelled directly to the community cooperatives, they effectively develop authentic, adaptive, and transformative capacities. Therefore, true economic self-reliance is improved where the intermestic friction determines the ultimate success or failure of local resilience. A rigorous post-project maintenance framework is required for this complete decentralization to prevent infrastructural decay. The FLLoCA program in Lamu demonstrates that the absence of community engagement and dependence on centralized county treasuries risks spatial inequality and elite capture. Therefore, the successful establishment of projects such as the indigenous Djabia water catchment that was implemented by the FLLoCA program proves the sociocultural theory that global finance only thrives when technical mandates are subordinated to local survival knowledge. Ultimately, Lamu artisanal fisherfolk face structural mismatch, contributed to by mega projects such as the LAPSSSET port, which concurrently undermines their traditional livelihoods, highlighting the critical warning that micro-level resilience initiatives are ineffective if macro-level state infrastructure.

To effectively address the implementation gap, international climate finance must evolve to an adaptable, culturally relevant funding structure while moving away from rigid administrative compliance. Therefore, genuine climate resilience is attained through eliminating intermestic hierarchies to afford marginalized communities the financial, operational, and sociocultural autonomy necessary to secure their own environmental survival.

Declaration Of Interest

The author declares no personal interest that could appear to influence work in this paper.

References

- Ali, H., Menza, M., Hagos, F., & Hailelassie, A. (2023). Impact of climate-smart agriculture adoption on food security and multidimensional poverty of rural farm

- households in the Central Rift Valley of Ethiopia. *Agriculture & Food Security*, 11(1), 62. <https://doi.org/10.1186/s40066-022-00401-5>
- AllAfrica. (2023). Health crisis looms as floods trigger cholera surge in Tana River and Lamu. *AllAfrica*.
- Archer, C. (2001). *International organizations* (3rd ed.). Routledge.
- Béné, C., Wood, R. G., Newsham, A., & Davies, M. (2012). Resilience: New Utopia or New Tyranny? Reflection about the Potentials and Limits of the Concept of Resilience in Relation to Vulnerability Reduction Programmes. *IDS Working Papers*, 2012(405), 1–61. <https://doi.org/10.1111/j.2040-0209.2012.00405.x>
- Biddle, B. J. (1986). Recent Developments in Role Theory. *Annual Review of Sociology*, 12(1), 67–92. <https://doi.org/10.1146/annurev.so.12.080186.000435>
- Citizen Reporter. (2023). Cholera outbreak hits coastal counties following heavy floods. *Citizen Digital*.
- County Government of Lamu. (2023a). *County climate change action plan (CCCAP) 2023-2027: Participatory climate risk assessment*.
- County Government of Lamu. (2023b). *Lamu County integrated development plan (CIDP)*.
- Creswell, J. W., & P. C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). Sage Publications.
- Elmallah, S., & Rand, J. (2022). "After the leases are signed, it's a done deal": Exploring procedural injustices for utility-scale wind energy planning in the United States. *Energy Research & Social Science*, 89, 102549. <https://doi.org/10.1016/j.erss.2022.102549>
- Engstrand, A. (2011). Role theory and environmental politics. *Environmental Politics*, 20(2), 185–202.
- Eriksen, S., Schipper, E. L. F., Scoville-Simonds, M., Vincent, K., Adam, H. N., Brooks, N., Harding, B., Khatri, D., Lenaerts, L., Liverman, D., Mills-Novoa, M., Mosberg, M., Movik, S., Muok, B., Nightingale, A., Ojha, H., Sygna, L., Taylor, M., Vogel, C., & West, J. J. (2021). Adaptation interventions and their effect on vulnerability in developing countries: Help, hindrance or irrelevance? *World Development*, 141, 105383. <https://doi.org/10.1016/j.worlddev.2020.105383>

- Ervik, R. , Kildal, N., & Nils, E. (Eds.). (2009). *The role of international organizations in social policy: Ideas, actors and impact*. Edward Elgar Publishing.
- Food and Agriculture Organization of the United Nations. (2025). *Food and Agriculture Organization of the United Nations. Transforming livelihoods through climate-resilient, low-carbon, sustainable agricultural value chains in the Lake Region Economic Bloc, Kenya*.
- Government of Kenya. (2017). *National climate change action plan 2018-2022*.
- Harnisch, S., F. C. , & M. H. W. (Eds.). (2011). *Role theory in international relations: Approaches and analyses*. Routledge.
- Holling, C. S. (1973). Resilience and Stability of Ecological Systems. *Annual Review of Ecology and Systematics*, 4(1), 1–23.
<https://doi.org/10.1146/annurev.es.04.110173.000245>
- Holsti, K. J. (1970). *National Role Conceptions in the Study of Foreign Policy* (Vol. 14).
<https://doi.org/10.2307/3013584>
- IPCC. (2022). *Climate change 2022: Impacts, adaptation and vulnerability*.
- Kenya National Bureau of Statistics. (2019). *2019 Kenya population and housing census*.
- Lutta, A., Mungo, C., Kehbila, A., Sunguti, E., & Osano, P. (2023). *Climate change impacts, adaptation options, and opportunities for investment in agro-pastoral value chains in arid and semi-arid regions of Kenya*.
<https://doi.org/10.51414/sei2023.065>
- National Treasury. (2023). *Financing locally-led climate action (FLLoCA) program guidelines*.
- Office of the Auditor-General. (2023). *Office of the Report of the Auditor-General on Kenya Climate Smart Agriculture Project (IDA Credit No. 5945-KE) for the year ended 30 June 2023*.
- Okello, C., Tomasello, B., Greggio, N., Wambiji, N., & Antonellini, M. (2015). Impact of Population Growth and Climate Change on the Freshwater Resources of Lamu Island, Kenya. *Water*, 7(3), 1264–1290. <https://doi.org/10.3390/w7031264>
- Pratisti, S. A., Bagir, Z. A., Ahimsa-Putra, H. S., & Northcott, M. S. (2024). Religion and Adaptation in Drowning Villages. *Worldviews: Global Religions, Culture, and Ecology*, 28(1), 46–69. <https://doi.org/10.1163/15685357-tat00011>

- Robert, S. E., & Brears, C. (n.d.). *Palgrave Studies in Climate Resilient Societies*. Retrieved <http://www.palgrave.com/gp/series/15853>
- Smit, B., & Wandel, J. (2006). Adaptation, adaptive capacity, and vulnerability. *Global Environmental Change*, 16(3), 282–292. <https://doi.org/10.1016/j.gloenvcha.2006.03.008>
- The Star. (2021). Thousands at risk of starvation in Lamu's terror-prone villages. *The Star Kenya*.
- The Star. (2024). Cholera outbreak reported following devastating Tana River floods. *The Star Kenya*.
- United Nations Development Programme. (2017). *UNDP support to the implementation of Sustainable Development Goal 13*.
- World Bank. (2014). *Climate-smart agriculture in Peru*.
- World Bank. (2017). *Project appraisal document on a proposed credit in the amount of SDR 184.7 million (US\$250 million equivalent) to the Republic of Kenya for a Kenya Climate-Smart Agriculture Project (Report No. PAD1988)*.
- World Bank, & C. (2016). *Climate-smart agriculture (CSA) considerations: Profile Malawi*.
- Zachary, M., Mwadiga, S., Abubakar, M., Boneya, H., Linet, O., Okello, A., Dirie, M. R., & Orero, M. (2023). Exploring the Nexus between Climate Hazards and Conflict in Lamu County: Implications for Community Adaptation Action Plans. *Journal of Environmental Protection*, 14(12), 984–1005. <https://doi.org/10.4236/jep.2023.1412054>