University College London

Disaster Risk Creation in Nairobi, Kenya:

Influence of Institutional-Actor Relationships

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A thesis submitted to the Department of Risk and Disaster Reduction for the degree of Doctor of Philosophy of University College London, London

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Declaration

I, Mark Kuyo Ojal, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

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I declare that the thesis consists of 88,173 words. This excludes Table of Contents, Tables and Figures, Acronyms and Abbreviations, Operational Definitions of Terms Used in the Thesis, References and Appendices.

I hereby confirm that my thesis was copy-edited for conventions of language, spelling and grammar by Professor Kenneth Otieno.

Abstract

Urban growth, much of which is anticipated in Sub-Saharan Africa, presents a time-limited opportunity to build widespread transformative adaptation and resilience into urban development planning and decision-making, effectively addressing both development and risk issues. However, this opportunity is constrained by limited knowledge, financial and institutional capacities, and weak governance at the city level, impeding effective management of rapid urban growth and risk reduction. This study aimed to investigate the relationships between institutions and actors that contribute to disaster risk creation in Nairobi, and considers the implications for advancing foresightful, risk-sensitive, and inclusive pro-poor urban development. It examines how disaster risk is actively produced through urban development decision-making processes in contexts of institutional complexity and messiness. In doing so, it unpacks how actors, institutions, and power dynamics interact to shape urban development decision-making spaces and resultant urban trajectories, and how these processes influence new inputs. At the same time, the thesis engages with the transformative aim of foresightful, risk-sensitive and inclusive, pro-poor urban development, highlighting how extant decision-making environments often exclude the urban poor and thereby contribute to the disaster risk creation. The objectives of the study are to: identify the dominant voices shaping Nairobi's evolving urbanity; examine how institutional pluralism constrains the opportunity to break cycles of risk creation and explore the opening for urban development policy so that it supports the transformative aim of foresightful, risk-sensitive and inclusive, pro-poor urban development. Drawing on institutional bricolage, African urbanism, and urban risk scholarship, the study employs a qualitative approach to explore the dynamics and social relationships shaping Nairobi's urban development decision-making and implementation spaces and resultant urban trajectories. The methodology includes document analysis, 44 in-depth, semi-structured interviews with over 46 national and city-level policy actors from various sectors, community actors from an urban poor settlement, and field notes. This thesis is one of the first to apply institutional bricolage in empirical urban research, offering novel theoretical contributions and advancing discussions on institutional bricolage, urban transformation, as well as who owns the city. To guide these theoretical contributions, the following questions are answered: How do processes of institutional bricolage occur in urban development decision-

making and action? Who are the bricoleurs? What are the characteristics of transformative urban practices, and finally what enables longer-term urban transformation? The findings link varying levels of vulnerability, exposure, and capacity to break cycles of risk creation and accumulation to the multiplicity of city visions and actors and their limited coordination power. The thesis reveals how the capture of decision-making by powerful bricoleurs across levels constrains local actors' agency in shaping their urban futures, and negotiating acceptable risk, and choosing their preferred adaptation actions. It highlights how project-bound decision-making spaces and distrust redefine national and city-level actors' relationships, limiting sustainable transformation opportunities. Further, it reveals how inclusive, people-centric decision-making spaces create openings for new understandings of risk and safe spaces for DRR or adaptation actions. The findings show that top-down politics heavily influence urban transformation. However, they also reveal that transformative institutional processes and physical transformation do not align well, inhibiting large-scale transformation that is sustainable. The study seeks to advance theory and influence policy and practice.

Keywords

Urbanism, disaster risk creation, institutional bricolage, decision-making, city visioning & agency

Impact Statement

This dissertation makes significant contributions to the framing of risk management through the lens of breaking cycles of disaster risk creation, particularly within the context of rapidly growing cities and towns in Sub-Saharan Africa. It provides a nuanced understanding of how institutional and actor relationships shape urban development decision-making spaces and, in the process, intentionally or unintentionally create disaster risk. It makes key contributions to theory, policy and practice.

The research is one of the first to empirically apply the concept of institutional bricolage to interpreting social relationships and inherent dynamics in the urban context, offering new insights into how disaster risk is actively produced through urban development decision-making processes in contexts of institutional complexity and messiness. It enriches the theoretical discourse on urban transformation and institutional bricolage, particularly in the context of African urbanism, and expands the understanding of how urban development policy agenda in African cities is influenced, and by who. It further raises thought-provoking questions on extant governance arrangements, power relations and implications for disaster risk creation.

The study advances understanding of the real-world dynamics of disaster risk creation, emphasizing the importance of addressing the root causes of risk to break cycles of disaster risk creation. The methodology, anchored on engaging with multiple actors and providing spaces for them to reflect on their strategies and the researcher's positionality as a known urban development practitioner in Nairobi, combines to provide scope for the research process to cultivate change both in the researcher, respondents and their spheres of influence. The participatory nature of this process encouraged key policy actors across levels to critically reflect on their own practices, fostering opportunities to directly influence policy and practice. Findings from the study will be disseminated through targeted presentations at policy workshops and conferences, ensuring alignment with the ongoing disaster risk management policy debates. Furthermore, the researcher will engage with broader audiences via blogs and podcasts to enhance public discourse on disaster risk creation. The researcher's positionality as an international civil servant with expertise in urban policy, the researcher's unique vantage point afforded insights into practices often invisible to or

overlooked by others, influencing both personal and organisational approaches to urban governance. The process has notably shifted the researcher's own strategic outlook and fostered a preference for long-term, foresightful, integrated risk-informed urban programming within own professional practice.

Overall, this research offers a comprehensive analysis of the dynamics, relationships and social processes that shape urban riskscapes in fast-growing cities, contributing valuable knowledge to the global discourse on disaster risk creation. The outcomes of this research enrich and advance the application of disaster risk creation within the fields of disaster studies, urban studies and urban risk studies, as well as urban development planning, policy and practice. They inspire further interrogation and eventual deconstruction of disaster risk creation in urban development policy, planning, decision-making and action processes, unlocking opportunities for safer, equitable and inclusive urban futures. This dual-loop learning process not only informs the study’s outcomes but also contributes to the broader discourse on disaster risk and urban policy, ensuring practical, actionable feedback loops into relevant policy channels.

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The journey to completing a PhD dissertation is a collective effort. While the document and all the possible errors herein are my responsibility, I would not have reached this far without the support and encouragement of very many friends and colleagues. Thus far, I have learned much more than I set out to learn in this PhD journey. Beyond new academic knowledge, I have learned the virtues of patience, endurance, persistence, attention to detail, and excellence.

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Acronyms and Abbreviations

Acronyms and Abbreviations	Full Form
AAK	Architectural Association of Kenya
AFD	Agence Française de Développement (French Development Corporation)
AfDB	Africa Development Bank
AHP	Affordable Housing Programme
AMT	Akiba Mashinani Trust
BBC	British Broadcasting Corporation
BCDRC	Breaking Cycles of Disaster Risk Creation
BOT	Build Operate Transfer
C40	C40 Cities Climate Leadership Group
CAP	Climate Action Plan
CBD	Central Business District
CBOs	Community-Based Organisations
CDF	Constituency Development Fund
CIDP	County Integrated Development Plan
CRED	Centre for Research on the Epidemiology of Disasters
CSO	Civil Society Organisations
CSUDP	Civil Society Urban Development Platform
CTAT	Central Technical Assistance Team
DRC	Disaster Risk Creation
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EIA	Environmental Impact Assessment
EU	European Union
FBOs	Faith-Based Organisations
FEWS NET	Famine Early Warning Systems Network
FGDs	Focus Group Discussions
GFDRR	Global Facility for Disaster Risk Reduction

GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Agency for International Cooperation)
GoK	Government of Kenya
IBEAC	Imperial British East Africa Company
ICSU-LAC	International Council for Science – Latin America and the Caribbean
IDP	Integrated Development Plan
IFRC	International Federation of Red Cross and Red Crescent Societies
INGOs	International Non-Governmental Organisations
IPCC	Intergovernmental Panel for Climate Change
JICA	Japan International Cooperation Agency
KARA	Kenya Alliance of Residents Association
KCL	Kings College London
KDI	Kounkuey Design Initiative
KeNHA	Kenya National Highways Authority
KEPSA	Kenya Private Sector Alliance
KIP	Kenya Institute of Planners
KISIP	Kenya Informal Settlements Improvement Project
KNBS	Kenya National Bureau of Statistics
KPLC	Kenya Power and Lighting Company
KRC	Kenya Railways Cooperation
KUR	Kenya Uganda Railway
KURA	Kenya Urban Roads Authority
KUSP	Kenya Urban Support Program
MCAs	Members of the County Assembly
MEL	Monitoring, Evaluation, and Learning
MIPDP	Mukuru Integrated Physical Development Plan
MPs	Members of Parliament
MTIHUDPW	Ministry of Transport, Infrastructure, Housing, Urban Development and Public Works
MTPIII	Vision 2030 Third Medium-Term Plan

NaMata	Nairobi Metropolitan Area Transport Authority
NaMSIP	Nairobi Metropolitan Services Improvement Project
NAP	National Adaptation Plan
NCBDA	Nairobi Central Business District Association
NCCAP	National Climate Change Adaptation Plan
NCCG	Nairobi City County Government
NCWSC	Nairobi County Water and Sewerage Company
NDMA	National Disaster Management Authority
NEMA	National Environment Management Authority
NGOs	Non-Governmental Organizations
NIUPLAN	Nairobi Integrated Urban Development Plan
NMR	Nairobi Metropolitan Region
NMS	Nairobi Metropolitan Services
NUA	New Urban Agenda
PDPs	Part Development Plans
PDU	Presidential Delivery Unit
PPP	Public-Private Partnership
RDR	(Department of) Risk and Disaster Reduction
REC	Research Ethics Committee
RP	Respondent
RQ	Research Question
SAPs	Structural Adjustment Programs
SDGs	Sustainable Development Goals
SDHUD	State Department of Housing and Urban Development
SDI	Slum Dwellers International
SDI	State Department of Infrastructure
SDPP	State Department of Physical Planning
SEA	Strategic Environmental Assessment
SEC	Settlement Executive Committee
SIDA	Swedish International Development Cooperation Agency
SPA	Special Planning Area
SSA	Sub-Saharan Africa

SWISRE	Swiss Reinsurance Company Ltd
TAPs	Technical Assistance Pools
UC Berkley	University of California, Berkeley
UCL	University College London
UPDA	Upper Hill District Association
UN	United Nations
UNDESA	United Nations Department of Economic and Social Affairs
UNDRR	United Nations Office for Disaster Risk Reduction
UNECA	United Nations Economic Commission for Africa
UNEP	United Nations Environment Programme
UN-Habitat	United Nations Human Settlements Programme
UNICEF	United Nations International Children's Emergency Fund
UNISDR	United Nations International Strategy for Disaster Reduction
UON	University of Nairobi
WDF	Ward Development Fund
WFP	World Food Programme
WRA	Water Resources Authority

Operational Definitions of Terms Used in the Thesis

This section offers an easy reference point for jargon-free definitions of key terms used in the document. Formal derivation and references are provided in the body of the thesis.

Agency	The ability of an actor to act, make choices or exert influence or control over their own actions and decisions. It conveys autonomy in decision-making.
Bricoleurs	Actors with the power and agency to participate in a bricolage process.
Disasters	Calamitous events that seriously disrupt the functioning of a community or a society at any scale due to hazards interacting with conditions of exposure, vulnerability and capacity, leading to human, economic or environmental losses and impacts which exceed the ability of the affected communities or societies to cope using own resources.
Disaster Risk Management	A process for designing, implementing, and evaluating strategies, policies, and measures to improve the understanding of disaster risk, foster disaster risk reduction and transfer and promote continuous improvement in disaster preparedness, response, and recovery practices, with the explicit purpose of increasing human security, well-being, quality of life, and sustainable development.
Exposure	Presence of people, property, systems, or other elements in hazard-prone areas that are thereby subject to potential losses.
Hazard	Hazards are potentially dangerous processes, activities or phenomena, whether naturally occurring or human-induced, that may cause loss of life, injury or other adverse impacts, damage, social and economic disruption or environmental degradation.

Hybrid governance arrangements	Institutional and organisational arrangements where non-state actors take on functions that were historically performed by public sector actors, and in the process, become entangled with the public sector actors to the extent that it becomes difficult to distinguish between them.
Informal	Activities, practices and processes outside legal or officially recognised guidance. Informality can be ascribed to urban settlement, economic activity, processes, practices and political organization.
Institutions	Co-produced rules (often implicit) and arrangements through which people organize their lives, access resources and give order and meaning to their world, and which are reproduced and adapted through everyday interactions. This can include formal institutions (e.g. legislation) and informal institutions (e.g. customary practice).
Institutional bricolage	A process in which actors (bricoleurs) with varying social and power relations consciously and non-consciously adapt, reconfigure, and combine institutional arrangements, drawing on whatever materials and resources available regardless of their original purpose, to respond to changing needs and emergent challenges
Institutional pluralism	Co-existence of multiple institutional logics or institutional spheres generating contestations, competitions, multiple identities, mythologies and ways of getting things done, and which legitimize organisations, actors and practices.
Institutional trust	An actor's sense of security about a situation based on extant institutions, and the belief that things are normal and customary.
Intellectual leadership	Individual capacity to create powerful ideas that spur scientific, social, technological and institutional change.

Irregular systems	A set of structurally inconsistent, opaque, or ad hoc arrangements that deviate from formal procedures or norms, and often lack coherence, accountability, or transparency.
Legitimacy	Generalised perception or assumption that the actions of an entity are desirable, proper and or appropriate within a given institutional context or simply social approval and acceptance, for example, ownership or command over an object, role or resource conferred by law, customary authority or popular consent.
Materiality	Physical substance, often considered as a physical expression and outcome of intellectual, economic, cultural and ideological processes constituted through buildings, infrastructure and public furniture.
Organisations	Organisations are ‘social collectives with common purpose’, are formally recognised by law or customarily, and are private or publicly owned.
Organisational trust	The perceived probability that organisations will carry out their remit to a satisfactory degree.
Power	A dynamic social relationship which determines an actor's ability to influence or control behavior, actions and decisions of others.
Poverty penalty	A phenomenon when the poor must accept both a price and a quality penalty for a good or service.
Pro-Poor	Policies, decisions or actions that are specifically designed to address systemic inequalities and uplift impoverished individuals and groups.
Risks	The potential for consequences where something of value is at stake and where the outcome is uncertain, recognizing the diversity of values.

Risk creation	The process or set of processes (including decisions and actions) through which disaster risk is produced and/or assigned by actors with varying degrees of power.
Shadow systems	A set of interactions that are outside of the rules prescribed by the legitimate organisational system and include the informal network of relations and the informal practices for 'getting things done', and the 'unofficial ideologies' not publicly expressed.
Tokenism	A form of symbolic or superficial inclusion where limited inclusion of marginalized actors is used to create an illusion of inclusivity while the overall power asymmetries and underlying inequalities and discrimination in decision-making processes remain unchanged.
Transformation	Systemwide change which perturbs the status quo and alters a system's basic nature, state, structure or function and brings about rapid change at scale.
Trust	The willingness of one party to be vulnerable to the actions of another based on the expectations that the other will perform a particular action. Trust can be conferred to individuals and organisations.
Urbanity	Everyday social, economic and political production of space and urban life.
Urban Governance	The process by which urban development actors from across sectors (public, private, civil society, informal and Indigenous actors) shape the material and social character of urban areas.
Urban Visioning	Adapting existing institutions, plans and programmes to create an urban environment that works, shaping socio-economic, materiality, environmental, urban and risk futures.
Vision	Depictions (including actual products, statements or documents) of aspired, yet tenable futures that are developed to influence

	socio-economic, physical and environmental futures towards reducing disaster risk in tomorrow's cities.
Vulnerability	A combination of factors that influence the level to which life, livelihood and assets are put at risk by exposure to a discrete and identifiable hazard in nature and/ or society.
Water scarcity	Social-environmental extremes leading to a lack of available water resources to meet the needs of a specific population. It is simply a condition where need exceeds supply.

1.0 Introduction

1.1 Cities and Disaster Risks

The Global Facility for Disaster Risk Reduction (GFDRR) estimates that global disaster-related losses and damage amount to $4.2 trillion since 1980 (GFDRR, 2016). On the other hand, the United Nations Office for Disaster Risk Reduction (UNDRR) estimates that the average annual direct economic loss attributed to disaster events has more than doubled over the past three decades, showing an increase of approximately 145% from an average of around US$70 billion in the 1990s to over US$170 in the 2010s (UNDRR, 2022). In 2021 alone, the total global economic loss attributed to disasters was US$270 billion (Bevere & Remondi, 2022; Howard, 2022). The average number of people affected annually has risen from approximately 60 million people between 1976 - 1985 to 170 million between 2005 – 2014 (GFDRR, 2016), whereas 82,000 lives on average are lost from disaster events annually (Dickson et al., 2012).

With disaster events on the rise, the generation of disaster risks is progressively outstripping risk reduction efforts (Ramiaramanana & Teller, 2021). The creation of disaster risks is thus fast becoming an area of growing scientific focus (Muir & Opdyke, 2024). While the focus of science, policy and practice is often on reducing risks, processes that create those risks are often forgotten. Studies suggest that disaster risk reduction (DRR) may only truly be realised when processes of disaster risk creation (DRC) are well-understood and addressed (Alexander, 2016; Lewis & Kelman, 2012; Muir & Opdyke, 2024). This calls for broader structural changes in social, economic, cultural and political processes, ideologies, relationships, systems, decision-making and institutional arrangements that shape urbanism and urban riskscapes.

Cities have been presented as places of opportunities, of refuge from famine and environmental risks such as drought (Pelling, 2007). Nonetheless, often located in hazard-prone areas, today, they are also hotspots for disaster risks (UN-Habitat, 2024). Many cities and towns in Sub-Saharan Africa are risky places (Adelekan et al., 2015; Bull-Kamanga et al., 2003). Natural hazards, high concentrations of people, economic activities and assets, widespread informality, lack of foresightful city

visioning, and inadequate provision of housing and risk-reducing infrastructure and services interact to create high levels of physical injury, serious illness, and loss of lives and livelihoods across urban Africa (Dodman et al., 2019). These factors impede efforts to break cycles of risk creation, heightening the risk and vulnerability to natural hazards. UNDRR estimates that 90 percent of the continent's urban population is vulnerable to disaster risks, disproportionately affecting the urban poor (Grasham et al., 2019). This is compounded by concentrated poverty, lack of early warning systems and inadequate risk governance (United Nations, 2016b). This, in turn, increases their vulnerability and clouds their pathways out of poverty. Climate change and demographic shifts add urgency and uncertainty, giving rise to new forms of vulnerabilities and evolving urban risks. The riskiness of cities is best expressed by Bekele who avers that:

> *"Cities can also be the most dangerous place on earth for those who live in an urban environment where the authorities have little presence and where the will and the resources are lacking to ensure basic social services, food security, running water, sewerage and respect for building codes."* - Bekele Geleta, Secretary General, IFRC (2008 - 2014), cited in (IFRC, 2010)

1.2 Floods and Water Stress: Two Sides of a Coin

The two urban risks considered in this study are floods and water stress. Floods are by far the most frequent cause of disasters, accounting for over 3200 occurrences (44%) and more than 1.6 billion people affected between 2000 and 2019. About 29% of the world's population is exposed to flood risk (Swiss Re, 2022). Floods cause tremendous devastation to communities globally. The impacts of flood-related disaster events are significant. Since 1991, global cumulative economic losses from major flood events have cost more than USD 1,200 billion (Ibid). In 2021 alone, more than 50 severe flood events around the world, including an increasing number of flash floods in urban environments, caused combined economic losses totaling $82 billion (Bevere & Remondi, 2022; Howard, 2022). Devastation following flood-related disaster events is reflected in loss and damage around the world. As stated by Swiss Re in their reporting of the devastation following the 2021 floods around the world:

> *"The devastation wreaked by floods reflects in the associated economic losses, which are consistently among the highest of all perils each year, alongside those from tropical cyclones and earthquakes,"* (Swiss Re, 2022, p. 2)

Floods are the most frequent disaster and remain a threat in Sub-Saharan Africa (SSA)'s cities and towns (Mavume *et al.,* 2021; CRED & UNISDR, 2015). There are extensive and intensive risks associated with floods. Intensive risks are spatially and temporally concentrated. They are related to floods in urban sub-Saharan Africa and are typically associated with large-scale, high-impact, low-frequency events that cause significant loss and damage. These flood events are often triggered by extreme weather events such as tropical cyclones, extreme rainfall such, or dam failures (Aderogba, 2021; *Mavume et al.,* 2021; Lumbroso, 2020). Most notable examples include cyclone Idai and the 2024 floods in East Africa linked to El Niño phenomenon (IPCC, 2022; World Bank, 2021). These intensive risks are exacerbated by climate change, deforestation, and poor land management (Mavume et al., 2021). On the other hand, extensive risks are spatially and temporally diffuse, often linked to widespread but locally lower-impact floods. These are prevalent across urban Sub-Saharan Africa (UN-Habitat, 2020a; UNDRR, 2019). Over time, these relatively low-severity events cause widespread damage impacting vulnerable populations, especially the urban poor. These recurrent floods do not always get international attention like intensive risks, yet they create chronic risks that become poverty traps for millions of people (UN-Habitat, 2020a; UNDRR, 2019).

Water scarcity is yet another disaster risk. Water scarcity is understood herein as the social-environmental extremes which lead to a lack of available water resources to meet the needs of a specific population. It is simply a condition where need exceeds supply (He et al., 2021; UNICEF, 2021). This is approached from physical water stress (He et al., 2021). Essentially, from a supply and not from an accessibility viewpoint. It is basically a situation where water resources can no longer meet the needs of the population and is characterized by a prolonged period of insufficient availability of water in surface and subsurface water resources, such as rivers, lakes, reservoirs, and groundwater. Like flooding, many of the world's urban populations face water scarcity (McDonald et al., 2014). In 2016, the global urban population facing water scarcity was

933 million, with 359 million (12.5%) and 573 million (20.0%) experiencing perennial and seasonal water scarcity (He et al., 2021). The number is projected to rise to 2.373 billion people in 2050 (Ibid). The number of large cities exposed to water scarcity is projected to increase from 193 to 284, including 10–20 megacities (He et al., 2021). These are aggravated by population growth and socio-economic development (Flörke et al., 2018; Garrick et al., 2019; World Bank, 2018), and climate change (Greve et al., 2018; Revi et al., 2014; World Bank, 2018).

The history of urban development has been to inadequately consider disaster risk (Muir & Opdyke, 2024). This is no different from Nairobi's urbanism and urbanization. See Chapter 5.0 for a more focused discussion on Nairobi's urbanism, urbanization and inherent disaster risk creation outcomes. Whether or not disaster risk is factored into urban development, decision-making and action will have a decisive influence on breaking cycles of risk creation and quality of life in cities and human settlements. With climate change, we cannot look to past development practices to shape future cities if cycles of risk creation are to be broken. This underscores the renewed importance of the enabling environment for foresightful, inclusive, risk-sensitive, pro-poor urban development decision-making and implementation. Global agreements, including the Sustainable Development Goals, the Sendai Framework and the New Urban Agenda, call on governments to invest in breaking cycles of risk creation, acknowledging that risk is a product of development as much as a harm to it (UN-Habitat, 2020b).

1.3 Problem Statement

The notion that cities offer an opportunity for sustainable futures is established in many key publications (IPCC, 2014, 2023; UNEP, 2023). In 2020, 4.4 billion people, representing 56.2 percent of the world's population, lived in cities and other urban areas, and this is projected to rise to six out of every 10 people by 2030 (UN-Habitat, 2020b). In the same context, seventy-five percent of the infrastructure that is predicted to exist in 2050 is yet to be built (UNFCCC, 2021; UN-Habitat, 2022; United Nations, 2021). This massive growth, much of which is anticipated in Sub-Saharan Africa, presents an opportunity to build transformation into urban development, and equitable resilience into urban development planning and decision-making (Dodman et al., 2017; Fraser et al., 2017; IPCC, 2023), effectively addressing both development and risk issues (UNDRR, 2019; UN-Habitat, 2020a). This is pivotal for breaking cycles of

risk creation and enhancing inclusive, accountable and risk-informed development decision-making and implementation (Galasso et al., 2021; Tomorrow's Cities, 2023). Both are needed at the same time for transformative change to be realised. The IPCC (2022) underscores this, noting that "global urbanisation offers a time-limited opportunity to work towards widespread and transformational adaptation and climate-resilient development" IPCC, 2022, p. 11).

However, as observed by GFDRR (2016), Turok (2014), Adelekan *et al.* (2015), Barofsky *et al.* (2016), Brown, (2017), Manda & Wanda, (2017) and Fraser *et al.,* (2017), Satterthwaite (2017), Leck *et al.,* (2018), Satterthwaite *et al.* (2019), the window of opportunity in Sub-Saharan Africa is constrained by limited knowledge, financial and institutional constraints, and weak agency at the city level to plan and manage rapid urban growth and break cycles of disaster risk creation. Lack of focus on breaking cycles of disaster risk creation poses threats to development gains, ending poverty in all its forms, realising sustainable development goals and adapting to climate change and related uncertainties. This research responds to the gaps by shedding light on how disaster risk is actively produced through urban development decision-making processes in contexts of institutional complexity and messiness. The research is also a response to the call by Adelekan *et al.,* (2015) for new research that emphasises the importance of understanding how urbanisation processes influence risk, and how these become new inputs. It is against this background that this study sought to investigate how institutional-actor relationships contribute to disaster risk creation in Nairobi, and considers the enabling environment for foresightful, risk-sensitive and inclusive pro-poor urban development. This is important because too often, risk is approached from a hazard or vulnerability first perspective, and the enabling environment is secondary. However, to deliver transformational outcomes, it is imperative to study and make changes in the enabling environment as a mechanism for breaking cycles of risk creation and unlocking transformation at scale.

This study seeks to contribute to the small but growing body of literature on disaster risk creation in Sub-Saharan Africa through the case of Nairobi. Nairobi is one of the fastest-growing cities on the continent and a major economic hub in East and Central Africa. The city has grown from a waterlogged, uninhabited swampy water point in the 1890s to a burgeoning African metropolis, providing initial insight into the urbanization

of risk and attendant processes of disaster risk creation. See Chapter 5.0 for a detailed discussion of the study context.

The choice of Nairobi as a study site was motivated primarily by the fact that the city comprises a complex and messy urban development decision-making and action regime (see section 5.4), a multi-hazard risk context including, inter alia, floods and water stress (see section 5.3), and deeply-seated complex socio-economic and political processes and ideological underpinnings that create and perpetuate inequalities and a fragmented urban form. Combined, these factors provide scope for interrogating the research problem and addressing the research question. The researcher's residence and work in urban development policy in Nairobi further motivated the decision, offering a unique chance to directly influence policy conversations.

1.4 Research Aims and Objectives

The study is premised on the argument that inclusive, resilient urban futures are a function of decisions and actions both taken and/ or omitted at the intersection of urban development management, risk management and infrastructure management. Figure 1 shows a simplification of these key management functions. The most basic objects of urban development management include inter alia, land allocation and land use management, provision and management of urban basic infrastructure and services (risk-reducing infrastructure and services), equitable distribution of resources and costs among different socio-economic groups, ensuring good health and well-being, and environmental management (Brown, 2015a; Smit, 2018). On the other hand, the most basic objects of risk management include, inter alia, disaster risk reduction, disaster preparedness, resilience building, climate change adaptation and managing uncertainty. Meanwhile, infrastructure management focuses on, inter alia, infrastructure planning and development, promoting sustainability through infrastructure investments. This is not to say that these are responsibilities or who does them. In practice, these management functions are transcendent. For example, risk mitigation and risk-informed planning are undertaken often as part of routine urban development management activities than by risk management functions.

Figure 1: Illustration of distinct functions of infrastructure management, urban development management, and risk management. Source: Author, 2025

This thesis examines how disaster risk is actively produced through urban development decision-making processes in contexts of institutional pluralism and messiness (Castán Broto, 2020; Rubin et al., 2023). Using disaster risk creation as its central problem space, the thesis applies institutional bricolage as its analytical lens to investigate how actors, institutions, and power dynamics interact to shape urban development decision-making spaces and resultant urban trajectories and riskscapes. These processes unfold within broader systems of risk governance, infrastructure governance and urban governance, where institutions and actors mediate how risks are recognized, ignored, or managed. At the same time, the thesis engages with the transformative aim of foresightful, risk-sensitive and inclusive, pro-poor urban development, highlighting how extant decision-making environments often exclude the urban poor and thereby contribute to the disaster risk creation. By unpacking these

interconnections, the research seeks to illuminate pathways for more equitable, foresightful, risk-sensitive and inclusive pro-poor urban development.

Objectives of the study:

a. To ascertain whose voices are strongest in Nairobi's evolving urbanity.
b. To investigate how far institutional pluralism constrains the opportunity to break cycles of disaster risk creation.
c. To explore the opening for urban development policy so that it supports the transformative aim of foresightful, risk-sensitive and inclusive, pro-poor urban development.

Figure 2 presents the vision for integrated, foresightful, risk-sensitive and inclusive pro-poor urban development decision-making, showing how the functions described in Figure 1 can be applied across governance domains. It illustrates the messiness of moving from functions which are clear to governance, where multiple actors have interests in each area of management. It underscores the messiness, which is at the core of this research, highlighting the difficulty in setting boundaries on which actors to talk to and what topics and functions to include in the study.

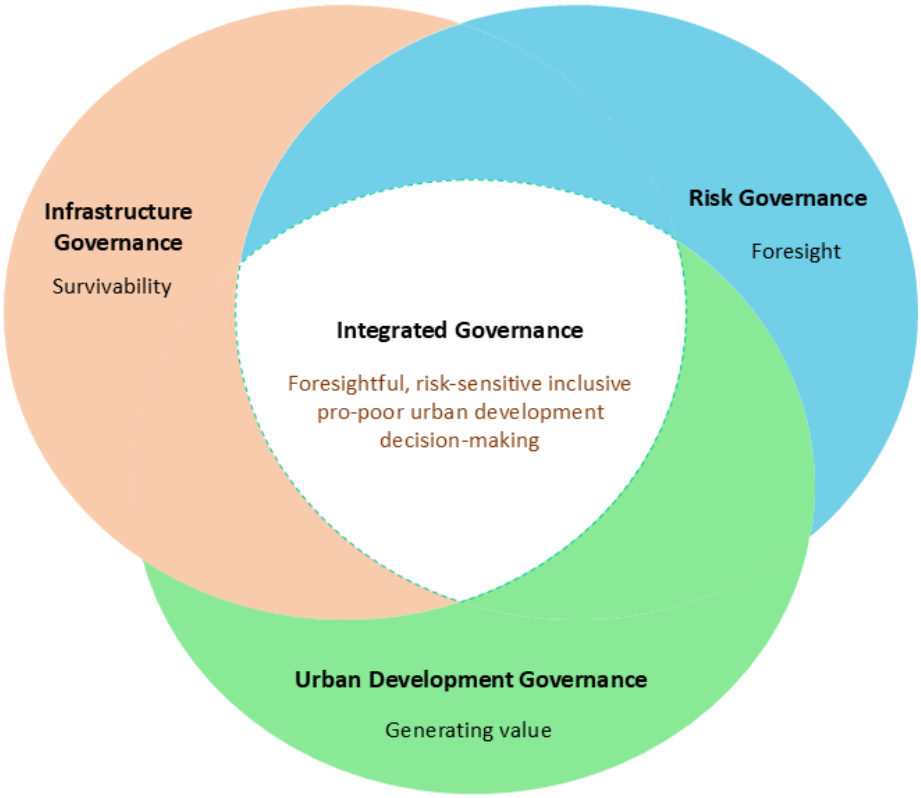

Figure 2: Vision for foresightful, risk-sensitive and inclusive, pro-poor urban development decision-making. Source: Author (2025)

1.5 Research Questions

To approach these high-level objectives, the thesis is driven by a central research question:

"How do relationships between institutions and actors shape disaster risk creation in Nairobi, and what are the implications for advancing foresightful, risk-sensitive and inclusive pro-poor urban development

This is operationalised in the thesis by the following questions:

1. Who is setting the urban development policy agenda in Nairobi?
    a) Whose voices and interests are strongest in different expressions of urban development, and with what effects on disaster risk creation?
    b) How is knowledge of disaster risks and resilience constructed and understood by different actors in urban development decision-making?

2. How is the interaction between the top-down and bottom-up actors in urban development decision-making in Nairobi?

    a) How are local actors pushing back against extractive capital and challenging central government hegemony over the development and implementation of the urban development agenda?
    b) How are shadow spaces and informal practices affecting the capacity for resilience and inclusive urban development decision-making in Nairobi?
3. How far do existing institutional arrangements allow inclusive decision-making?

    a) What are the mechanisms for participation, at what stage of development is participation deployed and why?
    b) How might a healthy balance between formal and informal practices in urban development decision-making be arrived at in Nairobi?

These questions are refined and restated in Section 3.7 based on the review of the literature. The variations in the questions herein and in section 3.7 show the research journey and how the focus of the study evolved during the research.

1.6 Structure of the Thesis

This introductory chapter presents the study's background and problem statement. It introduces the constraints and opportunities to build transformative adaptation and resilience into urban development planning and decision-making in urban Africa. Furthermore, it explains the issues at hand when researching relationships between institutions and actors, agency and power relations. It presents the objectives and outline of the thesis.

Chapter 2: Literature Review examines the social processes shaping the kind of urbanity arising in Sub-Saharan Africa. It discusses how these social processes interact with natural hazards, neoliberal ideologies, socio-political processes, and climate change to produce complex risk profiles across urban Africa. It pursues a scientific understanding of risk, unravelling the meanings of the different concepts deployed in the thesis. It provides a critical review of the literature on African urbanism and urban change and the co-evolving relationship with risk and vulnerability. Further,

it reflects on Africa's urban futures, raising critical analytical questions, some of which form the basis of the thesis.

Chapter 3: Theory and Concepts, presents the theory and concepts. It places the theory of institutional bricolage in the scientific debate on institutional theories. The chapter introduces the conceptual framework and refines research questions following theoretical and literature review. It advances the theoretical understanding of processes by which institutions in urban development decision-making and implementation interact with one another on one hand, and with agency on the other to shape everyday urban realities.

Chapter 4: Research Approach and Methods explains the methodology and methods for this research. It draws on a qualitative approach with a bespoke design tailored to interrogate different analytical objects. It also provides an overview of the data collected.

Chapter 5: Nairobi's Co-evolving Urbanism and Riskscapes, discusses the research setting, Nairobi's decision-making, and policy space within which urban development, cycles of risk creation and transformation are approached. It introduces the decision-making context and the policy and institutional context by introducing urban development projects and urban development policy actors across the different institutional domains.

Chapters 6-8 comprise empirical chapters of the thesis. Each of the three research questions presented above is addressed by a specific chapter. Chapters 6, 7 and 8 address the first, second and third research questions respectively.

Chapter 6: City Visioning presents an overview of Nairobi's multiple visions, how visions are held, who owns them and who drives them. It focuses on how dominant discourses and frames trickle down to everyday urban development policy and practice, how powerful actors shape institutions, urban riskscapes and implications for foresightful, risk-sensitive and inclusive pro-poor urban development.

Chapter 7: Production of Pro-Poor Decision-making and Action Space, explores how pro-poor urban development decision-making spaces are produced and the broad relationships between actors. It surfaces tensions between bricolage practices and institutional transplant. A key argument herein is that the everyday decision-making

and action spaces are residual and messy. On the other hand, project-bounded spaces offer an alternative pathway to avoid this "messy middle."

Chapter 8: Elusiveness of Urban Transformation presents the neighbourhood inclusion, decision-making and implementation space. It explores the openings for socio-physical and institutional transformation and discusses which characteristics of transformation were brought into pro-poor urban development decision-making and action in Nairobi between 2015 - 2022. It reveals how inclusive institutional arrangements are strengthening the agency of local actors and discusses how committed top-down leadership can enable transformation.

Chapter 9: Conclusions and Reflections is divided into conclusions and reflections sections. The conclusions section summarizes the main findings of the study. The reflections section reflects on the study findings, insights on theory, implications on disaster risk creation, the gaps, the methods used and areas for future research.

2.0 Literature Review

2.1 Introduction

There is a dearth of research into the complex political, governance, economic, social, and cultural changes taking place across urban Africa (Dodman et al., 2017), and even less consideration of the implications for collective agency and the production of risk and social vulnerability. This chapter presents a critical review of literature on African urbanism and urban change, vulnerability to disasters and how the processes of urban change contribute to and interact with disaster risks in urban Sub-Saharan Africa.

This chapter examines social processes shaping the kind of urbanity arising in Sub-Saharan Africa. It discusses how these social processes interact with natural hazards, neoliberal ideologies, political processes and climate change to produce complex risk profiles across urban Africa. First, an understanding of risk is pursued, unravelling the meanings of the different concepts deployed in this thesis. The second section focuses specifically on understanding urban risks and how they occur. The third section focuses on disaster risk creation. A critical review of African urbanism and urban change and the co-evolving relationship with risk and vulnerability is provided in the fourth section. The fifth section focuses on urban futures. Introducing visioning, it reflects on current patterns shaping African urbanism and what factors might influence its future. It concludes with a reflection on gaps in the literature and reflections on the literature review.

2.2 Understanding Disaster Risk

This section examines the concept of risk. Sub-section 1.2.1 focuses on defining risk and identifying its various components. In contrast, sub-section 1.2.2 engages in discussions surrounding misconceptions of the term natural disasters and the implications of framing disasters as natural occurrences.

2.2.1 Risk and Risk Factors: Hazards, Vulnerability, Exposure and Responses

The understanding of risk herein follows the definition provided by the Intergovernmental Panel on Climate Change (IPCC), which defines risk as *"the potential for consequences where something of value is at stake and where the*

outcome is uncertain, recognizing the diversity of values" (Revi *et al.,* 2014, p. 1048). It is simply the likelihood of occurrence of a hazardous event with the possibility of adverse impacts, including loss of lives and livelihoods, and damage to assets and systems (Gencer et al., 2018). Closely linked to but slightly different from risk is disaster risk. While both are hazard agnostic, disaster risk is precise on the scale of impact. Following Revi *et al.,* (2014), it is understood herein as the potential for loss, damage or harm caused by a hazardous event where impact exceeds the ability of a system or object of interest to absorb or cope, leading to a disaster. Disaster risk derives from the interaction of three interlinked components: hazards, exposure and vulnerability. IPCC AR6 report adds a fourth component: response (IPCC, 2022). This connotes human agency. This is discussed in greater detail in sub-section 2.2.2. While there are many conceptualizations of risk (IPCC, 2014; UNDRR, 2016, 2022), the understanding of risk herein aligns with IPCC AR6's conceptualization of risk as it foregrounds the human agency (decision-making and choices including whether to act or not and how to act) in the risk framework, which is the focus of this research. Noteworthy, decision-making is not bound by the wheel. It also subsets vulnerability and exposure.

Hazards are potentially dangerous processes, activities or phenomena, whether naturally occurring or human-induced, that may cause loss of life, injury or other adverse impacts, damage, social and economic disruption or environmental degradation (Šakić Trogrlić et al., 2022; UNDRR & ISC, 2020). This definition implies that 'hazard' by itself is harmless, as it is only a 'threat' that has the potential to cause harm. A hazard event occurring in an uninhabited place (unexposed) is not disastrous as it does not lead to loss of life and livelihoods, and damage to infrastructure and property. Similarly, the occurrence of a hazard event in a place with assets enjoying sufficient protection against such adverse events may also prevent risk creation. Lastly, the occurrence of a hazard event in a place where urban development decision-making and action is foresightful, risk-aware, inclusive, transparent, equitable and upholds social justice, may not lead to a disaster.

Hazards may be natural, anthropogenic or socio-natural in origin (UNDRR & ISC, 2020). Natural hazards are predominantly associated with natural processes and phenomena. Anthropogenic or human-induced hazards are induced entirely or

predominantly by human activities, choices, actions or inaction (UNDRR & ISC, 2020). Socio-natural hazards are hazards associated with a combination of natural and anthropogenic processes, including environmental degradation and climate change. Hazards may be single, sequential or combined in their origin and effects (Malamud et al., 2021; Šakić Trogrlić et al., 2022, 2024; UNDRR & ISC, 2020). They are complex and geographically specific. Understanding them requires holistic and collaborative work from across a range of disciplines, including across the human–physical geography interface (Donovan et al., 2023).

There are different types of hazards, including inter alia, biological, environmental, geophysical/geological, hydrometeorological and technological hazards (UNDRR & ISC, 2020). For conceptual clarity, it is important to distinguish between geophysical and hydrometeorological hazards and their interrelationships. Geological or geophysical hazards originate from internal Earth processes (UNDRR & ISC, 2020). They include earthquakes, volcanic activity and related geophysical processes such as mass movements, landslides, rockslides, surface collapses and debris or mud flows. Hydrometeorological hazards are of atmospheric, hydrological or oceanographic origin. They include tropical cyclones, floods, drought, water scarcity, heatwaves and cold spells, and coastal storm surges (Ibid). Hydrometeorological hazards have a direct link to climate change and may be a factor in other hazards such as landslides, wildland fires, locust plagues and epidemics, and anthropogenic activities. This study is primarily concerned with hydrometeorological hazards: floods and water stress.

Hazards can occur in various scenarios, including single hazards and multi-hazards. The understanding of multi-hazards in this study follows the definition provided by UNDRR and the International Science Council (ISC), which defines a multi-hazard context as a specific context where hazardous events may occur simultaneously, cumulatively or in a cascading manner, and considering the potential interrelated effects (UNDRR & ISC, 2020). Multi-hazards can be classified as compound or cascading events (de Ruiter et al., 2020; Šakić Trogrlić et al., 2022). These events often have more severe impacts than single-hazard events and present challenges for breaking cycles of risk creation. As discussed by Malamud *et al.,* (2021), treating hazards independently can underestimate risk and result in decision-making that

increases vulnerability or exposure to other hazards. For instance, vulnerability can increase between successive hazard events. Noteworthy, climate change is shifting the geography and intensity of hazards, and so is the likelihood of compound events, for instance, overlapping rain events leading to prolonged and larger floods, which trigger landslides and or surface collapse. Understanding multi-hazard dynamics, including multiple relevant single hazards, potential hazard interrelationships, and the impacts of consecutive hazards, can help to understand the dynamic nature of risk and inform risk prevention strategies and actions (Šakić Trogrlić et al., 2024).

Exposure refers to the presence of people, property, systems, or other elements in hazard-prone areas that are thereby subject to potential losses (UNISDR, 2017). It is concerned with the spatial and temporal distribution of people, assets and other elements in hazard-prone areas (Ibid). If people and assets are not located in hazard-prone places, the risk of disaster would not exist. Exposure is a necessary but insufficient determinant of risk. It is possible to be exposed but not vulnerable. For instance, a city can be built in a flood plain, but urban development decisions and actions are sensitive to inherent disaster risks and modify behaviour to mitigate potential loss.

Vulnerability is understood as the susceptibility of exposed elements such as people, assets or systems and livelihoods to the harmful effects of hazards (Cardona et al., 2012; UNISDR, 2017). The term is related to predisposition, fragilities, weaknesses, deficiencies, or lack of capacities, favouring adverse impacts on the elements exposed (Cardona et al., 2012). Early views of vulnerability in the context of disaster studies and environmental hazards were related to physical vulnerability (Ibid) and human vulnerability (Wisner *et al.,* 2003). Physical vulnerability refers to the susceptibility of built objects and structures to be harmed when hit by a specific shock or hazard event. This physicalist stance argues that vulnerability is influenced primarily by the type and quality of construction materials and maintenance levels. On the other hand, human vulnerability refers to the susceptibility of individuals or communities to harm, particularly in the face of hazards, due to factors such as social, economic, environmental, psychological, organisational and political conditions (Wisner *et al.,* 2003). These early views on vulnerability emphasised physical hazards and individual susceptibility.

Recent views relate vulnerability to characteristics of socio-economic and cultural conditions and introduce the concept of social vulnerability (Drakes & Tate, 2022; Raduszynski & Numada, 2023). This study subscribes to the social science view of vulnerability, which is aptly put by Wisner *et al.* (2003) as a combination of factors that influence the level to which life, livelihood and assets are put at risk by a discrete and identifiable hazard in nature and/ or society. Social characteristics such as gender, social class, culture, ability and disability, age and situational variables such as living place, health, household composition and access to resources influence social vulnerability (Grasham et al., 2019; Owusu et al., 2019). However, these are not the only important factors. The material and symbolic sources of power and agency, such as education, income, social capital, access to housing, infrastructure and services, and the availability of an area-based strategy for breaking cycles of risk creation are also important. The catastrophic but unequal impacts of the two violent earthquakes which struck Port-au-Prince, Haiti (7.0 Mw) and Concepcion, Chile (8.8 Mw) six weeks apart exemplify how different factors shape vulnerability. More than 316,000 estimated lives were lost in Haiti compared to 520 in Chile, and $30 billion in damages in Chile compared to the $14 billion in Haiti (Shi et al., 2021). Equally decisive is legal status. The informal status of urban poor settlements influences hazard exposure and the capacity to adapt (Gencer et al., 2018). This is to say that the interaction among these variables can create differential vulnerabilities. Hence, social vulnerability is understood as the combination of exposure to hazards and access to opportunities to prepare for, cope with and recover from the impacts of hazards (Drakes & Tate, 2022; Raduszynski & Numada, 2023).

There is a difference between risk and vulnerability, but they are also closely related and at times inseparable. Risk is a broader concept that includes the likelihood of a hazard occurring and its potential impacts. On the other hand, vulnerability specifically focuses on the factors that make a system, population or assets susceptible to loss, harm or damage. Socio-economic arrangements, organisational arrangements, ideological dispositions, decisions and actions, and institutional arrangements, including public policies and legal regimes, make some social groups more vulnerable to risks than others (Tierney, 2014). Thus, vulnerability and, by extension, risk, are largely consequences of social processes and asymmetric power relations.

In this study, it is also essential to understand disasters and their nature. The understanding of disasters herein follows the definition put forward by UNISDR (2015, p.11), which defines disasters as:

> *"A serious disruption of the functioning of a community or a society due to hazardous events interacting with conditions of vulnerability and exposure, leading to widespread human, material, economic and environmental losses and impacts."*

This definition points to the complex interactions of factors, including inter alia, hazards, exposure, vulnerability and capacity, for disasters to occur. It puts focus on human agency in the occurrence of disasters. A hazardous event is considered a disaster when a significant number of vulnerable people experience a hazard and suffer severe loss and/or disruption of their livelihoods and everyday life, such that their capacity to recover without external support is eroded. All three components of risk: hazards, exposure and vulnerability may each be subject to uncertainty in terms of magnitude and likelihood of occurrence. These determinants of risk are dynamic and may change over time and space due to socioeconomic changes, climate variability, decision-making, actions and inactions (IPCC, 2022). Hazards can be affected by current and future changes in climate, including altered climate variability and shifts in frequency and intensity of extreme events (Ibid). These can include sudden heavy rain events, or slower onset hazards like land loss, land subsidence and erosion linked to multiple climate hazards compounding (Ibid).

At this point, it is imperative to acknowledge that risk and disasters are different concepts and to distinguish the two. Disasters are specific points in time when risk is revealed and overwhelming loss and damage manifest in specific locations (Birkmann et al., 2013; ICSU-LAC, 2010; Revi et al., 2014; Wisner et al., 2003). Whereas disaster risk represents a latent condition that is a social construction and that describes potential harm and loss (Birkmann et al., 2013; Revi et al., 2014). Disasters signify unmanaged risks that often reveal development and human failures (Kelman, 2020; O'Keefe et al., 1976) and highlight challenges in development decision-making and implementation (Kelman, 2020).

The role of human agency in modulating the determinants of risk is a new emphasis and one important to urban development decision-making and implementation,

considering disaster risk creation. This is acknowledged in IPCC AR6 (Calvin et al., 2023; IPCC, 2023; Simpson et al., 2022). The risk propellor now recognises multiple determinants of risk in hazards, vulnerabilities, exposures and responses to represent better how responses *(emphasized herein as decisions, actions/inactions)* modulate each of these determinants of risk and highlight the multidimensionality and complexity of risk (Calvin et al., 2023; IPCC, 2023; Simpson et al., 2022). In this thesis, 'response' denotes decisions, actions, and/or inactions, a slight departure from AR6, which focuses on climate change responses.

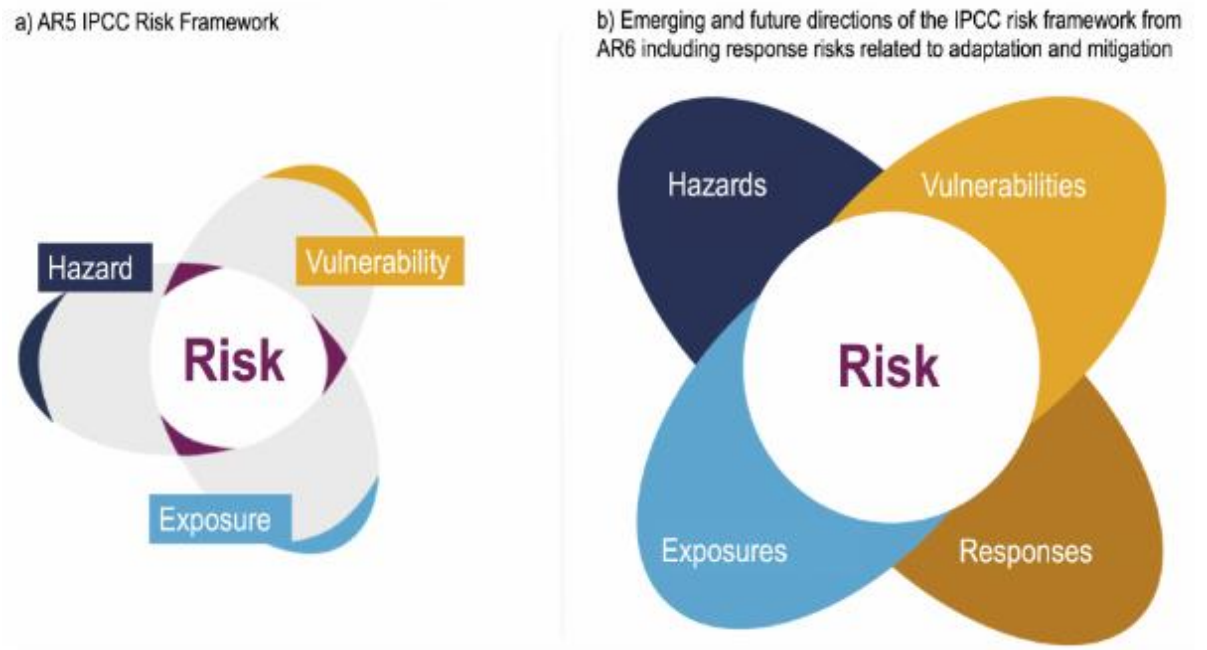

Figure 3: a. A traditional risk framing where risk is conceptualised as a function of the interactions of hazards, vulnerability and exposure b. A more contemporary risk framing illustrating that risk emerges from the interaction of hazards, exposure, vulnerability and responses. Source: Calvin et al., (2023)

A focus on risk creates linkages to solutions (Mach *et al.,* 2016; Adger *et al.,* 2018; IPCC, 2022). It underscores the importance of complex interactions and emphasises that the associated changes through space and time are integral to decision-making (Dawson, 2015; IPCC, 2022). It also links present experiences, including those in which climate change impacts are already occurring, to future scenarios with shifting likelihoods of diverse outcomes, emphasising the dynamic nature of risk (IPCC, 2022). See section 2.3 for an in-depth discussion on disaster risk creation.

Nairobi, as with most African cities and towns, is predominantly prone to extensive risk, albeit with increasing risk from intensive events. Refer to section 2.4 for more discussion on intensive and extensive risks. This presents both challenges and

opportunities in breaking the cycle of risk creation. Sub-section 2.2.2 moves away from defining concepts as understood and used herein to discussing the framing of disasters and their implications on agency, attitudes and perceptions.

2.2.2 Framing Disasters: Unnatural Disasters?

A misconception that needs to be clarified is the use of the phrase natural disasters. When disasters occur, popular and media interpretations and reporting tend to focus on their naturalness, as in the phrase natural disaster. However, the framing of disasters as natural is misleading. It reinforces the attitude that disasters are inevitable acts of God or nature and are beyond human agency and responsibility to prevent them and mitigate their adverse impacts (Kelman, 2020; Puttick et al., 2018), leading to the fatalistic belief that nothing can be done to prevent them (Vinnel *et al.,* 2023). Further, it tends to focus public attention on the event itself (*inter alia*, flood, landslides, tsunami or earthquake) and the emergency and humanitarian responses, redirecting attention away from the root causes that create disaster risk and responsibilities for related losses. This section highlights the origins of conceptualising disasters as natural phenomena. It discusses the implications of such framing on attitudes, perceptions, and public policy in breaking cycles of disaster risk creation (BCDRC).

Framing of ‘disasters as natural’ can be traced back to early interpretations of catastrophic events through disaster theology which views disasters as acts of God towards human sin, referencing Biblical depictions of disaster and human suffering (Rumahuru & Kakiay, 2020; The Holy Bible, New International Version, 2011; Villalba, 2023). These narratives aim to influence a change in human behaviour, putting meaning to disasters as punishment for transgressions. In the context of this study, they can also be viewed as divine institutions that constrain behaviour and structure social relationships. This viewpoint positions disasters beyond human control and within the supernatural realm. This disaster theology stance is reinforced by naturalists and physicalists who provide scientific explanations for natural hazards, emphasizing the physical and natural origins of disasters (Lyell, 1830). This was advanced by the work of Sir Charles Lyell, whose ‘Principles of Geology’ was foundational to understanding natural processes that shape the Earth's surface. These viewpoints consider disasters as natural events (Kovach, 1995; Lyell, 1830) or as short ruptures of normalcy (van Bavel et al., 2020). However, these views ignore the reality that

vulnerability and exposure are prerequisites for a disaster to occur (Blaikie et al., 1994; Wisner et al., 2003).

Social science perspectives have challenged these natural science and disaster theology views, arguing that disasters are not singular consequences of natural forces but are a social construction (ICSU-LAC, 2010; Kelman, 2020; Ramachandran et al., 2010; Tierney, 2014; Worster, 1979). The seminal work of Worster (1979) is one of the earlier studies to highlight the social construction of disasters. It discussed how capitalist policies led to an aggressive exploitation of the Great Plains, paving the way for disasters (Ibid). Similar viewpoints are shared by Wisner et al., (2003), who posited that:

> *"Although events such as hurricanes, floods, and earthquakes serve* as triggers for disasters, disasters themselves originate in social conditions and processes that may be far removed from events themselves." ~ (Wisner et al., 2003, p.9),

This is to say that there is no disaster without vulnerability (Clark-Ginsberg *et al.,* 2021), and vulnerability is a long-term process shaped by ideological underpinnings, values, decisions, policies, actions and inaction. A hazard may be rapid onset. However, disaster requires much more than a hazard. It is a long-term process, not a one-off event.

The same rhetoric anthropomorphising nature (Merchant, 1980), emphasising inevitability and uncontrollability (Hulme, 2009), natural cycles and variability (Mann & Kump, 2015), is evident in climate change discourses. It attributes the causes and effects of climate change phenomena singularly to natural processes. Yet, hydrometeorological hazards are in part a product of human actions. Such framing can shape how climate change is perceived and addressed, influence public opinion and policy decisions, and erode trust in science. Framing floods as natural can also be used to downplay the role of human agency, actions and inactions in aggravating the impact of climate-induced disasters (Kelman, 2020). It creates a politically convenient crisis narrative which justifies reactive disaster laws, policies, decisions and actions (Raju & da Costa, 2018; Raju *et al.,* 2022). For example, it is easier for political leaders to blame nature for floods instead of tackling development challenges

that heighten human and physical vulnerability. A recent flood-related disaster in Nairobi provides a case in point, where public officials presented floods as a consequence of climate change (Rukanga & BBC News, 2024; Ruto, 2024; Wainaina, 2024).

This study rejects this stance as it downplays structural failures in Nairobi's development planning and decision-making, as well as social, economic, political, institutional and governance processes that interact with hazards to produce disaster risk. Similar viewpoints are made elsewhere by Puttick *et al.,* (2018), Kelman (2020) and UNDRR (2022). In doing so, the study agrees with Kelman (2014) that while climate change poses significant threats to development, climate-related disasters are not natural but an interaction between natural hazards, social processes and development decisions. This is to say that climate action should not overshadow other critical development, governance challenges, and ideological, political, and economic processes that have and continue to shape disaster risk creation. This should not be misconstrued to mean that climate change should be ignored, but rather, it should be examined in the context of social processes that produce differential vulnerabilities.

Recognising that disasters result from complex interactions of (natural) hazards, and decisions and actions that generate conditions of exposure and vulnerability, is essential to understanding the place of human agency and the responsibility of decision-makers across levels to prevent disaster risks from resulting in actual disasters (Kelman, 2020). This should not be taken to suggest that disasters cannot arise from natural events in which the natural hazard dominates and there is little place for differential social vulnerability to the disaster, other than the fact that people are in the wrong place at the wrong time. It is also not to deny the existence of God and His use of disasters for His glory as documented in the Bible. These are, however, not excuses for inaction and are not to belittle human agency. There is evidence that messages attributing disaster risk to human decisions, actions, or inaction increase perceptions that cycles of risk creation can be broken (Vinnel et al., 2023). Additionally, valence framing of breaking cycles of disaster risk creation, and preparation actions and outcomes can shape attitudes, intentions, perceptions and public policy (Ibid).

In sum, this study concurs with Blanchard (2018), Kelman (2018) and Ras (2017) that the term natural disaster is inappropriate. As opposed to being acts of God or nature

outside of human control, disasters are outcomes of ongoing social, economic and political processes that favour some at the expense of others, structuring vulnerability and exposure as an outcome (Clark-Ginsberg et al., 2021). They result from decisions made by humans, such as allowing human settlements in hazard-prone areas, building substandard roads in flood-prone settlements, neglecting impoverished neighbourhoods or choosing to live in poorly constructed or poorly sited buildings. Section 2.3 advances this discussion on the social construction of risk, focusing on the concept of disaster risk creation and processes that generate disaster risk.

2.3 Disaster Risk Creation

A review of the literature suggests we have and continue to build risky cities and human settlements, with socially and structurally induced vulnerabilities woven into the urban fabric (Bankoff & Hilhorst, 2022; Coates & Warner, 2023; Muir & Opdyke, 2024). Human actions, choices and systems that generate disaster risk outpace the measures put in place to reduce disaster risk (Winser *et al.,* 2012; Raju *et al.,* 2022). Some of the efforts fall short of capturing the full dimension of disaster risk creation (DRC), generating different forms of maladaptation (Dickinson & Burton, 2022). As Wisner et al. (2004, p.i) aptly put it: "*an irony of risk society is that efforts to provide security often create new risks*." Before diving deeper, a common understanding of disaster risk creation is essential.

Different scholars define disaster risk creation (DRC) differently. Clark-Ginsberg *et al.,* (2021, p. 93) describe it as *"the creation or exacerbation of hazard, increase in exposure and propagation of vulnerability*." Poudel *et al.,* (2023, p. 5) define it as "*a constellation of active processes through which risk is produced and reproduced*." Dickinson and Button (2022, p. 203) consider it to be "*a process that increases vulnerability*." Muir and Opdyke, (2024, p. 2) interpret it as "*the process, or set of processes, through which risk is constructed (by human actors) in relation to (socio-) natural hazards*." While Lewis and Kelman (2012, p. 3) consider it to be policies, decisions, actions or inactions that *"increase or fail to decrease vulnerability" or that actively or inertially stymie or constrain disaster risk reduction efforts."* Following this review, DRC is understood herein as the process or set of processes (including decisions and actions) through which disaster risk is produced and/or assigned by actors with varying degrees of power.

The plurality of interpretations notwithstanding, the notion that risk is socially constructed is cross-cutting and unifying across DRC work (Lewis & Kelman, 2012; Muir & Opdyke, 2024; Raju et al., 2022). Acknowledging disaster risk as socially constructed, as opposed to the 'natural disaster' framing, attributes a large part of losses and damages to human agency and underlying processes resulting from societies' decisions and actions when facing a hazardous event. It is thus a process linked to choices, decisions, actions and inaction of actors with varying degrees of power, and an outcome of social, political, economic and ideological processes (Raju et al., 2022). For instance, constructing buildings and infrastructure in exposed areas, covering sinkholes, abusing and polluting natural resources, encroaching onto riparian areas and implementing urban planning practices which are blind to disaster risk and exclusionary planning practices which push the marginalised to the margins or hazard-prone areas exemplify disaster risk creation.

Disaster Risk Creation scholarship argues for identifying and reducing root causes and drivers of vulnerability, and understanding, preventing and creating accountability for the generation of risk. This root cause paradigm focuses predominantly on human agency in the production and distribution of risk. It is closely linked to the concept of vulnerability (Wisner *et al.,* 2004). It explores the underlying processes, relationships and structures which create and perpetuate vulnerability, shifting responsibility for DRC outwards and upwards, from exposed unsafe communities to the political and economic decisions of exclusion and exploitation that impoverished them or planned/allowed their settlement (Cazzola, 2022). This approach treats disaster risk as a manifestation of unresolved development problems and indicators of unsustainable development processes (Lavell & Maskrey, 2014; Wisner, 2016).

Disaster risk creation is a continuous process that entails a pre-, during or post-disaster process (Muir & Opdyke, 2024). Figure 5 illustrates processes that lead to disaster risk creation. The first relates to the foundations of risk-creating development pathways. In the case of Nairobi, it pertains to the vulnerabilities inherent in the city and people choosing development and implementation that are blind to water stress and flooding. The second relates to the processes involved in upholding such development pathways, such as a focus on ideologies that promote elite infrastructure or segregationist planning, which determines who lives where, who gets access to

risk-reducing infrastructure and services, and who doesn't. These ideologies shape the direction of urbanism in relation to disaster risk creation. The third and final relates to the general outcomes of these processes.

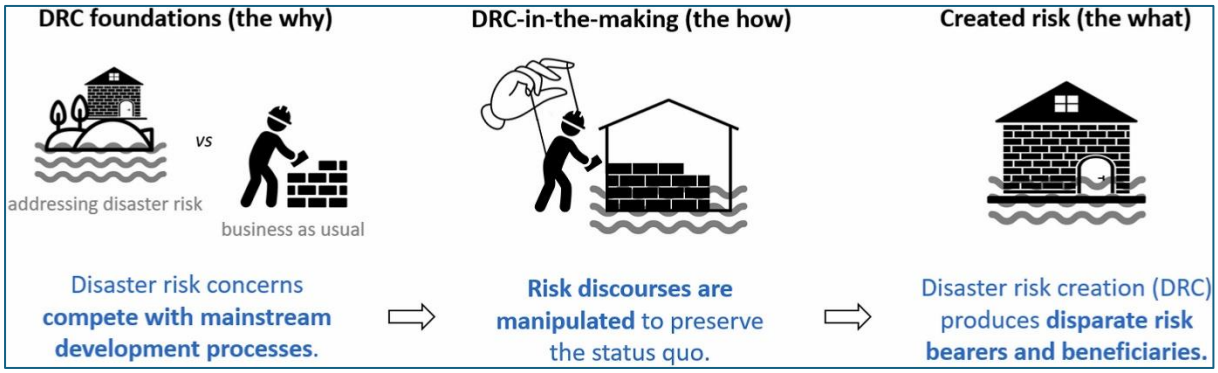

Figure 4: The sources, processes and outcomes of risk-creating development pathways. Source: Muir & Opdyke, 2024

As discussed earlier in the thesis, the root causes of disaster risk and disasters stem from human choices and structural relationships, conditions, practices and ideologies implicit in chosen development and growth pathways (Oliver-Smith et al., 2017). They are amplified by political, governance and technical choices in how both disaster risk and urban development are approached. The overemphasis on modernisation development discourse, and related processes and institutional arrangements has, for instance, created many disaster risks (that DRR seeks to reduce). Colonial legacies of segregationist urban development produce and reinforce served, under-served and unserved communities (Barclay et al., 2019; Muir & Opdyke, 2024; Pereira Covarrubias & Raju, 2020). Post-colonial trajectories of physical, economic and social development create systematic deprivation among communities. Ideally, development outcomes should be inclusive and entail the upward movement of the entire social system. Nonetheless, risk-generating forms of development actively work against this collective uplifting, defeating the very basic ambition of development seeking to end poverty in all its forms. Wisner (2016, p.35) sums this up in his observation that *"the very development process that is supposed to lift all boats, is, in fact, sinking ['certain groups'] by creating risk".* See section 2.5.2 for more on segregationist urban development.

Lewis and Kelman (2012) highlight enduring unethical behaviours as some of the drivers that lead to disaster risk creation. These behaviours include environmental degradation; discrimination, displacement, self-seeking public expenditure, denial of

access to resources, corruption and siphoning of public money (Lewis & Kelman, 2012). According to them, these drivers of vulnerability, which sit at the root of disaster risk creation, often emanate from greed and the misuse of political and commercial power (Ibid). Some people's actions, inadvertent or deliberate, have caused others to be deprived of resources and services that should be or were commonly available. This is compounded by what Bidwai (2010), cited in Lewis and Kelman (2012, p.11), terms "*sleaze and collusive business-politics relations that mock transparent, accountable decision-making and public interest*". Some of these systematic deprivations, exclusionary development practices, and corrupt practices and relations may have come to be regarded as normal and acceptable, yet they impose vulnerability and exacerbate disaster risk creation (Muir & Opdyke, 2024).

Breaking cycles of risk creation instead of simply seeking disaster risk reduction requires in-depth inquiry into contemporary and historical realities, including structural relationships, processes and systems that permit or perpetuate vulnerabilities (Pelling, 2003; Tierney, 2014; UNDRR, 2022; Wisner *et al.,* 2003). An important thrust of this argument, which underpins the discussions herein, is that the study of risk is inseparable from the study of hazards, exposure and vulnerability and socio-economic, ideological and cultural processes that create disaster risk. Root causes of risk are bound up with deep-seated, fundamental or structural drivers relating to ideologies, socioeconomic inequalities and other processes that shape the creation of risk, allowing certain actors to create risk and allocate it to others (Clark-Ginsberg *et al.,* 2021; Lewis & Kelman, 2012; Wisner *et al.,* 2003). Indeed, as Lewis and Kelman (2012) argue, realities of the status quo, including the political origin of poverty and vulnerability, greedy and unjust behaviour of concessionaires, politicians, and law enforcement officers, tend to remain unexplored, obscure and insufficiently penetrated. Understanding these is critical to understanding cycles of disaster risk creation.

Considering the preceding discussions, this study presents a framework for disaster risk creation in Figure 5. The illustration highlights decision-making as the central core of DRC. It shows that disaster risk creation emerges from the interactions of hazards, vulnerabilities, the degree to which assets and values are exposed to hazards, and choices/behaviour with social processes and climate change. Changes in both the

climate system (left) and socioeconomic processes, including ideologies, city visioning, localisation, development actions and institutional arrangements, shape DRC. Vulnerability and exposure are influenced by socio-economic, political and cultural processes, which can increase or decrease the consequences of exposure. Additionally, socioeconomic development interacts with natural climate variations and human-caused climate change to influence disaster risk creation.

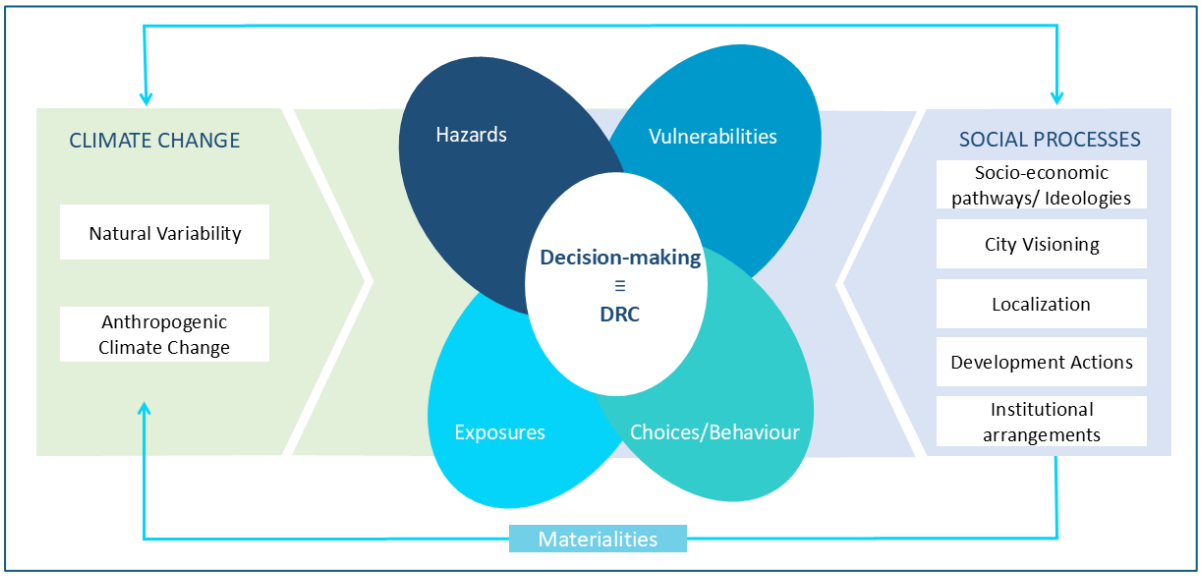

Figure 5: Disaster Risk Creation Framework, centred on Decision-Making Environment

2.4 Urban Risk

Disasters and disaster risk in the urban context are peculiar and more complex than in rural contexts. These complexities and understandings are discussed in this section. Urban risk scholarship is a frontier scholarship that encompasses a wide array of interdisciplinary studies. It transcends disaster studies, urban studies, engineering, geography, environmental science studies and climate change studies (Adelekan, 2020; Adelekan et al., 2015; Dodman et al., 2017, 2019; Fraser et al., 2017; Leck et al., 2018; Revi et al., 2014; Wisner et al., 2003). Birkmann (2013), Adelekan *et al.* (2015), Satterthwaite & Bartlett (2017), Brown (2018), Adelekan (2019) and Dodman *et al.* (2019) explore the intersectionality of ideologies, urbanisation processes, governance processes, vulnerability and risk across socio-economic conditions, environmental factors and cultural settings. On the other hand, engineering scholarship focuses on understanding and addressing urban risks through geophysical, technical, structural, and system-based approaches and physical vulnerability. This scholarship emphasises infrastructure resilience, risk management,

and innovative infrastructure solutions such as nature-based solutions to mitigate urban disaster risks (Carreño et al., 2012; Ferreira & Santos, 2023; Khodadad et al., 2023; Kumar et al., 2020; Shi et al., 2021). This does not exhaust the depths of the urban risk scholarship but showcases some groundbreaking scientific work on urban risk.

Urban risk scholarship holds the view that risk occurs on a spectrum. Alexander (2002), Cutter (2003) and Pelling (2003) discuss the spectrum of urban risk from everyday hazards to major disasters and emphasise the continuum of vulnerability and resilience in urban settings. At one end of the spectrum are the subtle yet ubiquitous everyday risks which threaten wellbeing, life and livelihoods, such as infectious diseases, water pollution, heat stress, air pollution and dangerous buildings (Adelekan et al., 2015; UN-Habitat, 2020a). At the other end are large urban disasters such as earthquakes, cyclones, floods and Tsunamis. In between are small-scale events such as localised floods, water stress, fires and extreme temperatures (Adelekan et al., 2015; Dodman et al., 2019) which disproportionately affects the low-income and the urban poor (Dodman et al., 2019; UN-Habitat, 2020a).

Everyday risks and small-scale disasters are increasingly recognised as a greater impediment to development compared to catastrophic events (UNDRR, 2015), particularly in urban Sub-Saharan Africa (Dodman et al., 2019; Leck et al., 2018; UN-Habitat, 2020a). Studies suggest that the cumulative effects of everyday risks and small-scale disasters can affect the capacities of communities, societies, or even city-level policy actors to deal with future risks (UNISDR, 2009). Identifying and acting on everyday risks, small disasters, and their drivers can reduce the risks and impacts of larger, catastrophic disaster events (Fraser et al., 2017; UN-Habitat, 2020a). This, as argued by Bull-Kamanga *et al.* (2003), provides a scientific and policy imperative to explore the intersectionality of urban development decisions and actions, everyday risks and intermittent disasters. This conceptualisation of risk as a spectrum helps surface the relative importance of different hazards for loss and damage, and their underlying drivers (Adelekan *et al.,* 2015; Brown, 2018). Table 1 illustrates the urban risk spectrum. While it provides general guidance, this study acknowledges the fuzzy boundaries and overlaps between everyday risks and small disasters. It is worth noting that everyday risk and small disasters are at times not easily distinguishable.

Table 1: Spectrum of Risk

Nature of event	Everyday risk	Small disasters	Large disasters
Frequency	Everyday	High frequency	Low frequency
Typical hazards	Infectious diseases, water pollution, heat stress, air pollution and dangerous buildings	Localized floods, water stress, slum fires and extreme temperatures	Earthquakes, cyclones, floods and Tsunamis
Scale	Small (1-3 persons killed, 1-9 injured)	Moderate (3-9 killed, 10 or more injured)	Large (30 or more deaths and/or 600 or more houses destroyed or seriously damaged)
Type of risk	Extensive		Intensive

Source: Brown (2018), Informed by Bull-Kamanga et al. (2003), Adelekan et al. (2015) and UN-Habitat (2020)

The framing of risk as a spectrum encapsulates both extensive risks and intensive risks (Allen et al., 2019). Intensive risk refers to the risk associated with larger, less frequent disaster events with the potential for 30 or more deaths and/or 600 or more houses destroyed or seriously damaged within a specific area (Satterthwaite & Bartlett, 2017; UNISDR, 2017). Extensive risk refers to the risks associated with low-severity, high-frequency events, including everyday risks and small disasters such as localised floods or fires (Adelekan, 2020; Dodman et al., 2019; UN-Habitat, 2020a). They are closely linked to inequality and poverty (Adelekan, 2020; UN-Habitat, 2020a).

Small and recurring extensive risks far outnumber intensive risks, and their cumulative impacts are observed to be much higher than those of intensive risks (IFRC, 2020). Hazards such as localised floods tend to recur in the same localities repeatedly, exacerbating existing vulnerabilities, especially among the urban poor and marginalised communities. Chavda *et al.* (2022) observe that extensive risks can also be one of the most complex risks to reduce and or manage at the local level. This is especially because its impacts are deeply shaped by development decisions and ecosystem degradation, which create differential vulnerabilities and exposure within and among communities (Ibid). Skewed development priorities, climate change, poor

urban governance, unsustainable, irregular and rapid land use change and destruction of fragile ecosystems are extending the footprint of extensive risks.

Considering risk as a spectrum provides a nuanced understanding of urban risk by highlighting the full range of risks and considering their varying frequencies, complexities, diversities, severities, and impacts. It acknowledges the interconnectedness and cumulative effects of different risks and allows a closer focus on the intersection between small, recurrent events and development, often neglected as research and policy focus predominantly on major, catastrophic events (Fraser et al., 2017). It adds nuance to the binary classifications of risks as either extensive or intensive and calls for comprehensive and integrated approaches to understanding, communicating and reducing risks (Adelekan, 2020; Dodman et al., 2019; Leck et al., 2018; Satterthwaite et al., 2019; Satterthwaite & Bartlett, 2017; UN-Habitat, 2020a).

2.5 Urban Risks and Vulnerability in Sub-Saharan Africa

Urban Sub-Saharan Africa faces mounting urban risks (Dodman et al., 2017, 2019; Fraser et al., 2017; Leck et al., 2018). UNDRR (2019) estimates that 90 percent of Africa's urban population is vulnerable to disaster risks. This has led some scholars to suggest that cities and towns in Sub-Saharan Africa are risky places (Adelekan et al., 2015; Dodman et al., 2019; UN-Habitat, 2020a). These risks occur across a spectrum (Adelekan, 2020; Adelekan et al., 2015; Dodman et al., 2017, 2019; Fraser et al., 2017; Leck et al., 2018), with the greatest impacts emanating from everyday risks and small-scale disasters. The risks are rooted in deeply entrenched inequalities, concentrated poverty, poor urban governance, widespread informality, environmental degradation, fast-paced urbanisation and unmet development needs (Calvin et al., 2023; Dodman et al., 2019; Fraser et al., 2017; IPCC, 2023; UN-Habitat, 2020a; United Nations, 2016b). It is a scientific and policy imperative to understand the link between social processes, everyday risks and intermittent disasters to build long-term urban resilience, reduce vulnerability and break cycles of disaster risk creation (Adelekan, 2020; Fraser et al., 2017; UN-Habitat, 2020a).

Social processes that shape the kind of urbanity arising in Sub-Saharan Africa encompass rapid, unplanned urbanisation, segregation, segmentation and stark inequalities, hybrid governance arrangements, embedded and ubiquitous informality, the capture of city visioning and contested claims of the kind of urbanity arising from

the region (Baud et al., 2021). The understanding and deployment of the term urbanity throughout this thesis follow that of Lefebvre, (2003). He views urbanity in terms of the production of space and everyday urban life (Ibid). According to him, it is the production of space and urban life through everyday social, economic and political practices (Ibid). The proceeding sections, 2.5.1 – 2.5.5 discuss how these social processes interact with natural hazards, neoliberal ideological dispositions, politics and governance, and climate change to produce complex risk profiles across urban Sub-Saharan Africa. The section specifically focuses on power relations and implications for agency, social vulnerability, the changing nature of risk, the accumulation of risks over time and the capacity for breaking cycles of disaster risk creation.

2.5.1 Rapid Exposure to Hazards

Africa is experiencing seismic demographic shifts, generating pressure on urban land, infrastructure and services. It is arguably the fastest-urbanizing continent in the world (UN-Habitat, 2020b). In 2020, it was estimated that 43.5 percent of the continent's 1.35 billion inhabitants, up from 286 million (35 per cent) at the turn of the century, lived in urban areas (Ibid). This is projected to rise to 56 percent by 2050 (UNECA, 2016). However, the doubt cast by Potts (2012) on these urbanisation projections, merits further scrutiny (Potts, 2012). Be it as it may, much of the observed urban growth in the region is horizontal, leading to high levels of urban sprawl, high rates of land-use change and expansion into hazard-prone areas (Kamana et al., 2024; OECD et al., 2020, 2022; Skidmore & Lim, 2020; Yussif et al., 2023). Forecasts for urban land cover in 2050 are estimated to increase twelve-fold relative to 2000 (Brown, 2017). This increases the number of people and assets exposed to hazards and catalyses the urbanisation of disaster risks (Fraser et al., 2017; UN-Habitat, 2020a).

This urban growth is taking place mainly in small cities and towns of less than 500,000 people (Güneralp *et al.,* 2017; Brown, 2021; OECD *et al.,* 2022) and in the context of limited knowledge, and weak agency and capacity at the city level to plan and manage the rapid urban change and associated challenges (Brown, 2018; Dodman *et al.,* 2017; Satterthwaite, 2016; Spaliviero *et al.,* 2020; UN-Habitat, 2020a). It is thus akin to the process of 'pseudo-urbanisation' where cities evolve in a dualist manner without the requisite infrastructural development (OECD et al., 2022). The scale of unfunded

commitments such as tap water, sanitation, electricity, transport and other services in these small and medium-sized towns remains vast, creating multiple, compounding hazards for the low-income and the urban poor, and exacerbating risk and social vulnerability (Adelekan et al., 2015; Spaliviero et al., 2020; UN-Habitat, 2020a). Coupled with climate change, this rapid land use change is generating new risks.

2.5.2 Differential Vulnerabilities

Urban risk and its impacts are differentially distributed (Cardona et al., 2012; Grasham et al., 2019; Pelling, 2003; Pelling & Wisner, 2014; Wisner et al., 2003). These differential vulnerabilities are dependent on context and situational variables of socio-economic, cultural, environmental, geographic, demographic, political, institutional and governance factors, and ideological dispositions (Adelekan, 2020; Fraser et al., 2017; Wisner et al., 2003). Similar views are held by Kelman and Lewis (2012). According to Winser *et al.* (2003) and Adelekan (2019), these are the most important factors that shape the root causes of risks. These factors affect vulnerability through how resources and opportunities are allocated and distributed among social groups (Birkmann et al., 2013; Cardona et al., 2012; Pelling, 2003; Wisner et al., 2003). They significantly influence who is most at risk from hazards, where different social groups live, the kind of dwellings available, their level of protection from hazards, economic status, health, and access to early warning systems and preparedness information. Most of the social processes manifest through policies, practices, and norms that influence urban planning, rights recognition, housing access, and risk-reducing infrastructure and services provision. Wisner *et al.* (2003) support these views.

Colonial legacies of segregation and segmentation of urban form based on race and social class continue to be decisive structural features of vulnerability and disaster risks (Gencer et al., 2018). Ideologies of racism, capitalism and imperialism are colonial legacies dominant in the internal form and spatial structure of African cities and towns (Mabogunje, 1990; Mbembé & Meintjes, 2003; Myers, 2011). They continue to influence risks and vulnerability today. These ideological dispositions are manifest in segregation, segmentation and unequal development patterns across the urban divide. They embody unfair power relations that push the marginalised into less desirable, hazard-prone areas with poor infrastructure, making them more vulnerable to environmental risks. This is evident in colonial capitals across urban Africa and in

other towns that played a strategic role in colonial economies. Justified by ‘health and sanitary concerns,’ these towns were designed with elaborate systems of morpho-typological segregation based on race and income. Residential neighbourhoods were classified into European, Asian and African zones, which were often separated by greenbelts.

This system of segregation is evident in both White’s 1948 master plan for Nairobi (Achola, 2002; Ogot & Ogot, 2020; Owuor & Mbatia, 2008) and in Earnst May’s 1947 plan for Kampala, and is responsible for much of the distinctive spatial characterisation of African cities that Tsheola & Mmotlana (2018) categorise into ‘served’, ‘underserved’ and ‘un-served’ communities. These ideologies have persisted in the post-independence era, subsequently morphing into socio-economic segregation based on class (Banyikwa, 1990; K'Akumu & Olima, 2007; Ogot & Ogot, 2020), reinforcing vulnerabilities along socio-economic lines.

Today, each zone is still distinguishable by its density, environmental quality and demographic composition, and access to services, materialising in served, underserved and unserved communities (Tsheola & Mmotlana, 2018). Unserved communities materialise as communities living in unserviced, informal settlements, often located in marginal parts of the city, exposed to most hazards. They are historically deprived of access to risk-reducing infrastructure and services (Ledant, 2013; Satterthwaite, 2017), are most vulnerable to disaster risks and bear the greatest burden. Underserved communities, on the other hand, materialise as the forgotten class. This ‘big middle' is partly serviced and partly legal, with mainly legal employment and legal tenure. In these dense, vertical slums, dark tenement buildings are the leitmotif. They often have fewer services compared to organised informal settlements. The ‘underserved’ are often vulnerable to both everyday risks and localised disasters, and are often just a disaster or medical bill away from poverty. They live above the poverty line but below formal affordability thresholds for adequate housing. Importantly, they have limited adaptive capacities and are excluded from formal housing markets. Served communities, on the other hand, represent the planned and serviced affluent neighbourhoods. This qualitative diversity explains the differential vulnerabilities within cities in Sub-Saharan Africa, which makes it difficult for urban development interventions to target critical issues.

2.5.3 Capture of Urban Visioning

It is established that risk accumulation and social vulnerability in much of Sub-Saharan Africa's urban landscape are influenced by macroeconomic conditions and socio-economic and political structures at different levels of governance. Increasingly, by international development agendas, political and neoliberal interests (Wisner *et al.,* 2003; Adelekan, 2019). Colonial legacies, neoliberal ideology, rapid urbanization, and external debt are risk pressures that push root causes of risks into forms of unsafe conditions such as destruction of livelihood opportunities, unplanned and unregulated growth and eroded urban governance capacity including planning capacity and capacity to provide risk-reducing infrastructure and services (Adelekan, 2019). Neoliberal ideology has played a central role in shaping urban governance across post-independence Africa, particularly from the 1980s onward, as part of a broader wave of economic liberalization, state restructuring, and global financial integration. It has become deeply entangled with local political and economic dynamics, particularly the incentives of ruling elites and the imperatives of global capital (Sverdlik et al., 2025). These lead to the accumulation of risks, the generation of new risks and a weakened capacity for breaking cycles of risk creation.

Structural Adjustment Programs (SAPs), championed by the International Monetary Fund and the World Bank in the 1980s and 1990s, were a key conduit through which neoliberal logic entered African governance (Singer & Pickett, 1990). While intended to promote economic stability and growth (Ibid), they profoundly undermined public institutions, weakened state capacity, and reoriented development priorities in ways that exacerbated social vulnerability and urban risk (Adelekan, 2020; Cheru, 1989; Rono, 2002). They had significant adverse effects on the social conditions and local economic development, exacerbating social vulnerability and urban risks (Adelekan, 2020). The policy package's impact was deeply felt in urban Africa and in every aspect of urbanism (Rakodi, 1997; Riddell, 1997).

These 'reforms' emphasized decentralisation, deregulation, democratization and privatization of public services (Meagher, 2011), introducing a new governance paradigm in which the state's role was no longer to provide public goods directly but to facilitate market-led solutions. This exposed the hitherto protected public sector

corporations to competition against global capital, leading to a shrinkage of the public sector, the erosion of state welfare programs, and the rapid informalization of urban systems and livelihoods (Onyishi et al., 2021; van Noorloos & Kloosterboer, 2018). These shifts were accompanied by cuts in public spending, disinvestment in social services, massive unemployment, removal of subsidies and introduction of service fees on health and education, disproportionately affecting low-income and poor households (Lugalla, 2005; Mkandawire & Soludo, 1999; Obare & Heidhues, 2011; Rono, 2002), and their adaptive capacities. The reduction in public services and the focus on market-driven policies increased poverty and inequality in urban areas. Consequently, this increased social vulnerability and created risk traps, especially for the urban poor, who relied heavily on public services (Cheru, 1989).

In Nairobi, this reconfiguration of governance catalysed informality and social vulnerability. The role of the state shifted from a primary actor delivering development to acting as an enabler and gatekeeper of private sector-led growth (Mwau & Sverdlik, 2020; Ogot & Ogot, 2020). The implementation of these new approaches was done in tandem with the gradual phasing out of strict building and land use regulations, and disinvestment in public-sector technical capacity, creating fertile ground for unplanned urbanisation and speculative development (Mwaniki et al., 2015; Mwau & Sverdlik, 2020). This transformation has significantly contributed to disaster risk creation by facilitating patterns of urban development that increase exposure and vulnerability. The relaxation of regulatory oversight and weakened institutional capacity have enabled the expansion of informal settlements and construction in hazard-prone areas, such as riparian zones and unstable slopes, often without adequate infrastructure or risk mitigation. Consequently, large segments of the population are concentrated in poorly serviced, high-risk environments. This structural production of risk reflects the cumulative effect of governance reforms that prioritise market-led growth over spatial justice and risk-sensitive urban planning.

Importantly, these neoliberal reforms were not only externally imposed but also strategically internalised by domestic political elites (Sverdlik et al., 2025). In their pursuit of short-term political legitimacy and electoral support, ruling elites often embraced private investment as a vehicle for visible, high-impact infrastructure and urban development projects (Harrison et al., 2019; Parnell & Robinson, 2012). This

instrumentalisation of neoliberalism opened the door for public-private partnerships and megaprojects, which restructured state-market relations, becoming central to a new mode of governance where development was increasingly aligned with elite and corporate interests (Goodfellow, 2020; Buckley & Kalarickal, 2006). The result is a reconfiguration of power, where public sector actors became less autonomous and more dependent on the priorities of investors and financiers (Buckley & Kalarickal, 2006). Some of the implications of these include diminished agency of public-sector policy actors on urban development decision-making and city visioning, and a lack of focus on pro-poor urban development and deliberate effort to break cycles of risk creation.

Urban governance today is thus increasingly characterised by neoliberal capture, where cities are restructured to accommodate capital accumulation, often at the expense of public accountability, equity and risk reduction (Aalbers, 2020; Ashton et al., 2016; O'Brien & Pike, 2015). As Jessop (2002) and Brenner & Theodore (2002) argue, local governments are being refashioned as entrepreneurial entities that facilitate investment and prioritise the generation of revenue over public welfare. Waldron (2019) and Kaika & Ruggiero (2016) discuss similar views, observing that urban development decisions are dominated by private investors and political elites, who shape spatial planning to suit profit motives rather than collective urban visions. This reorientation effectively enables elite capture of decision-making processes and leads to the exclusion of marginalised groups, especially the urban poor, who lack the power to influence or benefit from these new urban trajectories.

Drozdz *et al.* (2021) highlight how investors hold privileged positions in deciding what projects are financed, where such projects are constructed, who benefits, and how and when debts accrued from the projects are paid (van Noorloos & Kloosterboer, 2018). Projects implemented through such arrangements as public-private partnerships often override existing planning frameworks (normative city visions) and embedded institutional arrangements and have little regard for local priorities or environmental and social risks (Aalbers, 2020; Kaika & Ruggiero, 2016; Waldron, 2019). The outcome is the reproduction of uneven local development, reinforcement of existing power asymmetries and outright exclusion of certain social groups from

urban services. This reinforces social vulnerabilities and processes of disaster risk creation.

In this new urban political economy, local actors, including city governments, civil society, and communities, have lost agency over decision-making and city visioning, as global financial actors and political elites assert growing influence over urban form and function (Aalbers, 2020). The elevation of profit over equity, inclusivity and safety for all has led to the systematic marginalization of risk-sensitive, pro-poor urban development principles in urban policy, exacerbating inequalities and contributing to the entrenchment of vulnerability and processes of disaster risk creation. This raises a fundamental question: Whose interests are strongest in the kind of urbanity claimed by African cities? It puts to focus the need for further interrogation of the main mechanisms of neoliberal ideologies, how neoliberal ideology has become entangled with political economic forces and implications for social vulnerability, power and agency for local actors to shape their desired urban futures.

2.5.4 Hybrid Governance Arrangements

Following the definition put forward by the United Nations Human Settlements Programme (UN-Habitat), urban governance is defined herein as the sum of the many ways actors (individuals and organisations) manage the common affairs of urban areas (UN-Habitat, 2002). It is a continuous process through which conflicting or diverse interests may be accommodated, and cooperative decisions and actions taken or not taken (Lange, 2009). A more contemporary definition, which aligns more precisely with this study, characterises urban governance as the process of decision-making through which decisions are implemented or not implemented (UNESCAP, 2020). It is a result of negotiations and tensions among a complex array of actors and institutions.

Literature on urban governance has shifted away from a rather static and centred organisational perspective on governance to a more dynamic and messy conception of governance which emphasises institutional pluralism and multiplicity of actors (Baud et al., 2021; Dodman et al., 2017; Hajer & Wagenaar, 2003). This signals a paradigm shift from good government (which focused primarily on government as the locus of decision-making and centre of power) to good governance (a focus on multiple

bespoke institutional and organisational arrangements fit-for-purpose and context) (Baud et al., 2021; Colona & Jaffe, 2016).

The term 'hybrid governance' refers to institutional and organisational arrangements where non-state actors take on functions that were historically performed by public sector actors (Colona & Jaffe, 2016). In the process, they become entangled with the public sector actors to the extent that it becomes difficult to distinguish between them (Ibid). In hybrid governance arrangements, multiple actors with varied levels of power interact to shape and reshape institutional arrangements to address extant and emergent challenges (Baud et al., 2021). Related concepts are 'governance without government', twilight institutions', 'real governance' or 'negotiated statehood' (Baud et al., 2021; Hagmann & Péclard, 2010; Lund, 2006). Governance hybridity may arise where state actors are unwilling or unable to provide risk-reducing infrastructure and services, or where these are not covered by existing legislation or formal institutional arrangements (Barry, 2020a, 2020b). This study adds to this debate, arguing that governance hybridity may also arise in contexts of institutional pluralism and ambiguity, as in urban poor settlements policy debate spaces where there are multiple legislations, actors and no real responsibility. Its origins in post-colonial urban Africa are linked to structural adjustment programmes and the associated neoliberal reformist agendas (Colona & Jaffe, 2016).

The ubiquity of hybrid governance arrangements in urban Sub-Saharan Africa is well documented (Devas, 2004; Meagher, De Herdt & Titeca, 2014; Dodman *et al.,* 2017; Barry, 2020a; 2020b). Many urban governance functions across urban Africa are performed by a diverse and fragmented set of actors (Kedogo et al., 2010) drawn from the public, private, and civil society sectors, traditional and international development (Devas, 2004), and shadow networks (Meagher, De Herdt & Titeca, 2014; Dodman *et al.,* 2017). These actors actively engage in the everyday production of multiple urban realities and lay competing claims on economic, spatial and social legitimacy, and on the control of urban space (Meagher, De Herdt & Titeca, 2014; Dodman *et al.,* 2017). They work across the formal-informal continuum, canonical and shadow systems, and beyond, in between and in collaboration with governments across different sectors including solid waste management, water distribution, public transport, environmental conservation, disaster risk management, and urban poor settlements upgrading (Büscher, 2018; Hoffmann & Kirk, 2013). Thus, they can enhance the ability to respond

quickly to emerging risks and vulnerabilities and build trust and legitimacy around processes. Community-based actors, for instance, devise innovative strategies for social assistance and organising to cope with and adapt to the everyday dysfunctionalities that they face in housing, flood-risk management and livelihoods despite major structural constraints (Dodman, *et al.,* 2017; Onyishi, *et al.,* 2021).

Most of the literature on hybrid governance arrangements in urban Sub-Saharan Africa emphasises function rather than form, in a context where sub-optimal hybrid governance arrangements that deliver services are considered better, even glorified, than a total collapse of basic services (Colona & Jaffe, 2016; Smit, 2018). This study concurs with Dodman *et al.* (2017) that it is not unique to find decisions within and about cities being driven by shadow networks within and beyond local governments. However, Meagher, De Herdt & Titeca (2014) caution that hybrid governance arrangements also have a dark side. According to them, such arrangements blur lines of accountability, weakening accountability and transparency (Ibid). They can strengthen unethical practices, constrain the agency of less powerful actors, institutionalise the capture of decision-making platforms and channels, and reinforce irregular power relations (Meagher, De Herdt & Titeca, 2014; Barry, 2020). The increasing influence of non-state actors, often not subject to public-sector accountability mechanisms, in core public-sector functions aids opacity, enabling corruption and mismanagement.

A multiplicity of actors often leads to conflicting discourses on what the challenges and solutions are, different perceptions of risks and vulnerability, and differing approaches and methods to addressing them (Baud *et al.,* 2021). Each actor argues for their interests in the decision-making and implementation process (Ibid). Accordingly, the views of dominant actors may prevail over those of less powerful ones. For instance, private sector actors may become so powerful that they significantly shape urban development agendas, steering urban development policy in favour of market-driven models at the expense of the urban poor, perpetuating risk creation. Additionally, hybrid governance arrangements can also result in unstable and fluctuating power dynamics. Non-state actors (often in the shadows) may negotiate short-term, project-based visions with public sector actors in ways that undermine foresight and long-term

planning, entrenching short-termism and a culture of pragmatism. This can hinder opportunities to break cycles of disaster risk creation

Understanding how power is distributed in hybrid governance arrangements is important to addressing social vulnerability and tackling the root causes of risks. This calls for research to focus on understanding how actors with differential power, interests, values and pieces of knowledge engage through a range of spaces to shape how things get done. This study recognises the need to focus on the extent to which spaces for more inclusive decision-making and action are created and utilised. This includes focusing on how collective agency of actors is built, the spaces within which actors engage, how these spaces emerge and who has oversight over them. This applies particularly to pro-poor urban development, in which social vulnerability and risk management need to be linked in ways that promote development that is resilient and inclusive.

2.5.5 Informality

Informality is the leitmotif of African urbanism. In this study, informality is understood as a negotiated reality in which different actors with varying levels of power have (and negotiate) different forms of authority or subservience (Banks et al., 2020). It is closely linked to the inadequacies of bureaucratic systems. These deficiencies often create spaces where informal practices become necessary or thrive. Following Brown *et al.* (2015) and Pernegger (2021), the term informal is applied herein to activities, practices and processes outside formal regulation or formal mandate. It is a fluid concept that spans all aspects of urbanism and cuts across a range of relationships and transactions across the formal-informal continuum, including networks, social, institutional and organisational arrangements, practices, regulations, and governance (Brown, *et al.,* 2014; McFarlane & Waibel, 2016; Dodman, *et al.,* 2017; Tsheola & Mmotlana, 2018).

Like hybrid governance arrangements, the informal is useful in contexts where the state is unable or unwilling to provide services. Informality is reproduced where formal channels of decision-making are perceived to be exclusive or provide little space for participants to influence decisions and outcomes, or whenever policies and interventions do not match local peculiarities and realities. This incongruence can be

attributed in large part to the many regulatory regimes or visions designed for cities that policymakers desire to see, most of which are not the cities where most of their populations live or can afford to live in (Brown, 2021). It is compounded by the tendency of formal processes and services to be expensive, inefficient, blind and poorly adapted to the local social and institutional environments. This viewpoint is supported by Anyamba (2011), Pernegger (2021), Onyishi, *et al.,* (2021) and Brown (2021).

The low-income housing segment is a classic example of a space shaped by informality. It is informal and vibrant, facilitated by a form of 'hybrid' governance and a selective 'absence' of formal rules and regulations (Earle & Grant, 2019). Their construction often contravenes formal regulations, but alternative forms of 'regulation and governance' that operate outside the formal 'institutional arrangements for urban development decision-making do exist, which Agamben (2020) discusses as 'spaces of exception' and suspension of the law (Agamben, 2020). According to him, the state of exception is a permanent, lawless void outside the grasp of juridical hands, which allows for anything to happen within its borders. The study disagrees with Agamben's argument that these spaces are fundamentally immutable and lawless, concurring with Hauka (2013) that spaces of exception are comprised of institutional pluralism and not devoid of it. He argues that these spaces result from meticulously orchestrated interactions across multiple sovereigns, adding that they are mutable and performative, influenced by the actions and behaviours within them, and are subject to change and resistance against their extant form or function (Hauka, 2013). Tenement settlements exemplify sites where the state of exception has been realised as a permanent and stable condition and is given a permanent spatial arrangement. They are facilitated by the provincial administration, often by chiefs and village elders (Earle & Grant, 2019), urban planning officials and politicians at locale. The chiefs (sovereigns) influence who constructs what and where. They are also persistent. This is because powerful actors have learned to benefit financially and politically from them (Deuskar, 2019).

In the same context, the informal is by its very nature unregistered and unregulated, lacking state oversight, making it difficult to regulate. As such, it often becomes unruly and extortionist, reinforcing the poverty penalty, social vulnerability and systematic deprivation in the context of access to risk-reducing infrastructure and services

(Pieterse & Parnell, 2014). They can erode the authority and capacity of city governments to oversee urban development (Brown, 2021), creating disorder and being used to perpetuate short-term gains or personal interests (Anyamba, 2011). This raises two questions: Who has oversight over the informal? How far does the government control the work of other actors?

2.6 Whither Urban Futures?

The previous section discussed the main factors underpinning Africa's urbanism and implications for urban risks, vulnerability and capacity to break cycles of disaster risk creation. This section discusses a broad and thought-provoking question that delves into the future trajectories of urbanism, considering the myriad factors that might influence foresightful, risk-sensitive and inclusive pro-poor urban development, including inter alia, sustainability and resilience, inclusive urban development decision-making and action, and equity and social justice. It explores the concepts of urban visioning and transformation.

2.6.1 Visioning Urban Futures

Today, the need to engage with sustainability, rapid urbanisation, informality, disaster risks, and climate change agendas has led urban actors across scales to think about visions for sustainable and resilient urban futures. How well Africa harnesses its urban revolution is dependent on how well its scholars and policymakers understand the nuances of its urban dynamics and engage in discourse that shapes its urban futures.

The terms 'vision' and 'visioning' mean different things to different people. There are different perspectives on urban visioning, including strategic planning and community engagement perspectives (Dixon et al., 2023; McPhearson et al., 2016a); futures studies perspectives (Marzban & Mohammadi, 2020; Pelling et al., 2024); urban design perspectives (Carmona, 2023); and policy and governance perspectives (Healey, 2005; Marzban & Mohammadi, 2020). Each perspective offers unique insights into the process and goals of envisioning the future of urban areas. However, the increasing use of these terms sometimes tends to mask and devalue their meanings. It is prudent to clarify the understanding of the two terms and how they are deployed in this thesis.

Visions are simply expressions of desired futures (Shipley & Newkirk, 1999; Iwaniec & Wiek, 2014; Dixon et al., 2018) whether actual products, statements or documents that are developed to influence socio-economic, physical and environmental futures (Shipley & Newkirk, 1999). On the other hand, visioning is understood generally as the process of creating visions, that is, representations of desirable futures (Iwaniec & Wiek, 2014; McPhearson et al., 2016; Dixon et al., 2018). Hope *et al.* (2023) offer a risk-oriented understanding of visions and visioning. To them, visions are depictions of aspired, yet tenable futures oriented towards reducing disaster risk for the urban poor, whereas visioning is the process of collectively imagining such futures and adapting them to the complexities and uncertainties associated with disaster risk in each context (Hope et al., 2023). Institutional bricolage offers another view, which is closer to the debates herein, arguing that visioning involves reconfiguring and adapting existing institutions and practices to create a coherent and actionable vision for development (Cleaver & de Koning, 2015). In the context of cities, this perspective emphasises the role of agency, negotiation, and creativity in shaping urban futures. Following a bricolage approach, urban visioning is understood herein as tinkering and adapting existing institutions, plans and programmes to create an urban environment that works, shaping socio-economic, material, environmental and risk futures.

Visioning can take a process-based approach that forms the basis for building the capacities of diverse actors to reduce disaster risks and break cycles of risk creation. It can take participants on a journey that enables collective meaning-making to build visions for their cities and communities. This process empowers city-level and community-level actors to negotiate acceptable risk and enables them to lay claim to the kind of urbanity and riskscapes that arise. It strengthens local agency, allows local actors to shape the arising narratives that shape everyday urban realities and development futures, and to take ownership of the outcomes.

The modernist and post-modernist thinking holds a very determined vision to create cities that, in terms of infrastructure, architecture, and amenities, would rival the post-colonial wonders of the Far East, including Singapore, Hong Kong, and Shanghai. However, questions arise on their replication and implications on inclusivity, social justice and the right to the city in the African context, as well as their fit to the context. This dynamic often manifests in urban development governance, where international development agencies, financial institutions, or consulting firms drive urban policy

decisions through their funding and expertise. Several authors have waded into this debate, focusing on how international consultants and capital shape development decision-making and implementation, often highlighting the power dynamics and tensions that arise in these processes and city visions (Ferguson, 2006b; Mazzucato & Collington, 2023; O'Brien & Pike, 2015).

International financing mechanisms shape urban development policy, planning, decision-making and implementation, often prioritising projects that reflect the interests of global capital (Ferguson, 2006b; Roy, 2010). The use of international capital typically comes with conditions that prioritise efficiency, technical solutions, economic growth, profitability, structural adjustments, financial oversight or performance indicators over local needs and values like inclusivity and equity, effectively sidelining the knowledge and priorities of local actors and hampering efforts to break from disaster risk-creating development pathways (Muir & Opdyke, 2024). This often constrains the agency of local governments for city visioning and implementation, as they often must conform to the guidelines and metrics of donors or funders, which tend to overlook the local socio-economic, cultural and risk realities (Mazzucato & Collington, 2023; Sheppard, 2002). In Nairobi, for example, international consultants and capital play a significant role in shaping city visioning and arising urbanity, often through the projectification of city visioning and parasitic relationships and delivery mechanisms like public-private partnerships and consultancy-based models. They often push for large-scale infrastructure projects such as the Nairobi Expressway, the Nairobi Commuter Rail, the Nairobi Railway City, the Affordable Housing Programme and the Eastlands Urban Renewal Programme. Such emphasis on large-scale infrastructure and top-down delivery mechanisms often disregards the needs and priorities of city dwellers, hampers integrated, inclusive foresight and overlooks disaster risks such as water stress and flooding. See Figure 4 for sources, processes and outcomes of risk-creating development pathways.

International consultants often bring pre-packaged solutions that reflect global 'best practices', often at the expense of local knowledge, customs, or existing systems. The ubiquity of international consultants in places of decision-making serves to undermine the value placed on local expertise and competencies (Borie et al., 2019). International consultants are often seen as experts by virtue of their foreign credentials, leading to a marginalisation of local professionals, academics, and policymakers (Ibid). Local

actors, including communities, civil society organizations, community groups and city-level public sector policy actors, who often have a nuanced understanding the unique social, cultural, and political dynamics of their cities, are often ignored or pressured to adopt received city visions, knowledges and implementation mechanisms that are incongruent with the local challenges and institutional arrangements (Ferguson, 2006b; Harvey, 2003; Roy, 2010). Such practices and attendant delivery mechanisms disempower local policy actors and limit their ability to partake in city visioning and propose alternative city visions, reducing their ownership of development initiatives. This perpetuates dependency on external expertise. This dynamic perpetuates epistemic injustice, where local knowledge is devalued in favour of foreign expertise, leaving local experts with less control over urban development policy, decision-making and implementation. Cumulatively, it erodes the capacity of public-sector city-level actors to break cycles of disaster risk creation.

This section has highlighted how the hegemony of international actors and capital marginalises local communities and knowledge, and policy actors, reducing their agency for city visioning and implementation. It often skews city visioning towards global capital interests, perpetuating infrastructure apartheid, and reinforcing long-standing inequalities in the distribution of resources and services based on commercial and elite interests. Consequently, it perpetuates processes of disaster risk creation (Muir & Opdyke, 2024). It raises the following questions, which are addressed in the thesis: a) Whose visions and futures are dominant in the kind of urbanity arising in Nairobi, and the African continent? b) What kind of governance arrangements are shaping these emergent urbanities? c) How are disaster risks considered in these visions? d) At what cost and at whose expense are these visions? And lastly e), what are the implications for local agency, ownership of the city and social vulnerability?

2.7 Research Gaps

Urban Sub-Saharan Africa presents complex challenges that are deeply rooted in social processes, governance dynamics, and ideological legacies. It also presents novel opportunities for transformative urban development that is inclusive and resilient. Despite existing literature acknowledging the multifaceted and co-evolving nature of urbanism and riskscapes, significant research gaps or epistemic silences (Clements, 2009) exist.

First, there is an insufficient understanding of how social processes, including rapid urbanisation, hybrid governance arrangements, neoliberal ideologies, asymmetric power relations and informality, interact with natural hazards and climate change to shape riskscapes in urban Sub-Saharan Africa. While existing studies acknowledge the role of these social processes in exacerbating social vulnerability, there is a need for deeper investigation into the mechanisms through which they influence the creation of disaster risk.

Second, further studies are needed to adequately address the question of differential vulnerabilities within urban areas, which are shaped by socio-economic, cultural, environmental, geographic, political, institutional, and ideological factors. Furthermore, empirical research on the complexities of hybrid governance arrangements, characterised by the involvement of multiple actors with varying power dynamics and interests, is still scarce. How power is distributed and exercised within these governance structures and the implications for social vulnerability, agency of local actors, and disaster risk creation require further scrutiny.

Finally, a review of the literature reveals a paucity of research on the long-term implications of neoliberal policies and structural adjustment programs on urban governance and disaster risk creation. Specifically, the increasing role of private sector and global capital actors in shaping urban development agendas, and their entanglement with political elites, need critical analysis. This encompasses the consequences of elite capture of city visioning, the exclusion of marginalised groups from urban development decision-making and implementation, and implications for disaster risk creation.

Addressing these research gaps can provide a more comprehensive understanding of the root causes of urban risk in Sub-Saharan Africa and contribute to more effective and inclusive urban development decision-making, breaking cycles of disaster risk creation. This research attempts to address the first research gap by engaging with the complexity and inherent ‘messiness’ of Nairobi's urban development decision-making and action space, illuminating the multiple interactions, overlaps and interrelationships among institutional domains to address the questions of who decides who decides, how the pro-poor urban development decision-making and

implementation spaces are constructed, and how transformative practices in the context of Nairobi materialize.

2.8 Conclusions

In conclusion, African urbanism is qualitatively diverse, both across and within the cities and towns, and so are the riskscapes therein. The diversity within and across urban Africa is discussed by other scholars as well (Obeng-Odoom, 2011; Pieterse, 2010; Sakketa, 2023). This diversity is an outcome of interactions between historical legacies, global forces and trends, governance complexities and local conjunctures. Global capital flows have and continue to shape city-making and reconfigure urban governance across Sub-Saharan Africa. These have in effect limited African agency and taken away the power to vision and shape cities in Sub-Saharan Africa from local governments and city dwellers, producing forms of urbanism that in themselves reproduce social vulnerability, exclusion, inequality and informality, and disaster risks.

Disaster risk is created by the interaction of natural hazards, social processes, discourses, ideologies and associated social relationships. Disaster risk creation stems from mechanisms of exclusion such as formal urban planning and decision-making, the capture of urban development decision-making and action spaces by global capital structures, the legacies of past decisions and actions about urban planning, location of human settlements and gaps in the provision of risk-reducing infrastructure and services, and lack of adaptive capacities. These mechanisms of exclusion generate disaster risks (Muir & Opdyke, 2024; Dickson & Burton, 2022; Clark-Ginsberg *et al.,* 2021).

Climate change science, disaster risk science and urbanism scholarships remain isolated areas of scholarship, policy and practice. Even though they interact and materialise variously across urban Sub-Saharan Africa, they remain disjointed, constraining the opportunity window for transformative change at scale and for development that is risk-informed, inclusive and resilient. A theoretically different approach that combines disaster risks, climate change and urbanism is needed to understand the underlying dynamics that produce the kind of urbanity (Lefebvre, 2003), riskscapes and concomitant vulnerabilities inherent across urban Africa. Additionally, there is a need for a new decision-making regime which brings all these together, tackling root causes and drivers of risk.

3 Theory and Concepts

3.1 Introduction

As stated earlier in the sub-section 1.4, this study sought to investigate how relationships between institutions and actors contribute to disaster risk creation in Nairobi. It does so by researching how actors, institutions, and power dynamics interact to shape urban development decision-making spaces and resultant urban trajectories. At the same time, the thesis engages with the transformative aim of foresightful, risk-sensitive and inclusive, pro-poor urban development. The researcher is interested in how disaster risk is actively produced through urban development decision-making processes in contexts of institutional pluralism and messiness. This focus raises various questions, some of which are beyond the scope of this research and can be taken forward in future research: How big is the influence of legislation, policies and guidelines on urban development decision-making and implementation? To what extent are these decisions and actions structured by informal practices? How are institutional influences and practices received by actors at the city level? What transformative practices are manifest in community-led urban development decision-making and action? What enables physical and institutional transformation? Theoretical reflections made in this chapter open space for refining analytical questions.

This chapter focuses on the concepts and theories underlying this research by describing the institutions, urban development decision-making and implementation, and the theory specifically used in this research. It explores the theory of institutions, drawing upon literature on institutionalism and institutional bricolage. It presents institutional bricolage as an analytical frame of analysis. It seeks to push the boundaries of knowledge, updating literature on institutional bricolage and transformation, and illuminating the hard-to-see institutional dynamics such as power relations, relationships of distrust and agency.

First, a description of the commonly existing definitions of institutions and the elements of institutions is provided. Second, an overview of the behaviour of institutions is provided. It provides an overview of the main institutional perspectives and how these institutional theories have affected scientists' thinking on urban governance. Insights into the occurrence of institutional change, the persistence of institutional structures,

and opportunity moments for transformation are provided. Third, the concepts of urban governance, decision-making, and the relation with institutions are elaborated. Finally, the theory of institutional bricolage is presented as the main theoretical framework for this research. It illuminates how institutions are constantly shaped, re-shaped and re-adapted by actors, offering insights into agency, power relations and relationships of trust and distrust. Based on these theoretical reflections, the chapter concludes with the conceptual framework and a restatement of the research questions. It further calls for a nuanced understanding of the interactions between formal and informal institutions, between canonical and shadow systems and how they shape African urbanism.

3.2 Institutionalism

3.2.1 Defining Institutions

Different authors define institutions differently. Lawson (1997) defines institutions as "*systems of structured processes of interaction that are relatively enduring and recognised as such*." North (1990; 1991; 2016) defines it as the formal and informal constraints that structure human interactions, whether social, political or economic, Ostrom (1992) adjudges it as "*the set of rules actually used by a set of (actors) and potentially affecting others,*" Hodgson (2006) considers it to be the "*established social rules that structure social interactions,"* while Cleaver (2012) considers it as "rules (often implicit) and arrangements through which people organize their lives, access resources and give order and meaning to their world." Plurality of interpretations notwithstanding, the notion that institutions shape both individual and collective agency is cross-cutting.

Following North (1990) and Cleaver (2012), institutions are understood herein as the co-produced rules (including *norms, customs and beliefs*) and arrangements (incl. practices of getting things done) that structure choices, behaviour and agency, and which are reproduced and adapted through everyday interactions. Norms are value-based, shared expectations and standards of behaviour that are considered acceptable and expected within a social context. They are governed by shared moral values and ethical standards and are context-specific. Practices are habitual actions and behaviours that people in a given socio-institutional context engage in to get things done in given situations. Beliefs are shared convictions or understandings that

individuals or groups hold about reality, what is true and what is of value. Beliefs structure behaviour and choices by shaping how individuals perceive and interpret reality. They represent social identity (Scott, 2014; De Koning, 2015). On the other hand, arrangements are the structured and organised ways in which institutions are set up and operate (Ostrom, 2006; Scott, 2014). They include, just to mention a few, decision-making and implementation spaces, implementation mechanisms, organisational structures and accountability systems. Critically, institutions are also channels through which power is exercised, reproduced and challenged.

In everyday parlance, the terms 'institution' and 'organisation' are used casually and interchangeably and refer to many things. However, organisations are different from institutions. Herein, organisations are understood as social collectives with agency and a common purpose or overlapping interests and are formally recognised by law or customarily. They include, inter alia, political parties, parliament, local governments, cooperatives, banks, consultancy firms, residents' associations, and churches. Institutions create organisations, which in turn shape them to respond to changing needs.

3.2.2 Elements of Institutions

Institutions have three basic elements: formal institutions, informal institutions, and their enforcement mechanisms (Carter, 2014; D. North, 1990, 2003; D. C. North, 2016).

Formal institutions are the written 'rules of the game' that are legally sanctioned and include constitutions, laws, policies, property rights, regulations, statutes, by-laws, contracts and standard operating procedures established and enforceable by an authority (De Koning, 2011). Also referred to as canonical institutions, they are visible and subject to management through public organisations (Pelling, *et al.,* 2008; Brown & Duguid, 1991). Informal institutions, on the other hand, are the social norms, culture, practices, beliefs, customs or codes of conduct (including intimidations) and arrangements that shape thought, behaviour and choices (Leftwich & Sen, 2010; Berman, 2013; Carter, 2014). They also include informal practices that 'make things happen' or simply, the 'unwritten rules of the game'. They are important and dominate the everyday activities, relationships and interactions between and/or among individuals, between individuals and organisations, and individuals and institutions

(North, 2003). In practice, formal and informal institutions have a complex web of interactions that can be complementary, competing, or overlapping (Jütting, *et al.,* 2007; Leftwich & Sen, 2010). Combined, formal and informal institutions, and the effectiveness of their enforcement shape the character of polities and social and economic development outcomes (North, 1990). They also influence the implementation and outcomes.

Several scholars have, however, critiqued the dichotomous classification of institutions as formal and informal, arguing that this binary distinction oversimplifies the complex nature and richness of institutions and their interactions (Cleaver, 2002; Helmke & Levitsky, 2004; D. North, 1990; Ostrom, 1990). They advocate for a more nuanced understanding of institutions that recognises the interplays and mutual influence between formal and informal institutions. Cleaver extends this, distinguishing institutions as either bureaucratic or socially embedded (Cleaver, 2002). The two are not mutually exclusive but are mutually reinforcing and are at times not easily distinguishable. Bureaucratic institutions are the formalised arrangements based on clearly defined organisational structures, contracts and legal rights, while socially embedded institutions are those based on culture, social organisation and daily practice (Ibid). This study agrees with these contestations against binary definitions as either formal or informal, traditional or modern. These binary definitions imply that of the two types of institutions, one is mainstream, and the other is unconventional, one is local and the other is international, and one is dominant and the other is subservient. This interpretation is problematic as it inadvertently and implicitly reinforces existing biases and superiorities. As such, it reinforces asymmetric power relations.

To mute these biases and shape more equal meanings and understandings of institutions, institutions are categorised herein as either received or locally embedded. Like bureaucratic institutions, received institutions are those institutions that are new, often modernist and externally introduced into a socio-cultural environment with pre-existing institutions and arrangements. They are often transplanted or adapted from other cultures or contexts. On the other hand, embedded institutions are those institutions that already exist in an institutional environment and are part of social life. This categorisation mutes superiority while acknowledging the differences. They draw from different values, worldviews, cultures, norms, beliefs and knowledges. This is to say that neither is inferior to the other, and none is subservient to the other. Both

received and locally embedded institutions can be socialised, becoming entrenched and acceptable ways of doing things. The study considers the received and embedded institutions to be a dynamic blend, acknowledging the permeating relationships between them.

Figure 6 illustrates received and embedded institutions. Both institutions are shaped by ideologies, discourses and culture. The dotted lines mean that there is a leakage of meaning in both received and embedded institutions, and elements of established institutions can be used to patch new ones (received ones). Whereas the arrow means that received institutions can become embedded over time, becoming acceptable ways of doing things. Institutional bricolage happens through creative fusion between these two categories of institutions.

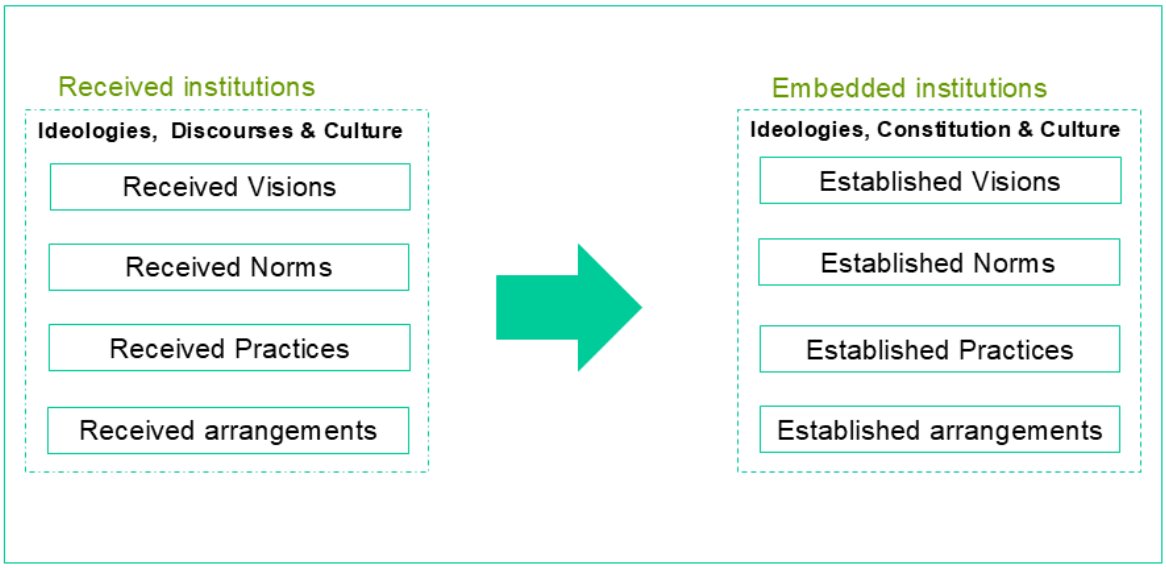

Figure 6: This categorisation of Institutions is developed based on the review of literature. Source: Author, 2024

3.3 Behaviour of Institutions

This section moves from the discussion of the ways in which institutions are understood and categorised to provide insights into the occurrence of institutional change; the persistence of institutional structures, opportunity moments for institutional change, and power dynamics among actors. To do so, the discussion draws from historical, rational choice and sociological engagement with neo-institutionalism.

3.3.1 Historical Institutionalism

The traditional institutional perspectives, also known as old institutionalism or historical institutionalism, focused on formal institutions and the functioning of the state, laws, and regulations (March and Olsen 1984; Lowndes 2002). It is preoccupied with how institutions emerge and are shaped through path dependence (North, 1990); persistence and stability (Zucker, 1977), 'transformation' at sporadic moments (Powell & Bromley, 2013); the influence of the institutional environment on behaviour (Granovetter, 1985), role of informal structures (Scott, 2008; March, & Olsen, 1989) and power asymmetries and authority in maintaining order (DiMaggio, & Powell, 1983). These are discussed in greater detail below.

First, historical institutionalism explains behaviour and change in terms of history, focusing on the concept of path dependence. According to historical institutionalism, past decisions and established practices constrain and shape future decisions and actions (Zucker, 1977). In principle, path dependence helps explain the lack of institutional change, incremental institutional change and inefficiencies that may come about due to the change or lack of it. This means that once a particular institutional pattern or practice is established, it becomes self-reinforcing and difficult to change. This trajectory can constrain the range of feasible options and make certain changes difficult in the future. Institutions as well as actors can develop inertia over time, making them resistant to change and closed to exploring alternatives.

Second, historical analysis is interested in both 'normal periods' and 'critical junctures', during which major institutional change is possible (Gorges, 2001). While path dependence emphasises stability and continuity, it also recognises that critical junctures such as disaster events, pandemics or even political crises can alter institutional paths. These sporadic events open a 'space of possibilities' for institutional change (Gorges, 2001). They create an opening to challenge extant power relations, established forms of social organisation and dominant understandings of the world (Shaw, 2012; Pelling *et al.,* 2021). They illuminate and magnify gaps, inequalities, corruption, elite capture and clientelism, and challenge existing social contracts and trigger questions about legitimacy, rights, the authority of dominant actors, inclusivity and adequacy of governance (Pelling, *et al.,* 2021). Such moments can destabilise extant governance institutions and practices (Collins, 2018), de-anchoring the integrity

of power (McGowran & Donovan, 2021). Disruptions triggered at such critical junctures can break existing assumptions and open space for possibilities of new relationships and new understandings to emerge, and new rights being extended. It is at such 'critical junctures' that the unexpected potential for change that arises from relational ruptures can be revealed (Pelling, *et al.,* 2021; McGowran & Donovan, 2021; Donovan, 2020; Marks, 2019). They open space for a response that begins to illuminate what is possible in a post-crisis world (Pelling, *et al.,* 2021; Angell, 2014; Collodi, *et al.,* 2019). In this way, the disruptions can be an opening for transformative change (Pelling, 2011), for instance, new rights being extended (Gramsci, 1971).

The 2024 Kenya floods, for example, provide a relevant case in point of how disasters reveal failures of urban development decisions. This links with the thesis research question on how urban development decision-making processes shape the creation of disaster risk, and how it can evolve in response to disaster events, better incorporating foresight, inclusive decision-making and risk knowledge into city-shaping processes. Additional questions might be: How might the 2024 flood-related disaster in Nairobi challenge dominant understandings of disasters and inspire new ways of viewing extant urban development pathways, and how they create disaster risk and open space for institutional transformation? Additionally, how might these be built into everyday urban development decision-making? These questions, although related to this research, are beyond the scope of this study and are not tackled herein. They open opportunities for engagement in future studies.

Third, historical institutionalists argue that institutions once made, persist, providing stability and order to social relationships (Peters, 2017; North, 1990; North, 1992). They resist change, maintaining their established structures, practices, and norms despite external pressures or internal challenges. This is attributed to, inter alia, path dependency and incremental nature of institutions and institutional change (Pierson, 2000; Thelen & Steinmo, 1992; Gorges, 2001), embedded norms and practices, self-reinforcing mechanisms, institutional inertia and legitimacy and authority. Once inefficient institutions are put in place, they make a shift towards a different path more difficult and more costly, especially if the status quo benefits the elites (Lowndes, 2005; Vijge, 2013; Pierson, 2000; Levi, 1997). It creates a powerful cycle of self-reinforcing activity (Lowndes, 2005). In Nairobi, for instance, residents have long struggled with

the twin risk of water scarcity and floods. This situation has worsened over time due to a combination of historical factors. See section 5.3 for a detailed discussion on this. Duty bearers have been unable to break free from the vicious cycle of disaster risk creation. This is partly because powerful elites, including unscrupulous developers, politicians and civil servants, benefit from the status quo. They continue to profit from uncontrolled development. As such, disaster risk remains largely a secondary concern. Since elites benefit from the arising vulnerabilities and attendant inequalities, there is little incentive for substantial institutional change. This self-reinforcing cycle makes it difficult to break free from the vicious cycle of disaster risk creation and adopt more inclusive, equitable, risk-sensitive and resilient development pathways.

Zucker (1977) discusses how cultural elements, including norms and practices that shape behaviour and expectations, become institutionalised and persist over time, making significant deviations to new ways of thinking and of doing things difficult. On the other hand, Meyer & Rowan (1977) explore how institutions gain legitimacy and authority over time, reinforcing their stability. It is not uncommon for institutions that endure to reproduce and further entrench inequality (Johnson, 2004; Roth, 2009; Cleaver & Whaley, 2018). This presents a dilemma to decision-makers as to whether to work with existing asymmetric power structures and, in effect, facilitate the role of powerful actors for the sake of service delivery, or to work against the 'elite capture' of existing institutional arrangements (Cleaver & Whaley, 2018), reaffirming Bell's (1994) position that path dependency makes change nearly untenable.

Lastly, historical institutionalists hold the view that institutions influence both the choices made by actors and the interactions between actors. They view power as '*an actor's position vis-à-vis positions of others*' (Schmidt, 2008). They discuss how institutions grant certain actors more power, creating power asymmetry over decision-making and access to resources (Vijge, 2013). Such power asymmetries influence institutional inertia or change and the trajectories the changes take. This argument is also advanced by Pelling and Blackburn in light of adaptation actions (Blackburn & Pelling, 2018; Pelling, 2011). They debate that the same socio-political relations through which power is exercised in development decision-making and action, *also referred to as 'development relations',* influence the distribution of the burden of impacts and costs of absorbing losses and adapting or transforming in the face of

escalating disaster risks (Blackburn & Pelling, 2018). This raises questions on the reproduction of power, equity and representation in urban development decision-making, and their implications on the urban poor.

Classical institutionalism offers explanations for the importance of precedence, institutional change and persistence. However, it also has some drawbacks. First, it can be overly deterministic, focusing too much on hindsight and constraints of past decisions to explain present challenges and even future visions. This downplays the agency of actors in institutional change, instead emphasising structural constraints and legacies (Mahoney & Thelen, 2010; Thelen, 2004), some of which provide the perfect scapegoat. It can lead to an incomplete understanding of phenomena. It can also miss out on learning opportunities, listening to alternative viewpoints and gaining new, nuanced understandings of both extant and emergent challenges. Secondly, it overlooks informal institutions, instead emphasising formal institutions (Helmke & Levitsky, 2004), some of which reinforce, and or reproduce existing structural inequalities and asymmetric power relations, constraining the agency of local actors.

3.3.2 New Institutionalism

New institutionalism, also known as neo-institutionalism, has focused on the role of institutions in development. The rise of new institutionalism can be traced back to the early 1980s and is linked to three events: the renewed interest in institutions following the renewed interest in the ‘state’ (Krasner, 1984; Skocpol, 1985; Bell, 1997; Bell, 1994); the prominent feature of institutions in explaining why countries pursued different paths to similar challenges of the 1970s and 1980s (Thelen & Steinmo, 1992); and the fact that major policy changes since the 1970s have involved institutional reforms, especially impacting the role of the state and involving substantial public sector reform (Bell, 1994). The main claim of new institutionalists is that institutions matter (North, 1990; Hodgson, 1988) and ‘getting institutions right’ is critical for development, and foundational for good governance (Cleaver & Whaley, 2018).

So pervasive is the impact of neo-institutionalism that each of the social science disciplines now has its theory of ‘new institutionalism’. Economists argue that institutions play an important role in reducing transaction costs and uncertainty, and in enforcing contracts and agreements (Hodgson, 1988; North, 1990). Sociologists focus on how institutions establish normative orientations, conventions and practices that

shape and influence behaviour and choices (DiMaggio & Powell, 1991), while political scientists are preoccupied with how institutions shape behaviour, power and preference of actors (Bell, 1994). Each approach to neo-institutionalism has its strengths and weaknesses in explaining policy choices and policy directions. Noteworthy, however, pluralism within institutionalism also produces theoretical inconsistency (Peters, 2000).

One of the prominent neo-institutionalists is Douglas North. North's theory explains institutional change and how this change improves efficiency over time (North, 1990; 1991; 1992; 2003). He uses the word efficiency to connote a situation where existing institutions produce growth and development (North, 1990). According to him, an efficient institutional framework is adaptive and responsive to change, and provides incentives that promote decentralised decision-making, enabling societies to maximise opportunities to not only resolve social problems but also promote economic growth (Faundez, 2016; North, 2003). North also underlines the pivotal role of informal institutions in societal development. He avers that the institutional heritage of political, economic, and social 'rules of the game' combines with belief systems to shape the way we view the world, the way we make decisions and how institutions and societies evolve over time (North, 1991; North, 2003; Faundez, 2016). He, however, does not explain how they arise and change over time (Lowndes, 1996; Williamson, 2000).

The inadequate understanding of informal institutions has led scholars such as Olstrom and North to a limited focus on formal institutions as the locus of opportunity for reform and transformational change (Helmke & Levitsky, 2004). Others have gone further to present informal institutions as a source of inertia and corruption (Helmke, & Levitsky, 2006; Klitgaard,1988; Lowndes, 1996; De Sardan, 1999; Pelling, *et al.,* 2008; High, *et al.,* 2004). However, it is increasingly acknowledged that the 'informal' is a locus of opportunity for change, where new opportunities arrive through engagement and negotiations (Shaw, 2002). In African urbanism literature, the informal is increasingly associated with indigenous knowledge, endogenous arrangements, socially-embedded practices, innovation, flexibility, adaptability, collective agency and actor-based change (Maloney, 2004; Njiru, 2004; Kinyanjui, 2014). Simply, the emergence of assemblage.

Ostrom (1990; 2002; 2008) contributes to the new institutionalism debate through her work on common-pool resources, arguing that communities can self-organise to address their shared challenges. She explains that norms of trust, reciprocity and punishment are critical for building social capital, a requisite for successful self-organising (ibid). Actors who trust one another to keep their word and use reciprocity in their relationships build social capital, lowering the costs of monitoring and enforcement of sanctions (Ostrom, 2002, 2008). Ostrom proposes eight design principles for the sustainable management of common-pool resources. The principles include clarity of boundaries of those resources and users; correspondence between appropriation and provision of rules and local conditions; public participation; democratic decision-making; sanctions; conflict resolution mechanisms; minimum recognition of rights to self-organise; and importance of coordination (Ostrom, 1990; Ostrom, 1992). Referred to as 'institutional strengthening,' the principles have been widely adopted and used by multilateral and bilateral organizations to craft institutions and push institutional changes in developing countries (Ostrom, 1990; Ostrom, 1992; Gutu, *et al.,* 2014). The basic assumption behind institutional crafting is that they can replace ineffective institutions with new ones. For example, forming urban boards and water user groups, among others (Gutu, *et al.,* 2014; World Bank, 2017).

Ostrom's approach placed more emphasis on formal institutions and structural factors, turning a blind eye to the local embeddedness of institutions in social life (Gutu, *et al.,* 2014). She argued that institutions can be crafted and applied universally for a specific goal (Ostrom, 1990; Ostrom, 1992). However, it is now established that some institutions that work well in one setting are part of a failed system in another. Empirical findings suggest that this approach tends to weaken the agency of public sector actors as it superimposes alien institutional arrangements. This simplistic, over-optimistic blueprint copy-paste approach, without understanding the underlying complexities and power dynamics, leads to few locally compatible solutions, enabling elite capture (Ostrom, 2008; Ostrom, 2002; Ostrom, 1990).

There are two major perspectives of neo-institutionalism: Rational choice neo-institutionalism and sociological neo-institutionalism. Essentially, they offer different perspectives on how institutions influence behaviour and outcomes.

3.3.2.1 Rational Choice Neo-institutionalism

Rational choice neo-institutionalists place emphasis on how rational action is channeled by 'rules of the game', including laws, inherited organisational structures and norms (Bell, 1994). As the name suggests, rational choice neo-institutionalism claims that actors are rational beings and self-utility maximising individuals who make decisions based on rational models (Peters, 2017). It argues that institutions are constructed by individual actors for rational purposes, and that actors engage in changing and shaping institutions to achieve and or protect their interests (Bell, 1994; Peters, 2017). Simply, individuals use institutions to pursue their interests (Peters, 2017). Powel and Bromley (2013) support this viewpoint. They postulate that new institutions arise when institutional entrepreneurs see opportunities to exploit institutions to their own advantage (Powell & Bromley, 2013). Empirical data from Nairobi demonstrates how policy actors used existing institutions to demolish urban poor settlements within the riparian reserve but chose not to extend the same in affluent neighbourhoods which were also affected and encroach on the riparian reserve. This raises questions of equity and justice.

Cleaver (2002) rejects this neo-institutionalist perspective that views individuals as rational and economic resource appropriators. According to her, individual choices and action are characterised by both agency and structural constraint, which can be political, economic, social and cultural factors limiting individual decision-making ability (Ibid). This study disagrees with Cleaver's view because it downplays contextual differences and realities. In a context where decision-making structures and actors are under capture, rational choice tends to prevail. Actors and institutional entrepreneurs craft institutions that favour them. The mutilation of the Conflict-of-Interest Bill (National Assembly Bill No. 12 of 2023) by the Senate of Kenya gives an instance. Senators, as institutional entrepreneurs, deleted provisions that sanction conflict of interest from both the Bill and existing laws, effectively allowing them and their proxies to trade with the state (Masinde, 2024).

3.3.2.2 Sociological Neo-institutionalism

Sociological neo-institutionalists place emphasis on the influence of broader social structures on choices and decisions (Powell & Bromley, 2013). They argue that institutions constrain actors or organisations to mimic other units that face the same

set of conditions, realities or challenges in a process that DiMaggio & Powell, (1991) call institutional isomorphism. According to sociological institutionalists, organisations (including city and national governments) tend to model themselves after similar organisations that they perceive to be more legitimate or successful (Gorges, 2001). This has propelled institutions and institutional change to the centre-point of international development policy debate for the last four decades (Aron, 2000). The ubiquity of certain forms of institutional arrangements can be credited to the universality of mimetic processes as opposed to any concrete evidence that the adopted models enhance efficiency (DiMaggio & Powell, 1991). They also reinforce existing power relations and the pervasiveness of discourses.

Institutional isomorphism can be brought about in three ways (Gorges, 2001): Through mimetic processes in which an actor sees the success of another and strives to replicate it; through normative processes in which organisations adopt 'tested best practices'; and through coercive action (Ibid). Development assistance is mainly attached to 'best practice' institutions which are often implicitly modelled around formal northern institutions (Aron, 2000; Gorges, 2001). Some of these 'best practice' institutions include democratic governance, efficient bureaucracy, good corporate governance, strong protection of property rights, liberalization of financial markets and social capital or civic engagement (Gorges, 2001; Aron, 2000). These institutional changes tend to be poorly adapted to the institutional environments where they are applied. Barro cautions against exporting northern institutions including governance models to other countries (Aron, 2000; Barro, 1996). This leads me to a fundamental question as to who decides who decides: Who is really setting the urban development policy agenda in Nairobi? And who sets the vision and agenda for pro poor urban development and especially the participatory part within it? These questions are addressed in the thesis.

New institutionalism has been criticized variously by different scholars. Critics argue that neo-institutionalism, like historical institutionalism, focuses predominantly on formal institutions (Cleaver, 2002; Georges; 2001). This bias is linked to the visibility and legibility of formal institutions to development agencies as opposed to informal institutions that tend to be 'invisible' and illegible to 'outsiders' (Ibid). It is also criticized for: 'universalism' and its preoccupation with transplanting northern institutions in developing countries and paying little attention to the recipient institutional

environment (Gorges, 2001); failure to acknowledge the mismatch between institutional designs and how things actually happen on the ground (Cleaver, 2002); downplaying heterogeneities and nuances in power relations, culture and politics; and failure to acknowledge the rather complex overlaps that may result in complexity, institutional pluralism, ambiguity, and messiness (Cleaver, 2002; Cleaver & Franks, 2005; Wong, 2010; Gutu, *et al.,* 2014). Post-institutionalists attempt to fill these voids and overlaps, extending the meaning and context of institutions beyond the 'formal', acknowledging complexities in society and underscoring their intricate interactions with informal practices (Haapala, *et al.,* 2016; Gutu, *et al.,* 2014). Section 3.4 discusses the post intuitionalist approach - institutional bricolage, upon which the framework of analysis for this study is based.

3.4 Institutional Bricolage

To analyse how actors, institutions, and power dynamics interact to shape urban development decision-making spaces and resultant urban trajectories, this study uses institutional bricolage (Cleaver, 2002; Cleaver & De Koning, 2015; De Koning, 2014; De Koning & Cleaver, 2012), a dynamic post-institutionalist approach, as a theoretical lens. This critical institutionalist approach, developed by Frances Cleaver (2002), considers institutions to be not only constraining human agency but also enabling it. It endorses the logic of practice (Bourdieu, 1990); thus, it acknowledges the complexity, multipurpose and embeddedness of institutions in the mundane, everyday practices and the unpredictability of institutional change pathways (Haller, 2010). Institutional bricolage has been applied predominantly in natural resource governance in rural areas to explain how processes, power and meaning shape environmental governance arrangements (de Bont et al., 2016; De Koning, 2014; De Koning & Cleaver, 2012; Etiegni et al., 2017; Karambiri et al., 2020; Mayaux et al., 2023; Sirimorok & Asfriyanto, 2020; Whaley et al., 2021). However, the added value of adequate institutional arrangements applies to 'the urban' as well (Haapala et al., 2016; Sakketa, 2018).

This study applies a bricolage lens to the urban context to illuminate the hard-to-see dynamic combinations of bureaucratic and socially embedded institutions, and informal practices that structure behaviour across the shadow and canonical systems (Cleaver & Whaley, 2018), and how these in turn shape everyday urban reality. This

is one of the very few empirical studies that apply an institutional bricolage lens to the urban. The theoretical lens allows the incorporation of different forms of epistemology (Blackburn & Pelling, 2018; Frick-Trzebitzky, 2017), explaining the emergence and evolution of adaptive governance systems including the process (how particular governance arrangements emerge and are enacted); power (how they are shaped to benefit some actors and not others); and meaning (how norms of trust constrain collaborations and relationships) (Blackburn & Pelling, 2018).

The institutional bricolage framework speaks to a growing strand of urban governance research that adopts a political-economic lens to examine the role of decision-making, politics, and institutional power dynamics in shaping urban change (Rakodi, 2001; Goodfellow, 2014; 2020). Scholars such as Sverdlik, et al. (2025) have drawn attention to the uneven outcomes of urban development and infrastructure planning, highlighting the importance of understanding governance not only in formal-legal terms but also as a process shaped by negotiation, contestation, and hybrid institutional arrangements. This study contributes to this emergent body of work as it foregrounds the informal, negotiated, and often fragmented ways in which institutions evolve and function in practice, even when they appear well-structured on paper.

By operationalising the concept of institutional bricolage in the analysis of urban development decision-making and implementation, and disaster risk creation in Nairobi, this research offers empirical insights into how actors reinterpret, adapt, and sometimes resist new institutional arrangements. In doing so, it adds nuance to conventional narratives of institutional failure or capacity deficits by demonstrating how hybrid governance arrangements emerge and function through processes of aggregation, alteration, and articulation. These dynamics are not merely technical or administrative, they are deeply political, involving power asymmetries, competing mandates, vested interests and struggles over meaning and legitimacy. This contributes to a more grounded and practice-oriented understanding of urban governance and institutional change in African cities, while also extending the application of institutional bricolage to the urban.

Following Cleaver (2002; 2012), institutional bricolage is understood herein as a process in which actors (bricoleurs) with varying social and power relations consciously and non-consciously adapt, reconfigure, and combine institutional

arrangements, drawing on whatever materials and resources available regardless of their original purpose, to respond to changing needs and emergent challenges (Cleaver & de Koning, 2015; Cleaver, 2002; Cleaver & Whaley, 2018). In this process, old arrangements are modified and new ones are invented. Institutional elements from different origins are redeployed or reworked to perform new functions. They are embedded in everyday practices and in the process, they are attributed new meaning and authority (Cleaver & Whaley, 2018; Cleaver & de Koning, 2015), overtime becoming normalized as the right way of doing things (Cleaver, 2002). Essentially, institutional bricolage is a constant negotiation between conflicting practices and norms, a contestation between modernity and tradition, bureaucratic and socially-embedded, exogenous and endogenous, and enduring and emergent (Cleaver, 2002) to create bespoke institutional arrangements sensitive to socio-cultural and environmental contexts (Cleaver, 2002; 2012). This ongoing process can lead to both the reinforcement and the transformation of power relations.

The central idea of institutional bricolage is that a discrepancy exists between formal structure, mandate or the ideal pattern of a policy and actual practices of doing things (Haapala et al., 2016; Mahoney & Thelen, 2010). In reality, when bureaucratic institutions interact with socially embedded institutions, variations emerge between the intended design and what happens in reality (Haapala et al., 2016; Jones, 2015; Rusca et al., 2015; Wang et al., 2018). Applying a new policy to a pre-existing institutional environment must consider not just the policy itself and its aspirations, but also the unique setting and circumstances to which it is to be applied (Streeck & Thelen, 2010).

When reworking existing institutional arrangements, bricoleurs innovate, often within the limits of their powers and what is perceived as legitimate (Cleaver & de Koning, 2015). Over time, these arrangements become layered, influenced by changes in institutional environments and shifts in political and social discourses. The ideas and principles that inform the new institutional arrangements are hence borrowed from a variety of sources and contexts (Marin & Björkland, 2015; Sehring, 2009). Arising institutional arrangements are therefore a hybrid of new and recycled, exogenous and endogenous, and they include normalized ways of doing things; established practices adapted to new realities; and organisational arrangements invented or transplanted (Cleaver & de Koning, 2015).

Such hybrid institutional arrangements are often multipurpose. They are rarely organized to serve singular purposes, aligned to singular sectors or specific projects. Even if they start that way, they will evolve based on changing needs, gaining new meanings (Verzijl & Domínguez, 2015). An example is the President's Delivery Unit which coordinates delivery of flagship projects but also directly supervises urban regeneration projects. Another example is the cells (ten households grouped together), a community organizing structure deployed in Mukuru SPA and which also serves as a community policing structure (*nyumba kumi* – ten households). These new arrangements must be socialized to seem familiar and gain acceptance. Acceptance gives the new institutional arrangements legitimacy, enabling the exercise of power through them. The institutions are naturalized (Cleaver & De Koning, 2015), becoming accepted ways of doing things. This process of naturalization occurs in different ways including from calls on tradition; on symbols, discourses and power relations borrowed from other contexts; and by drawing analogies to accepted, routinised ways of doing things, to culture and ethos of morality and spirituality (Cleaver & De Koning, 2015; Mendoza Fuente & Marin, 2024).

3.4.1 Actors as Bricoleurs

Institutional bricolage emphasizes the active and important role of bricoleurs (Cleaver, 2002; De Koning, 2011). All bricoleurs are actors but not all actors are bricoleurs. This distinction is a function of power and agency. Bricoleurs are actors with the power and agency to participate in a bricolage process. They, both consciously and unconsciously, intelligently mobilize, creatively choose and patch together principles, norms and resources from different institutional environments into a new institutional arrangement (Christiansen & Lunsbury, 2013). Policy actors across levels are bricoleurs in the sense that they can rearrange the institutional landscape for urban development decision-making and implementation to fit certain interests. They are central to the formation of ideas, discourses, paradigms and or frames, and play an important role in their integration into institutional frameworks and acceptance in the institutional environment. They are also involved in modifying institutions to ensure they fit in the institutional environment, whether emergent or persistent.

An important aspect in the definition of actors as bricoleurs is the possession of authoritative resources (Cleaver 2002): attributes that justify institutional position or

influence. An actor with access to authoritative resources such as formal legal authority, public support, expertise and information, knowledge, inventiveness, eloquence, strength, honesty, and/or financial resources can be a bricoleur (Cleaver, 2002). The more authoritative resources an actor possesses, the more the actor can call on these resources to influence bricolage processes (Sakketa, 2018). Thus, institutional bricolage can be argued to be an authoritative process in which actors with fewer authoritative resources are less likely to be bricoleurs and less likely to have a say in institutional bricolage processes (Cleaver 2002). In the context of risk and adaptation, powerful bricoleurs may champion or block adaptation actions or control them to maintain their preferred interests (Colloff et al., 2021).

3.4.2 Processes of Institutional Bricolage

Institutional bricolage provides a locally relevant theoretical framework for understanding how new institutional arrangements, particularly those driven by national policies, donor agendas, or global norms, interact with existing, embedded institutional landscapes in specific urban contexts. This framework is particularly well-suited to the study because it explicitly accounts for the co-existence and entanglement of formal bureaucratic institutions with socially embedded norms, values, and practices that continue to shape decision-making and everyday governance in urban settings. In this study, the framework has been adapted to reflect the urban complexity of Nairobi by using a metaphor from urban planning, introducing a new public space into an established neighbourhood, to illustrate how actors navigate tensions between introduced institutions and the existing institutional environment. This urban adaptation underscores the socially and spatially situated nature of institutional change and allows a closer analysis of how such processes are locally experienced, negotiated, and reconfigured in practice.

Three processes of institutional bricolage occur particularly when bureaucratic institutional arrangements (often new, and or modernist) are introduced into an established institutional environment with their embedded institutions (culture, norms, practices, by-laws and procedures) that structure behaviour therein (Cleaver 2002; de Koning, 2011; De Koning, 2014; Cleaver & de Koning, 2015). This process is considered by Douglas (1987) to be a process of naturalizing institutions. Three possible scenarios can play out when these exogenous institutional arrangements

interact with an existing institutional environment and concomitant endogenous dynamics to produce different realities (De Koning, 2011). Jessica de Koning (2011) categorises these three possible scenarios into Aggregation, Alteration and Articulation. Based on the original analogy (Ibid), this study reinterprets these scenarios using an urban metaphor to reflect the context.

Bricolage in the urban is akin to introducing a new public space into an existing neighbourhood. The new public space (bureaucratic institution) is introduced into a neighbourhood with an established urban fabric, environmental quality, character and social relationships (an institutional environment with established socially embedded institutions). There are at least three possible outcomes of the park being introduced into the neighbourhood that relate directly to the identified practices: the new park becomes a community hub, meeting the intended ambition and becomes a popular place for people to gather, celebrate, play, and rest, and it complements the built fabric, leading to both physical and social change in the neighbourhood. The park (bureaucratic institution) adds to the neighbourhood's existing amenities and character (institutional environment) to create a more vibrant physical and relational space where social relationships, power relations, rights, relationships between natural and built environments, and negotiated aspirations and interests are expressed (Aggregation); or the new park changes traffic circulation patterns and perceptions of safety, altering how people move around the neighbourhood. The new park (bureaucratic institution) requires the neighbourhood (existing institutional environment) to alter its physical layout (practices) to enhance the interaction to fit the park into the neighbourhood context. The design of the new park can also be redone whereby the new park (institution) is carefully designed to fit into the urban fabric (existing institutions), creating a new public realm that blends the old and new and connects with existing public spaces, creating a continuous network of parks (Alteration); or the community rejects the idea of changing the existing land use to a modern public park in totality, citing erosion of the cultural heritage, historical significance of the site and existing layout, features and character of the neighbourhood that they cherish. These three scenarios are related to three possible scenarios in a bricolage process (De Koning, 2011).

3.4.2.1 Aggregation

Aggregation is the first process of institutional bricolage. It is understood as the creative fusion of institutions introduced with different types of institutional and sociocultural elements. Building on De Koning (2011; 2014), aggregation is understood in this research as recombining new or transplanted institutions with embedded institutions and social characteristics in creative fusion to create bespoke institutions fit for purpose and sensitive to context. It involves combining the old and the new, traditional and modern, endogenous and exogenous, bureaucratic and socially-embedded, and embedded and received to create an institutional framework appropriate for the local context (De Koning, 2011). Rather than replacing old institutional arrangements, the new institutional elements are assimilated into the existing institutional framework, enhancing its capabilities overall functionality, resilience, and effectiveness (Ibid). It involves the mediation of various rules, norms, and beliefs (Cleaver 2002; De Koning, 2011). For aggregation to happen, the new institutions must be culturally and socially acceptable to the actors in the institutional environment. It is characterised by the creation of multipurpose institutions, demonstrating local adaptive capacity.

3.4.2.2 Alteration

Alteration is the second process of institutional bricolage (De Koning, 2011). It refers to adjusting or adapting both 'introduced institutions' and embedded institutions to better achieve desired institutional arrangements and outcomes or to reconcile incongruence between introduced or proposed institutional arrangements and embedded institutions (Cleaver, 2002; De Koning, 2014; Olivier de Sardan, 2008). Actors tweak and tinker with different institutions tailoring them to their specific needs. According to de Koning and Cleaver (2012), this can range from making small changes to complete reinterpretations and outright rejection of institutions or some of their elements. Alteration also involves individuals. More powerful bricoleurs such as those with fiscal power have much more agency over alteration of institutions compared to those who do not have (De Koning & Cleaver, 2012).

Alteration targets both embedded and introduced institutions. Unlike in the rural context where alteration of socially-embedded institutions may not be visible due to their deeply embedded nature, in the urban context, alteration of both embedded and

introduced institutions is noticeable. This is because they often involve situations in which new regulations or practices are introduced to policy and decision-making contexts. Alteration of embedded institutions involves the adaptation of existing norms to integrate new policies or administrative procedures. It focuses on the practical, everyday adjustments that actors make to align existing practices to new policies, highlighting the pragmatic nature of alteration (de Sardan, 2008). This can imply bending regulations, procedures, processes, negating policy frameworks, plans, policies, regulations, standards, or renegotiating them to align them to the institutional environment (Cleaver 2002; De Koning, 2011). The difference between articulation and alteration is that the latter does not imply a complete dismissal of embedded institutions. It acknowledges their existence, but also their non-applicability.

Embedded institutions can also be altered through processes of articulation. When articulation of local institutions occurs, there can be a leakage of meaning. Persistent and recurrent leakage of meaning can trigger the start of a process of alteration of embedded institutions. In recurring situations in which certain claims on established practices and standards lose their meaning, people start to reinterpret these meanings. This leads to a gradual change in the embedded institutional framework (de Koning, 2011).

3.4.2.3 Articulation

Articulation of embedded institutions is the third process of institutional bricolage. De Koning (2011) uses articulation in the context of socially embedded institutions. She defines it as emphasising local rules, norms, and beliefs because of disagreement with bureaucratic institutions. This study extends this definition, emphasizing city-level policies, standards, regulations, practices and procedures, and asserting formal responsibility for decision-making to push back against the newly introduced institutional arrangements. This process relates to the actors' deeply embedded understandings of their formal mandate and the 'right way of doing things' (De Koning, 2011; De Koning, 2014; Cleaver & de Koning, 2015). City-level public sector policy actors draw upon these understandings: they draw upon the formal mandate and extant institutional arrangements to neutralize the impact and effects of introduced/ exogenous institutional arrangements. Following this process of articulation, these institutions are often resisted either actively or passive-aggressively. Consequently,

there are always tensions and mistrust between city-level policy actors and their national-level colleagues.

These claims on formal mandate relate to established practices and policies, implying a certain way in which things have been or ought to be done that is incongruent with the newly introduced institutional frameworks. These claims on formal mandate can appear as an active process, especially when city-level public sector policy actors' feel that their agency is constrained.

Another effect relating to the articulation of embedded institutions, and especially claims of formal mandate, is that these institutional arrangements run the risk of losing their original meaning. This is also a form of leakage of institutional meaning which implies that the institutional arrangements legally established by the constitution and other institutions, and from which city level policy actors draw their mandate, are re-interpreted or even re-invented by more powerful bricoleurs in different situations and therefore do not necessarily have the same meaning for each person.

These processes demonstrate how institutional bricolage processes take place in the urban governance context. This does not imply that each of these processes is a requirement for institutional bricolage. In all the practices, bricolage is useful for legitimising and operationalising 'new' institutional arrangements, making them socially acceptable and workable in different institutional environments. Indeed, actors are amenable to embracing and adapting to changing institutions if they integrate taken-for-granted 'social formulae' (Douglas, 1987). As such, outcomes of institutional bricolage are neither completely 'old' nor 'new'. They are 'dynamic institutional hybrids' combining elements of 'existing' and 'introduced', 'indigenous and modern' and 'informal and formal', and 'established and emergent' processes, which are socially acceptable (legitimate) and get the job done (functional) (Cleaver, 2012; Manara & Pani, 2023). Table 2 gives a schematic overview of the described processes and their characteristics.

Table 2: Processes of Institutional Bricolage in the Urban Context. Based on De Koning, 2011

Processes	Description
Articulation	Accentuation of embedded institutions:

	• Claims on formal mandate, tradition, norms and established practices. • Rejection of received institutions • Leakage of meaning
Alteration	Adaptation or reshaping of both types of institutions 1. Alteration of embedded institutions: • Conscious • Reshaping and re-interpretation 2. Alteration of received institutions • Conscious • Renegotiation, rule-bending • Ignoring or negation of embedded institutions (including formal mandate)
Aggregation	Recombination of various institutional elements: • Mediation between different rules, norms, and beliefs • Creation of multipurpose institutions

3.4.3 Conceptual Framework

The theory of institutional bricolage and its processes of articulation, alteration, and aggregation are considered the theoretical core of this research (Cleaver, 2002; 2012 & De Koning, 2011), albeit with new interpretations. These processes hold true for both the embedded institutions and /or introduced institutions and can be either more or less conscious. Finally, processes of institutional bricolage are linked with various motivations or logics of action: power and control, agency, and trust and distrust. These motivations are not uniform and can vary from rational, strategic, and conscious

decisions to less active and more embedded explanations (De Koning, 2011). In this way, the role of agency in shaping and reshaping institutions is essential. In this cycle, disaster risk creation is an embedded input that is enduring. In the same context, a desire to break cycles of disaster risk creation is a motivating input to the system. Drawing from theory, this framework helps surface how actors' actions shape the enabling environment for breaking cycles of disaster risk creation. Transformation is both an outcome (degree of change) and a process (changes in the approaches, relationships, and practices regardless of outcomes). These four aspects combined result in the conceptual framework presented in Figure 7.

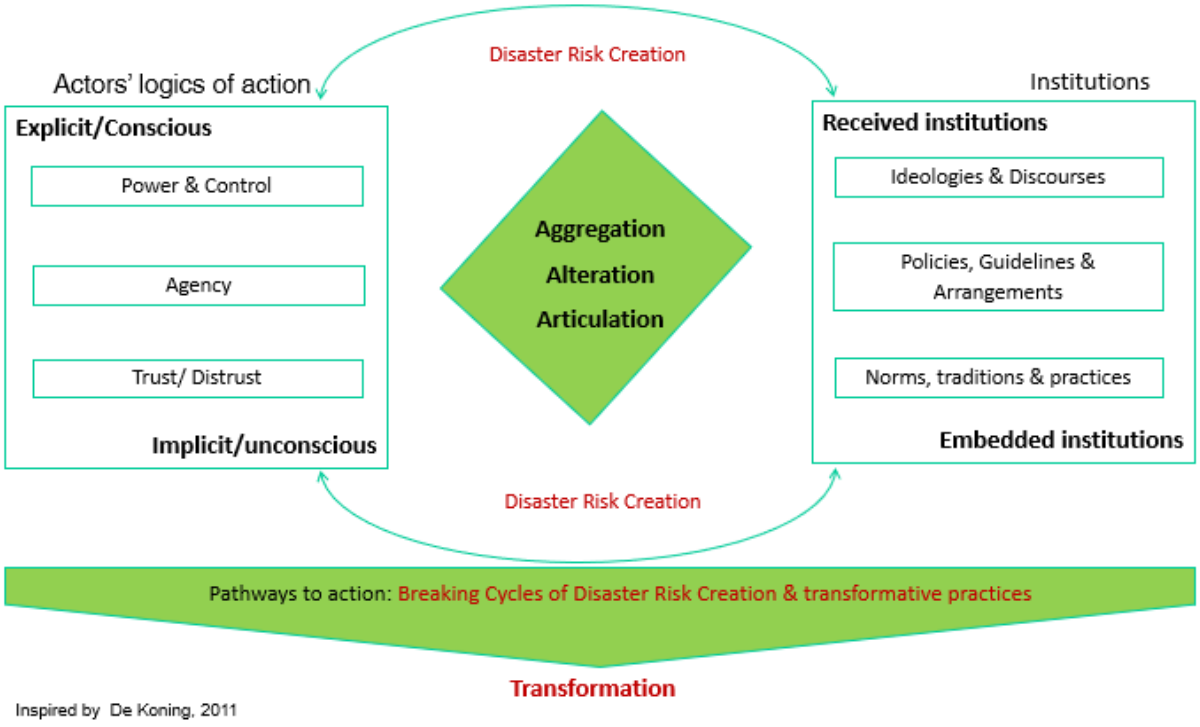

Figure 7: Conceptual Framework. Source: Author, 2024

3.5 Institutionalism and Urban Governance

Institutional theories have been intensively applied in the field of urban governance. Like the developments in general institutional theories, theories on the basic rules of the game concerning the governance of urban areas have undergone a shift from a focus on deterministic formal institutions to more dynamic views that incorporate aspects of new institutionalism and even recent post-institutional thinking. Major contributions to institutional theories in the context of urban governance have come from Hardin's (1968) tragedy of the commons, Ostrom's (1990) theories on common property management, North's (1990) insights on emergence of institutions,

institutional change, and economic performance, and from post-institutional theorists who are expanding the focus beyond formal institutions and emphasize the interactions between canonical and shadow systems, the importance of embedded institutions, power dynamics and norms of trust in shaping the normal way of doing things. These interactions are discussed below.

3.5.1 Shadow Systems, Irregular Systems, Informal Practices and Urban Governance

Shadow systems are understood herein as a set of interactions or parallel systems that are outside of the arrangements prescribed by the canonical system, often in response to gaps, inefficiencies, or corruption within the formalized systems (Cleaver, 2012; Halpin & Hanlon, 2008; Burke, 2004; Stacey, 1996). They include the networks of relations and the informal practices for 'getting things done', the 'unofficial ideologies' not publicly expressed, but which may subvert and undermine the official ideology of an organisation (Burke, 2004; Stacey, 1996; Halpin & Hanlon, 2008). Canonical systems, on the other hand, include official systems, standard operating procedures (SOPs), legislations and policies (Pernegger, 2021).

The term informal generally applies to activities, practices, arrangements and processes that take place outside formalised regulation (Brown, 2015; Pernegger, 2021). They are often deployed where formal channels of decision-making are perceived to be exclusive or provide little space for participants to influence outcomes (Onyishi, *et al.,* 2021; Pernegger, 2021). Specifically, informal practices refer to unwritten, unofficial, and often improvised ways through which decisions are made, implemented, and negotiated outside formalised systems. These practices can both enable and undermine inclusive urban development and are common in many cities, particularly where formal systems are weak, fragmented, or inaccessible to the majority.

Shadow systems and informal practices play a crucial role in shaping urban governance by influencing decision-making processes, resource distribution, and the overall functioning of cities. These elements operate alongside canonical systems, creating a complex, complementary and often competing web of interactions that can either enhance or undermine official ideologies and democratic ideals. There are different sites where informal practices and shadow systems operate and might be

viewed. These include policy communities where shadow systems can be a key resource for policy enactment, deployment, regulation and monitoring, as well as innovation and learning.

Community-based disaster risk management systems' response to flood risk in Nairobi illustrates shadow systems. Urban poor communities create their own flood preparedness and response mechanisms. These include organizing local sandbags, building makeshift drainage systems, establishing communication systems to warn neighbors of impending floods, coordinating with local volunteer groups for emergency response or working with NGOs to secure resources for resilience building as in the case of Mukuru SPA. These community-led DRM systems often emerge because government-led responses are slow, weak and fragmented. See Chapter 8 for a detailed discussion on Mukuru SPA.

Shadow systems enable actors to influence policy decisions and or implementation (High, *et al.,* 2004), offering an effective and efficient alternative against deficient bureaucratic procedures (Behrens, 2009, Pelling, *et al.,* 2008). At a higher level in the policy chain, shadow systems can support policy advocacy, improve coordination across institutional domains and facilitate transdisciplinary approaches across epistemic communities to improve service delivery and co-produce social resilience (Dodman, *et al.,* 2017). Government agencies collaborate through personal relationships or ad-hoc arrangements, bypassing formal inter-agency coordination mechanisms. In Nairobi, for example, it is not uncommon to find urban development decisions made through informal communication between national and county officials rather than formalised channels. A simple phone call based on personal relationships can unlock resources or allow information exchange. Additionally, the use of WhatsApp as an acceptable channel for official communications in the public sector also exemplifies the embeddedness of informal practices in urban governance. These practices short-circuit the formal channels within canonical systems, creating links between communities and high-level policy actors (High, et al., 2004).

Informal practices are deployed in the shadow systems and take many forms including committees, partnerships, processes (Pratt, 2018; Cinderby, *et al.,* 2021; Pernegger, 2021), delivery units (Hymowitz, 2017; Kigochi, 2018). They have been used by different policy actors, including administrative systems, politicians and government

officials to get things done. They have become a part of today's 'soft' governance (Røiseland, 2011) so much so that the canonical procedures are becoming the exception (Pratt, 2018; Pernegger, 2021). Increasingly, they are inevitable and necessary (Polese, 2015). However, they can make or break public policy and its implementation, modifying policy and improving outcomes and organizational legitimacy (Peters & Pierre, 2003).

Informal practices may provide an opportunity to subvert institutionalized corruption of a system that consistently fails to deliver, establishing accountability. However, they can also enable or limit choices and opportunities for low-income groups (Earle, 2019) and can either benefit or undermine democratic ideals (Pernegger, 2021). In fast-moving policy, decision-making and reactive context, boundaries between the shadow and the canonical systems can be blurry (Pelling, *et al.,* 2008). Pelling and colleagues opine that activity in this space can aid opacity, clientelism and corruption, impeding accountability and inclusive development decision-making (ibid).

The terms informal practices and irregular systems sometimes overlap. However, they have distinct meanings and implications. While informal practices are unwritten, unofficial, or socially embedded actions that occur outside of formalised ways of doing things, but often with some form of acceptance or regularity, irregular systems are a set of structurally inconsistent, opaque, or ad hoc arrangements that deviate from formal procedures or norms, and often lack coherence, accountability, or transparency. They typically refer to institutionalized deviations from the rule of law, reflecting structural weakness or erosion of canonical systems, and are characterisied by overlapping mandates, opaqueness in decision-making and action, weak enforcement, and incoherence between written rules and actual practice (Goodfellow, 2018; Lund, 2006). They are marked by contingent practices such as rule-bending, suspension of enforcement, or selective compliance. In urban governance, they appear where plans, policies, and regulations are applied differently across space and populations, and where services are selectively extended or withdrawn, depending on political cycles or elite capture (Goodfellow, 2018). They take many forms, including project-bound spaces of decision-making and implementation, unauthorised governance authorities and uncoordinated megaprojects. The establishment and workings of NMS offers an example of irregular systems. It disregarded and never

sought public opinion in its undertakings, effectively erasing the collective agency of Nairobi residents (Ouma, 2021). Its decision-making and actions were shrouded in opacity, synonymous with decision-making and action in the military (Ibid). Although public funds from the Executive Office of the President and the revenue share for the Nairobi City County Government funded it, the then Director General of NMS repeatedly dismissed calls for accountability, insisting he was answerable only to the President. As Ouma (2021) discusses, its obsession with efficiency, a moniker for lack of accountability, obscured its ideological scaffolding as an undemocratic project designed to subvert the logics of participatory decision-making and implementation.

In conclusion, shadow systems and informal practices enable flexible, adaptive, and often innovative approaches to urban governance. When they are embraced and allowed to have a life of their own, they can contribute meaningfully to learning, experimentation, subversion, resistance, novelty and innovation (Stacey, 1996; Shaw, 1997; Pelling, *et al.,* 2008). However, they also present risks of corruption and inefficiency, if left unchecked. A firm ethical foundation is needed for building trust, accountability and more productive articulation between shadow and canonical systems (High, *et al.,* 2004). Importantly, irregular systems, characterized by institutional fragmentation, inconsistencies, and rule-bending, often coexist and interact with shadow systems. While irregular systems may initially emerge from attempts to navigate bureaucratic gaps or resolve conflicting mandates, they can eventually create fertile ground for shadow systems to take root and thrive. Over time, the two can become mutually reinforcing, blurring the lines between flexibility and dysfunction. This dynamic can entrench elite capture and undermine accountability, while appearing to provide adaptive governance.

To harness the potential of shadow systems and informal practices without deepening governance fragility, there is a need for a degree of institutional continuity and stability. This helps ensure that positive innovations and learning emerging from these systems are not entirely dependent on personal relationships, connections, transient alliances or ephemeral decision-making and implementation spaces, and to also mitigate the disruption that comes with every election cycle or with the departure of key staff. Institutionalising beneficial aspects of shadow and informal systems can help embed

resilience in governance structures, while also mitigating the risks associated with irregularity, opacity, and fragmentation.

3.5.2 Power Relations, Agency, and Urban Governance

Power relations and institutional arrangements significantly influence urban governance by shaping decision-making and implementation processes, resource allocation, and the implementation of policies and adaptation actions (Logan & Molotch, 1987; Stone, 1989; Ostrom, 1990). In the context of urban governance, the interplay between power relations and institutionalism significantly shapes the scope and effectiveness of agency (Fung & Wright, 2003; Gaventa, 2006; Cleaver, 2007). Power dynamics influence which policies are prioritized and how they are implemented. Powerful actors can shape policies to serve their interests. For instance, Public-Private Partnerships (PPPs) can drive city visioning towards urban development projects that prioritize pro-growth policies over pro-poor policies. Consequently, the less powerful actors may struggle to have their voices heard.

Agency is understood as the ability of an actor to act, make choices or exert influence or control over their own actions and decisions. It conveys autonomy in decision-making. An actor's agency connotes his/her ability to be political and take purposeful actions to realise various goals. Agency in institutional bricolage refers to the bricoleurs' continuous efforts of using available resources to improvise and adapt institutional arrangements and or elements in the phase of uncertainty and changing circumstances. The exercise of agency is subject to available opportunities and resources for actors, the conventional codes of being and doing and the discursive and practical consciousness based on the actors' reasoning and everyday realities (Funder & Marani, 2015; Cleaver, 2007; Giddens, 1984). Thus, as discussed by Arts *et al.,* (2012), and Karambiri *et al.,* (2020), the exercise of agency is influenced by the actors' power and their assumed and creative practices. Agency is political, strategic and relational (Long, 2001). Actors' plural identities, circumstances and leadership can influence their agency and consequently, institutional outcomes (Balooni *et al.,* 2010; Cleaver, 2007).

Power is understood herein as a dynamic social relationship which determines an actor's agency. It is the product of actors' control over strategic, material and or symbolic resources (Karambiri *et al.,* 2020). Agency is linked to power and power

determines whose voice is strongest in urban governance, who loses, who wins, and whose knowledge prevails in decision-making and or implementation (Giddens, 1984), as well as how disaster risk is distributed. Actors with more power can exert greater influence over urban governance decisions. The implication of this in the context of weak institutions is that less powerful actors may find it challenging to exercise their agency effectively, constraining their ability to influence decisions and advocate for their needs, consequently, they are often assigned disaster risk (Fung & Wright, 2003; Gaventa, 2006; Cleaver, 2007).

Institutional bricolage processes reproduce or even reinforce pre-existing power relations and inequalities (Cleaver, 2012; Mahoney & Thelen, 2010; Manara & Pani, 2023). In principle, institutional bricolage pursues stability in institutional environments by nesting new institutions within the existing institutional environment. Processes of continuity and change, as with negotiation and contestations, form the core of institutional bricolage processes. This can lead to more symmetrical power relations or more asymmetrical ones (Mahoney & Thelen, 2010). While all actors are potential bricoleurs, in reality, access to cognitive, material and relational resources enables and or constrains the agency of various actors to partake in institutional bricolage (Manara & Pani, 2023). This led Khan (2018) to conclude that how power is distributed is perhaps "*the most important determinant of the path of institutional change and the effectiveness of particular institutions*". Similarly, how power is distributed is one of the most important determinants of disaster risk creation and the effectiveness of efforts seeking to break its cycles.

From a bricolage perspective, uncovering how power is exercised beyond the boundaries of formal institutions, and how different actors experience it, is important for understanding power relations, their effects on institutions, on arising urbanity and implications for DRC (Cleaver & De Koning, 2015). Standing firmly on the shoulders of Steven Lukes (1974; 2005), Cleaver (2002) and Ostrom (1990), this thesis explores the tactical deployment of power by agents that seek to navigate, exploit or resist established structures and the more transitory constraints of institutions. It specifically examines how actors with different access to and control over material and symbolic resources exercise power to enforce their ideas and curve the trajectory of urban change, with various implications for DRC. It is less interested in meta-expressions of power.

The interplay of power relations and adherence to institutional arrangements have profound implications for agency over urban development decision-making and action. While powerful actors can shape institutions and dominate urban development decision-making processes, efforts to empower the urban poor and other vulnerable groups, promote inclusive institutions, and support collective action can enhance collective agency, leading to more equitable outcomes (Fung & Wright, 2003; Gaventa, 2006; Cleaver, 2007). Understanding these dynamics is crucial to creating more inclusive and responsive institutional arrangements that allow diverse actors to shape and own their urban futures.

3.5.3 Trust, Distrust and Urban Governance

Trust is defined differently in different disciplines (Li et al., 2012), and even within the same discipline, making it difficult to come up with a singular definition. Williams (2002) defines it as the willingness of one party to be vulnerable to the actions of another party based on the expectations that the other will perform a particular action (D'Cruz, 2020; Faulkner, 2017; Williams, 2002). This definition provides the understanding and deployment of trust herein.

Trust matters for urban governance and for institutional legitimacy. It matters for: actor relationships (Robbins, 2016); civic engagements (Bornstein & Tomkins, 2015); collective agency (Jones, 2019); enhancing legitimacy and compliance; and promoting effective communication for institutional-actor relationships (Cole & Cohn, 2016; Tyler & Jackson, 2014), and contributing to social capital, an enabler for the integration of new institutional elements. Like institutions, trust promotes democratic governance, optimizes organizational productivity and mediates social interactions (Robbins, 2016). It can maintain social order (Ibid), enabling actors to attempt cooperation. Notions of trust and legitimacy inspire compliance, motivating people to behave in a manner they deem fair when responding to governmental authority for instance complying with zoning regulations and environmental standards, and acceptance of risk-related messages such as early warning (Fjaeran & Aven, 2021). Hardin (2002) argues that citizens are more likely to comply with authorities if they are confident that the organisation would consider their views and ideas, and serve their interests or at least the public good. Without trust, democratic governance would lose its meaning as it would lose its active, participating citizens, one of the very foundations upon which

it is built. Scholars such as Zucker (1986), Shapiro (1987), Williamson (1993) and Sha (2009) have emphasized the role of institutions in building and nurturing trust. Trust and institutions have a mutually reinforcing relationship. Effective institutions that deliver positive outcomes build trust. On the other hand, trust allows the smooth functioning of institutions.

Cognisant of all the relativity and vagueness of the concept of trust, the study determined that the terms “trust” and “distrust” herein will be limited to institutional and organizational contexts, and it makes distinctions between them. Following Hudson (2006) & Govier (1997), organizational trust is understood as the perceived probability that organisations will carry out their remit to a satisfactory degree. Trustworthy organisations are characterized by fairness, reliability and integrity. They are crucial for effective urban governance. When organisations are trusted, they gain legitimacy and the cooperation of citizens. Institutional trust on the other hand is understood as one’s sense of security about a situation based on extant institutions, and the belief that things are normal and customary (Gefen et al., 2003; McKnight et al., 1998). It derives from institutions that structure social relations and choices (North, 1990; Li *et al.,* 2012), and on the perceived reliability of the institutions and their enforcement, as well as the actors involved. Institutional trust is critical for the functioning and legitimacy of institutions. Organisational trust is generally considered to be related to the confidence, agency and performance of an organization to fulfil its mandate. It manifests itself when people assess organisations as promise-keeping, accountable, efficient, competent, caring, predictable, open, transparent, fair and honest (Hooghe et al., 2017; Kaasa & Andriani, 2022; van der Meer & Hakhverdian, 2017). It encourages citizen participation in decision-making processes. When residents believe that their voices will be heard and valued, they are more likely to engage in public consultations and city visioning activities. On the other hand, organisational distrust is present where there is lack of confidence, and where there is concern that the organization will act to harm its trustors or a perception that it simply does not care about the welfare of those who trust it (Hardin, 2002). Whereas institutional distrust is understood as a lack of confidence in institutions, the rule of law, constitutionalism, and in systems of governance, be they public health, justice or urban governance systems (Best et al., 2021; Meyer et al., 2008). Noteworthy, there are positive correlations between trust and distrust of individuals within an organization and

organizational trust and distrust. This is because individuals in organisations are actors with agency.

Trust is related to but distinguished from distrust (Hardin, 2002; Li et al., 2012; Nannestad, 2008). The dominant understanding of trust and distrust is as two mutually exclusive states and of 'full' trust as a complexity-reducing factor in society and an ideal 'state of affairs', and of distrust as the opposite: a negative and complicating factor and situation that should be prevented or counteracted. Trust can be described as an attitude of optimism towards the competence and responsiveness of an actor or organisation. Whereas distrust can be described as pessimism towards competence and responsiveness of the other (Faulkner, 2017; Hawley, 2017). In other words, trust reduces complexity whereas distrust compounds it. In the context of risk, distrust is often related to heightened public concern, risk amplification, questioning of the work of risk managers, risk reduction and selective use of science (Fjaeran & Aven, 2021). Fear and contempt both feed and are fed by distrust, impeding cooperative relationships. Distrust that is revealed whether deliberately or involuntarily has the power to insult or wound. It sends a signal that one regards the distrusted as incompetent, malevolent or lacking integrity (D'Cruz, 2020). When there is distrust, cooperative relations are minimized. This partly explains the suspicious relationship between the city level and national level policy actors. Distrust towards city-level, public-sector policy actors and their organisations can erode their legitimacy, undermining their authority and capacity to govern effectively (Hetherington & Husser, 2012; Rothstein & Stolle, 2008). In Nairobi, empirical evidence suggests that distrust towards the county government has led to questioning the intentions, decisions, and actions of its policy actors, disempowering them. Additionally, it has led to fragmentation of city visions. This fragmentation hinders coordinated efforts to effectively break cycles of risk creation.

Trust and distrust can both flow from the exercise of social power and can both have consequences for social power (Hawley, 2017), influencing how power is distributed, exercised, and maintained within societies. Trust and distrust influence legitimacy and authority of urban development policy actors (Blomqvist, 2016; Hetherington & Husser, 2012; Rothstein & Stolle, 2008). This allows them to exercise agency for decision-making and implementation. The opposite is true when there is distrust. Additionally, trust and distrust are essential logics for action for bricoleurs in institutional bricolage.

Trust facilitates cooperation, reduces transaction costs, and enhances social capital, enabling the integration of new institutions (Cleaver, 2002; Cleaver & Hanks, 2005; Ostrom, 1990; Putnam R.D, 2005). Whereas, distrust drives critical evaluation, innovation, oversight in decision-making, generating alternative control mechanisms and holding in check the power of elites and technical experts, and safeguarding of the agency of local actors (Fjaeran & Aven, 2021; Mosse, 2003; Scott, 1998). Balancing trust and distrust through transparent, inclusive, and accountable institutional arrangements is crucial for delivering equitable outcomes, maintaining effective power relations, and public acceptance of risk-related decisions and their implementation (Fjaeran & Aven, 2021). This balancing can help bricoleurs navigate complex institutional landscapes, creating adaptive and contextually appropriate institutional arrangements (Luhmann, 2017; Tilly, 2005). Against this background, it is reasonable to conclude that institutional frameworks provide the structure for urban governance, while urban governance practices shape and are shaped by the levels of trust and distrust.

3.6 Institutional Transformation

3.6.1 Transformation: Meanings and Practice

Transformation is emerging in the scientific and sustainable development debates as both a necessity and an opportunity (Fedele, *et al.,* 2019; Pelling, 2011; Pelling, *et al.,* 2015). It is increasingly advocated for at international, regional, national and city levels (Rosenzweig, *et al.,* 2018; Feola, 2015; Patterson, *et al.,* 2017). However, it is a complex concept that remains poorly defined, little understood and too easily invoked (Patterson, *et al.,* 2017; Fedele, *et al.,* 2019; J & Handmer, 2013). It's understood broadly as system-level changes that fundamentally alter the entire system's properties and functions for longer-term sustainability (Rosenzweig, *et al.,* 2018; Fedele, *et al.,* 2019; Revi, *et al.,* 2014; Wamsler & Pauleit, 2016; Pelling, *et al.,* 2015; O'Brien, 2012; Pelling, 2011; IPCC, 2014; Pelling, *et al.,* 2014). Following on from Smith & Stirling (2010), O'Brien (2011), Bene *et al.* (2012) and IPCC (2018), transformation is understood in this study as systemwide change which perturbs the status quo and alters a system's basic nature, state, structure or function and brings about rapid change at scale.

Institutional transformation is a key component of transformative change. It refers to significant changes in the structures, rules, norms, relationships and practices that govern the way in which things get done. It is a profound and often deliberate shift initiated by actors with varying levels of power. It is facilitated by changes in individual and collective agency, critical junctures that open new pathways and possibilities, exogeneous shocks that disrupt existing institutional arrangements and reveal deeply rooted inequalities and power asymmetries, modifying existing institutions and redeploying them for new purposes or emergent, and fairer power relations (Mahoney & Thelen, 2010; Streeck & Thelen, 2005).

Moving away from definitions to practice, claims of transformation have been documented across many sectors and contexts, including, inter alia, urbanism, economics, governance, agriculture, risk management and natural resources management (Chu et al., 2017; Deubelli & Mechler, 2020; Kates et al., 2012; Scolobig et al., 2023; Vermeulen et al., 2018; Wamsler & Pauleit, 2016; Zografos et al., 2020). These illustrate the enthusiasm of some researchers, policymakers, and practitioners to invoke the word 'transformative' in interventions, processes and make claims of it.

Transformation literature critically engages with power, inequality, and networks of control and influence that push for systemic reforms and action as well as demand real transformation of both power holders and social systems (O'Brien & Selboe, 2015; Fedele, *et al.,* 2019; Pelling, 2011). It can be driven by radical shifts in response to observed or anticipated changes (Kates, *et al.,* 2012; Fedele, *et al.,* 2019). In the contexts of urbanism, climate change adaptation and breaking cycles of risk creation, it involves confronting and questioning the established systems and their outcomes, illuminating the hidden structures that sustain vulnerability and reinforce processes of disaster risk creation in urban settings, and opening up new policy options including new rights being extended, greater social and economic equality, greater political participation, and inclusive urban development decision-making and implementation (Català, 2014; Pelling, 2011; Rosenzweig, *et al.,* 2018; O'Brien & Selboe, 2015; Lonsdale, *et al.,* 2015; Pelling, *et al.,* 2015).

3.6.2 Characteristics of Transformative Practices

Different authors have developed different characteristics for transformation. According to Fedele *et al.* (2019), transformation is restructuring, innovative, path-

shifting, multiscale, systemwide, and persistent. It is restructuring as it involves fundamental shifts in value systems; regulatory, legislative and bureaucratic regimes, norms, knowledge systems, power relations, worldviews and practices (Fedele, *et al.,* 2019; Pelling, *et al.,* 2015; Matyas & Peling, 2015; Mapfumo, *et al.,* 2017). It is path-shifting as it alters extant development trajectory, pushing systems (and their component structures, institutions and actor positions) onto alternative development pathways towards inclusivity, resilience and sustainability (Fedele, *et al.,* 2019; Pelling, *et al.,* 2015; Hahn & Nykvist, 2017), and breaking cycles of disaster risk creation. It is innovative as it introduces novel approaches and methods to dealing with both longstanding and emergent challenges (Fedele, *et al.,* 2019; Folke, *et al.,* 2010; Feola, 2015). It is multi-scalar, cutting across sectors, spatial, jurisdictional and governance levels (Fedele, *et al.,* 2019; Folke, *et al.,* 2010; Kates, *et al.,* 2012). It is system-wide, permeating the whole system leading to systemic changes and ripple effects across systems, organisations, whole regions and communities (O'Brien, 2012; Kates, *et al.,* 2012; Fedele, *et al.,* 2019). It is persistent as it is future-oriented and long-term in nature. As such, it requires political support and institutionalization for posterity (O'Brien, 2012; Moser & Ekstrom, 2010; Fedele, *et al.,* 2019).

Scolobig *et al.,* (2023) provide a different approach to presenting the characteristics of transformative practices (Scolobig *et al.*, 2023). In their framework, characteristics that can help track transformative urban practices are outlined as they manifest across four core elements of the public-sector adaptation life cycle including visioning, planning, institutional frameworks and materialities, referred to as interventions by Scolobig *et al.,* (2023). The four elements can be employed together to deliver transformation. They can also independently deliver transformation. Each of them represents an action space for decision-making where transformative outcomes can be delivered (Ibid). Noteworthy, these action spaces are independent of each other. No preceding element or action is required to lay ground for transformative change within another element. It is also possible to have transformative practices in a single element and not the others. Be it as it may, the most coherent and purposeful transformative outcomes will likely pass through at least one round of visioning, planning, materiality and institutional frameworks (including organizational learning associated with Monitoring, Evaluation and Learning with scope to feedback into policy).

Table 3 presents characteristics of transformation across the four key elements of the public sector adaptation lifecycle. It extends the characteristics that Scolobig *et al.,* (2018) provided, tailoring to the empirical context.

Table 3: Characteristics of Transformative Visions, Planning, Materialities and Institutional Frameworks

#	Framework elements	Characteristics	Description
1	Transformative vision	Systemic	A transformative vision is comprehensive and permeates the whole system. It addresses needs and changes beyond component challenges to cover wider relational issues. It includes radically new concepts, notions, and opportunities
		Path shifting	A transformative vision breaks from the status quo to embrace fundamental alterations in social and administrative systems
		Mobilizes advocacy coalitions	A transformative vision mobilizes human resources including experts, advocacy coalitions and/or champions
		Addresses root causes and or drivers	A transformative vision addresses deep causal relationships between risk factors such as drivers of the poverty penalty, social vulnerability, flood risk, water stress and fires.
2	Transformative planning	Inclusive	Transformative planning involves all interest groups and considers the range of diverse views
		Restructuring*	Transformative planning results in fundamental social shifts (values, norms i.e trust, knowledge, ways of thinking, power relations, agency).
		Co-production	Transformative planning produces policy options and solutions jointly with diverse actors i.e policymakers, experts, and stakeholders. It recognizes expert and local knowledge
		Equitable	Transformative planning prioritizes vulnerable groups and includes an assessment of equity and distributional issues.
		Based on open data systems	Transformative planning is based on transparent and open access data collection and analysis

3	Transformative materialities	Transferability*	Horizontal travel of sensitization, the concept and desire to have the experience in other locales.
		Fidelity to vision and planning process*	Transformative materialities bring a transformative experience, respecting the planning process and augmenting inherent institutional, social and emotional experiences.
		Sustainable in the long term	Transformative materialities integrate governance and maintenance strategies that guarantee long-term economic, social, and environmental benefits.
		Future-oriented	Transformative materialities focus on delivering benefits for the long term.
		Catalytic*	Transformative materialities inspire a change in behaviours, attitudes or thought processes. They open and unblock thinking so that different actions, and different outcomes, are possible.
4	Transformative institutional frameworks	Polycentric	Transformative institutions recognize the value of diffusing governance centres through the revision of mandates, responsibilities, and organizational structures
		Address unfair structural relations	Transformative institutions address power imbalances, unfair structural relations and social injustices, strengthening the agency of local actors.
		Scalability*	Transformative institutions catalyze changes within structures beyond the remit of the organization to ensure permanency. This may involve changing or developing regulations, standards, codes or policies.

*Source: Researcher, 2024 (Adapted from Scolobig et al., 2018). *symbol connotes what's added or moved*

This framework highlights the key elements and characteristics of transformation in the context of pro-poor urban development decision-making and implementation. As an analytical frame, it moves the analysis from a zero-sum assessment of practices as either transformative or not, towards a more nuanced understanding of the elements in a policy or project cycle that are more or less transformative, and the specific properties that are transformative. It allows for illuminating points where specific decision-making and implementation systems constrain transformative practices enabling targeted interventions to address blockages and open systems up to their transformative potential (Scolobig *et al.,* 2018).

3.7 Refined Research Questions

3.7.1 Research Questions

Based on the review of the literature, and theories of institutionalism and institutional change, the analytical questions put forward earlier in 1.5 are refined and restated:

1. Who has the power to set the urban development policy agenda in Nairobi**?**
   a) Who sets the vision and agenda for pro-poor urban development and especially the participatory part within it?

   b) What are the consequences of the above for the generation of vulnerability, exposure and capacity for breaking cycles of disaster risk creation?

2. How are pro-poor urban development decision-making and implementation spaces in Nairobi produced?
   a) How are institutional innovations reshaping relationships and the urban development decision-making space in Nairobi?
3. What transformative practices were brought into pro-poor urban upgrading in Nairobi between 2015 and 2022?

3.8 Conclusion

In conclusion, this chapter has explored theories of institutions, with a focus on institutional bricolage. Grounded in institutional bricolage, it challenges the traditional binary classification of institutions. Instead, underscoring a need for nuanced understanding of institutions. It surfaces the constant adaptation of institutional elements to make them fit for purpose and context. Applying the institutional bricolage approach to understanding processes of disaster risk creation focuses on how institutions and actors creatively adapt, tinkering with existing institutional arrangements (socio-legal regulations, norms and practices) to shape everyday urbanity, advertently or inadvertently contributing to disaster risk creation. It offers new perspectives and reveals new insights on dynamics that underlie disaster risk creation.

Transformation, as articulated in the literature, represents shifts which fundamentally alter social, institutional, and environmental systems. It is motivated by a quest for long-term sustainability and inclusivity and requires structural shifts in values, power

relations, and development trajectories towards more equitable societies and futures. While often invoked easily, its conceptual understanding remains limited. Ultimately, transformation engages with issues of power and inequality, aiming to reshape entrenched systems that perpetuate disaster risk creation towards more equitable future-proof societies. The chapter has proposed a refined framework for assessing transformative change, and identifying the strengths and weaknesses of pro-poor urban development processes intended to break cycles of disaster risk creation, supporting transition toward more equitable societies. The framework provides a basis for critical discussion of how visioning, planning, interventions and institutional frameworks can be considered transformative.

The chapter highlights the intricate interactions between embedded and received institutions, the power dynamics, relationships of trust and distrust and local agency in Nairobi's co-evolving urbanism and riskscapes, making it fit for critically engaging with breaking cycles of disaster risk creation (BCDRC) and investigating what enables transformation. The arising conceptual framework provides an analytical frame upon which this study is grounded. It aims to guide future inquiries into a more complete understanding of Nairobi's urbanism and attendant processes of disaster risk creation.

4.0 Research Approach and Methods

4.1 Introduction

This chapter is dedicated to discussing and reflecting on the methodology used in this study. In theory, methodology can be described as linking ontology, epistemology, and methods. How do we see reality, how do we learn from reality, and how do we study it? These three questions are interwoven and determine the perspective on the execution of any research. The choice of methodology adopted herein is a consequence of both philosophical viewpoints, empirical constraints and personal preference.

First, the study approach and reflections on the researcher's ontological and epistemological stances are discussed. Second, the research setting, and design are provided. The ways in which the philosophical stances shaped the research design, methods used, and the research questions are discussed. Third, the sampling strategy adopted to select the study sites and study participants is presented. Fourth, positionality and reflexivity are discussed. It reflects on how the study leveraged the background and position of the researcher as a Kenyan national working in urban policy. The discussion then transits to a description of the methods used for data collection and analysis, including reflections on the strengths and limitations of the methods. The different forms of triangulations and data management are also discussed in subsequent sections. The last two sections reflect on ethical considerations, challenges, and the way in which the challenges were addressed.

4.2 Research Approach

The study adopted a qualitative approach to inquiry (Creswell & Poth, 2018, 2022). Research approach is understood as the plan for conducting an inquiry (Creswell & Poth, 2018, 2022). It is at the intersection of philosophy, strategies of inquiry (study design) and specific methods that translate the design into practice (Creswell & Poth, 2022). To develop the understanding of qualitative research as used herein, the study looks to the definition put forward by Creswell (2013) which defines qualitative research as an inquiry which:

> "*Begins with assumptions and the use of interpretive/theoretical frameworks that inform the study of research problems addressing the*

meaning individuals or groups ascribe to a social or human problem."

~ Creswell (2013)

Qualitative research is about interpreting or understanding the underlying meanings that individuals and groups ascribe to different phenomena (Aspers & Corte, 2021; Denzin & Lincoln, 2020).

In this study, the researcher was keen on how best to go about addressing an intellectual puzzle rather than miring in distracting definitional battles or paradigm wars, and to exercise both the researcher's creative and investigative potential. The intellectual puzzle this research addresses is a processual one centered on a quest to understand how disaster risk is actively produced through urban development decision-making processes in contexts of institutional pluralism and messiness. It sought to illuminate the processes of urban change in Nairobi, especially how actors, institutions, and power dynamics interact to shape urban development decision-making spaces and resultant urban trajectories, and implications for flood risk and water stress, and how these become new inputs. The study is interested in the plurality of realities and meanings, complexity of interactions; insights into who owns the city; perspectives on how and how far the more powerful actors control the work of other actors; and insights into how shadow systems might enable transformation. By unpacking these interconnections, the research seeks to illuminate pathways for more equitable, foresightful, risk-sensitive and inclusive pro-poor urban development.

The researcher's ontological stance is social constructivism and epistemological disposition is interpretivism (Creswell & Poth, 2022; Crotty, 2020; Denzin & Lincoln, 2020; Lincoln & Guba, 2013; Mertens, 2024). Interpretivists gravitate towards flexible frameworks that allow room for innovation, and for the researcher to tailor research framework to suit own research needs (Creswell & Poth, 2018, 2022; Edirisingha, 2012). The interpretive nature of qualitative research makes it suitable for addressing the researcher's intellectual puzzle, and to demystify institutional pluralism, power and agency, relationships of trust and distrust, transformation, and how they manifest. The interpretive nature of the study is reflected in the breadth of research questions and analytical objects, the study design, the selection of methods such as semi-structured and in-depth interviews to encourage participants to openly construct meanings, and identification of a diverse pool of participants to enable broad discussions.

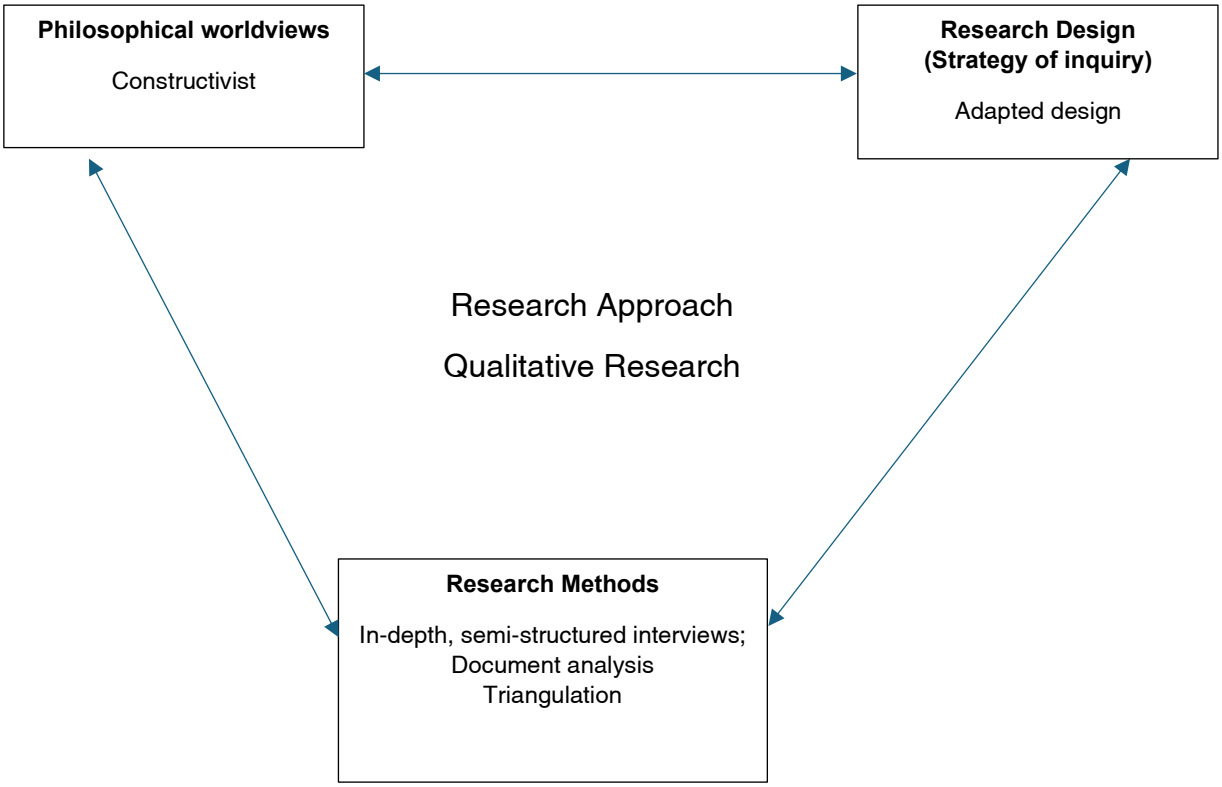

Figure 8: Research Frame Adopted From Creswell, 2009

Figure 8 illustrates how the different components of the research approach intersect. The ontological perspective of social constructivism argue that reality is socially constructed, not objectively determined and perceived, and is contextually bound and multiple (Creswell & Poth, 2018, 2022; Edirisingha, 2012). Constructivism is useful for understanding the practices of a group or society and its implications towards their attitudes (Adom et al., 2016). Interpretivism is consistent with constructionist thinking, holding the view that there are multiple realities (Edirisingha, 2012; Hiller, 2016; Maxwell, 2012), and that all knowledge is subjective and grounded in our particular experiences, is time-bound and context-specific (Hiller, 2016). Thus, interpretivism argues that knowledge is ontologically relativist (Alvesson & Sköldberg, 2023; Denzin & Lincoln, 2020; Greene, 2010). The researcher suggests that implications of urban development decisions and actions are experienced variedly, and people ascribe varying meanings to phenomena including the understanding of disaster risks, breaking cycles of disaster risk creation as well as to such concepts as transformation. Contextually, developing inclusive urban futures and transformation requires an appreciation of the multiplicity of realities, knowledges, and underlying dynamics that generate inertia and implications of choices.

4.3 Research Design and Empirical Setting

Research design, also referred to as strategies of inquiry (Creswell & Poth, 2022; Denzin & Lincoln, 2020), approaches to inquiry (Creswell & Poth, 2022) and research methodologies (Mertens, 2024), is understood as the type of inquiry that provides specific direction for procedures in an inquiry (Creswell & Poth, 2022). A bespoke research design was developed away from the conventional five research designs provided by Creswell & Poth (2018; 2022). This is because the study was investigating different objects, which were not able to fit into the contemporary qualitative research designs. The framework was developed to offer the flexibility to interrogate the different objects: power relations, agency, relationships of trust and distrust, and transformation. It is centred upon document analysis, semi-structured interviews, elite interviews and field notes. This is illustrated in Figure 9. The lines show the relationships between the types of data generated, both chronologically and as input-output. The dotted lines show simultaneous data collection while solid lines represent an input-output relationship. Each method produced its own analytical outputs.

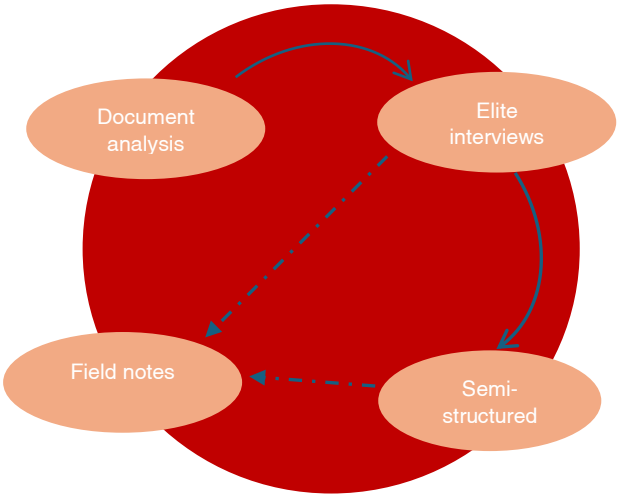

Figure 9: Research Design and Adopted Methods. Source: Author, 2024

The empirical setting is Nairobi. Nairobi is the capital of Kenya, a national, regional and international hub for commerce, transport, regional cooperation and economic development. The city county has a population of 4.39 million (KNBS, 2019) and a growth rate of 4.1% per annum (United Nations, 2016b). Much of the city's growth has taken place in the absence of a spatial development framework to guide growth

(K'Akumu & Olima, 2007; Oyugi & Owiti, 2007), resulting in much of the chaos witnessed today. Based on the 2019 national census, the city accounts for 29 per cent of Kenya's urban population and enjoys primacy - is more than 3 times the second largest city, Mombasa with a population of 1.19 million (KNBS, 2019).

The research focus is the decision-making and policy debate space affecting Nairobi, within which disaster risk creation and pro-poor urban development are approached. The city's urban development policy and implementation space provided a good context for tracking different institutional systems across the public, private, and informal sectors, as well as the interactions between the shadow and canonical systems and institutional change. See Chapter 5.0 for a detailed discussion of the contextual background. A special focus was on how actors, institutions, and power dynamics interact to shape urban development decision-making spaces, and how disaster risk is actively produced through urban development decision-making processes and considers implications for foresightful, risk-sensitive and inclusive pro-poor urban development. Methods were led by the thesis research questions, which are restated here:

Research Question One: *"Who has the power to set the urban development policy agenda in Nairobi?"* explored city visioning. It looked at the city from the viewpoint of actors with formal policy responsibility and focused on how dominant frames trickle down to shape formal policy in Nairobi. It also focused on broader decision-makers (international - city) who shape the decision-making policy debate space within which pro-poor urban development, and transformation are approached.

Research Question Two: "*In what ways does institutional pluralism shape the production of pro-poor urban development decision-making and implementation spaces in Nairobi?"* explored the ways in which decision-making spaces are produced and the broad relationships between actors in project and everyday practice. It sought to understand whether these actors collaborate or whether 'the everyday' is subservient to the project-bound decision-making bubbles. The learnings from the first two questions were useful for a nuanced understanding of how Nairobi's urbanity arises, how it is enabled and/or constrained by institutions, and how actors navigate these constraints and break through.

Research Question Three: "*What transformative practices were brought into pro-poor urban upgrading in Nairobi between 2015 and 2022?"* narrowed down to unpacking the neighbourhood inclusion, decision-making and implementation as a policy space. It centred on the Mukuru Special Planning Area (SPA) process, a participatory urban upgrading initiative in Nairobi as a locus of study. It explored whether Mukuru SPA process is transformative as claimed (Makau, *et al.,* 2020; Satterthwaite, *et al.,* 2020).

The Three Research Questions were translated into empirical chapters. The arising empirical chapters and how they come together are illustrated in Figure 6 below:

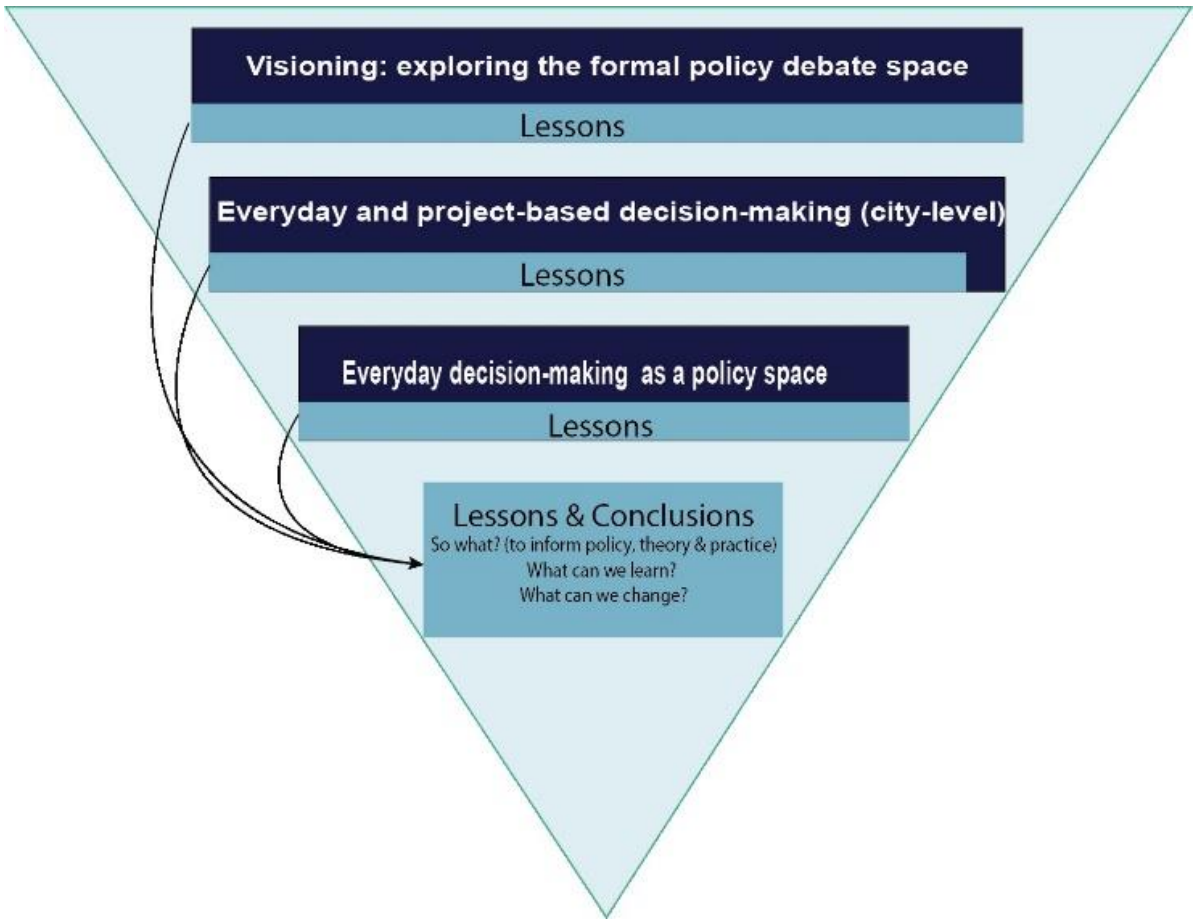

Figure 10: An Illustration of the Empirical and Conclusion Parts of the Research. Source: Researcher, 2024

4.4 Sampling Strategy

4.4.1 Selection of Research Sites

The sampling strategy used in this research was non-random sampling. The choice of research sites was based on theoretical sampling (Patton, 2015). Theoretical sampling is a type of purposive sampling where cases that are rich in information about the

phenomenon in question are strategically and purposefully selected. It involves *"finding manifestations of a theoretical construct of interest to elaborate and examine the construct and its variation" (Ibid).* This influenced the selection of Nairobi as the site for this study and the selection of decision-making and action sites of study.

Nairobi typifies fast-growing cities in Sub-Saharan Africa and shares similar characteristics with other major cities in the region. The city provided a rich institutional context and offered a comparable site to investigate different forms of urban governance practices and relationships. It provided a flexible maneuver across the public, private and local and international civil society sectors, international development partners, and multi-level governance (Büscher, 2018; Smit, 2018). It further offered a multi-hazard risk context including, inter alia, floods and water stress (see section 5.3). It thus offered a good case to study how relationships between institutions and actors shape disaster risk creation and the implications for advancing foresightful, risk-sensitive, and inclusive pro-poor urban development. Additionally, as discussed in section 1.3 the researcher's residence and work in urban development policy in Nairobi provided a considerable degree of familiarity with the city's urban policy processes and decision-making structures. This familiarity with the study context offered a unique opportunity to reflect on case studies that would best answer the research questions.

Theoretical sampling also informed the selection of specific sites to address the specific research questions. RQ 1 focused on the formal urban development policy debate space and looked at the city from the viewpoint of actors with formal policy responsibility. The choice of this as a study site was based on the interest in understanding how ideologies, discourses and frames trickle down to policy and practice, shaping relationships between actors, actors and institutions and institutional arrangements, and the kind of urbanity that arises in Nairobi.

RQ 2 was centred on the Kenya Informal Settlements Improvement Project phase one (KISIP I) as a representative project-bound decision-making and action space, and the urban planning department of the Nairobi City County Government as the everyday decision-making and action space. The choice of these two sites was motivated by a quest to shed light on how actors working in urban poor settlements adapt institutions to construct bespoke institutional arrangements. They provided insights into the nature

of relationships between actors, interactions between formal and informal institutions, and the arising hybridity. Nonetheless, the necessarily limited focus on these two sites prevents a fully comprehensive view of Nairobi's urbanity. Other foci of resistance where negotiations, contestations and co-production take place are not covered in this thesis such as participatory budgeting which allows residents to shape fiscal priorities and budg*et* allocations of the county government and the emancipatory deployment of science and technology by organised civil society; for example by Kounkey Design Initiative, a non-profit, research, design and build organisation which uses household surveys and participatory methods to challenge official data or its absence and so to raise voice and the visibility of the urban poor in the provision of risk-reducing infrastructure and services (Borie et al., 2019). The data gathered by KDI is freely accessible and often serves to trigger conversation with Nairobi City County Government. One such data is high resolution flood hazard maps (Ibid). These networks of resistance challenge urban inequalities, exclusionary practices, oppressive structures, and limitations on agency for city visioning.

RQ 3 was centred on Mukuru Special Planning Area process. Mukuru SPA was chosen because it is widely recognized as a successful innovative and inclusive urban upgrading process, and has been acclaimed as transformative (Makau, et al., 2020; Satterthwaite, et al., 2020; Butler, et al., 2018). Mukuru SPA process highlights how communicating the benefits of inclusive urban development decision-making can enable formation of systemic changes beyond the project, new norms and practices, and co-production of inclusive urban futures (Makau, et al., 2020; Satterthwaite, et al., 2020; Butler, et al., 2018). See section 5.5.2 for a detailed discussion of the contextual background. In this research, the Mukuru SPA process is viewed as institutional bricolage (Cleaver, 2012; Cleaver & Whaley, 2018) within the broader urban development planning system in Nairobi.

This lens, which focused on investigating the enabling environment for inclusive pro-poor urban development in Nairobi, highlights key dynamics that shape governance, power, and outcomes, and surfaces enablers and institutional barriers for advancing foresightful, risk-sensitive, and inclusive pro-poor urban development. It foregrounds several factors including how power and influence are negotiated to shape development agendas, visions and priorities, as well as the degree of cooperation or conflict that facilitates or hinders projects. It also reveals the agency of actors —how

they navigate, challenge, or reinforce institutional structures within institutional constraints. This investigation sheds light on how decision-making spaces are constructed and whose interests are prioritized, exposing patterns of inclusion and exclusion. Additionally, it underscores how these relationships affect implementation, often revealing gaps between policy design and real-world outcomes. By focusing on these dynamics, this lens provides critical insights into the mechanisms shaping urban development and associated processes of DRC.

The selection of the two study sites was driven by several factors, including alignment with the research objectives, practical constraints, access to relevant participants, the presence of knowledgeable informants capable of engaging critically with the research questions, and the researcher's familiarity with the city and its contextual dynamics. These sites offered rich, context-specific insights, allowing for an in-depth exploration of the relationships between institutions and actors, the construction of urban development decision-making and implementation spaces, and the processes shaping disaster risk creation and urbanity in Nairobi. KISIP and NCCG were chosen for Research Question 2, while Mukuru SPA was selected for Research Question 3, due to their relevance to the study's objectives. These sites allowed for the observation of actor-institution relationships and provided informed respondents able to address the key questions. The diversity of contexts also enabled the capture of a range of perspectives and experiences in urban development. Furthermore, Mukuru SPA was contextually appropriate for examining transformative urban practices in community-led upgrading (RQ3), while KISIP was chosen for its knowledgeable individuals who could offer deep, reflexive insights into the research themes. The selection of these study sites provided focus and richness, allowing in-depth interrogation of the different objects: power relations, relationships of trust and distrust, agency, and transformative practices.

4.4.2 Selection of Participants

The type of respondents targeted for this study included urban development, policy decision-making and implementation actors cutting across international development, national and county governments, the private sector, civil society, academia, and grassroots organisations. Participants were selected through non-random (purposive) sampling based on the review of the literature and the researcher's previous

professional life working in urban policy in Nairobi which offered an overview of actors across levels. Purposeful sampling is a deliberate choice of respondents, subjects or settings (Creswell & Poth, 2018, 2022) that is applied to select cases that are rich in information about a phenomenon under investigation (Patton, 2015). Potential participants were approached through e-mails and follow-ups were made through phone calls and text messages. Snowballing (Creswell & Poth, 2022) was also used to identify participants. Respondents were requested to suggest candidates who might be suitable for further discussion. The recruitment was voluntary and based on informed consent.

The study had an initial target of 50 fifty participants for the in-depth, semi-structured interviews. This was broken down as follows: 20 national-level policy actors including national government, private sector and INGOs; 15 city-level policy actors including the county government, civil society organizations, consultants, and academia; and 15 community-level actors. The distribution of respondents on a 20:15:15 ratio prioritizes capturing a comprehensive view of the governance landscape. It weights national-level policy actors more heavily due to their influence on policy formulation. At the same time, it maintains proportionate representation from the city and community level actors to reflect their roles in decision-making and implementation. This followed the suggestion by Ritchie *et al* (2003) that studies employing individual interviews conduct no more than 50 interviews so that researchers can manage the complexity of the analytic task. Thus, the number of respondents capped at 44. This is because data saturation (Gaskell & Bauer, 2017; Yin, 2018) had been reached. Data saturation is a point where despite aiming for diversity, enough data has been collected and adding new respondents, as in this case, does not add any new variation (Gaskell, 2002; Yin, 2009). See Appendix 7 for a detailed table describing each respondent and attributing codes to each of them. This is provided to give readers an idea of the professional or experiential background of the results. The distribution of the respondents across the research questions is presented in Table 5.

An inclusion criterion for this study was men and women between the ages of 18 and 65 who are actors in Nairobi's urban development decision-making and action landscape. The choice of age range targeted economically active participants. The minimum age was imposed to limit respondents to individuals legally recognised as adults. An exclusion criterion for the recruitment of participants was individuals who

met the inclusion criteria but did not have the time or interest to participate in the interviews, or those who demanded payment as a pre-condition for recruitment in the study.

The study focused principally on pro-poor urban development decision-making and action, as such, marginalized groups were an essential part of this study. The study sought to give voice to this group which has limited agency to vision its urban futures and reduce disaster risks. As such, the third research question focused specifically on marginalized participants drawn from Mukuru Special Planning Area. This was partly to understand how far their voices are brought into development decision-making and implementation. Mukuru SPA process exemplifies community-led and government-supported pro-poor urban upgrading in Nairobi. It provided a good context to track different characteristics of transformation across the four key elements of the community-led pro-poor upgrading adaptation lifecycle. See Section 5.5.2 for a detailed discussion of the contextual background. It also provided a setting to integrate the viewpoints of marginalized communities in the study. Marginalized participants were recruited through a gatekeeper. The gatekeeper was one of the community mobilisers who was involved in the Mukuru SPA process and was introduced by the researcher's wife. The researcher's wife and the gatekeeper had worked together in her professional capacity.

To mitigate the risk of bias in the selection of respondents. A matrix, presented in Table 4, was constructed before data collection to pursue a diversity of research participants. This allowed the researcher to compare different actor groups based on their roles, influence, and power, making it easier to analyze dynamics in urban development, and to ensure adequate representation of diverse actors including those with limited power and agency, and the often-forgotten groups including youth and young professionals to understand whether they, more than the more powerful policy actors, were experiencing the relationships between institutions and actors in pro-poor urban development decision-making and implementation differently.

Table 4: A matrix of the selection of respondents

Actor Group	**Role**	**Level of influence**	**Number**	**Resources**

National-level public sector	Policymaking, implementation	High	4	Regulatory, political & fiscal power, funding, bureaucratic control & international influence
City-level public sector	Decision-making, implementation	High	8	Regulatory & fiscal power, expertise
Civil society	Advocacy, Implementation	Medium	6	Knowledge & expertise, & community networks,
International development	Funding, technical assistance	High	9	Funding, expertise, and policy influence
Consultants/ Private sector	Technical support, brokering	High	7	Expertise & knowledge, influence over funding
Local (Urban Poor) Community	Beneficiaries, Activists	Low	10	Local knowledge & social networks
Demographic composition				
Men	25			
Women	19			
Youth (defined as under 35 years)	15			

4.5 Researcher Positionality: Outsider-Insider

The study leveraged the background and position of the researcher as a Kenyan national working in urban policy. The researcher had previously worked at the United Nations Human Settlements Programme (UN-Habitat) and at Nairobi City County Government (NCCG). Much of the researcher's engagements in Nairobi focused on urban regeneration efforts, urban safety and security and placemaking. These engagements gave the researcher a fair understanding of the politics of city-making, power relations between actors, and informal practices of getting things done. It also gave the researcher a position of power. However, before this study the researcher had not explicitly engaged with the questions around disaster risk and urban poor settlements. Similarly, viewing the creation of risk through an urbanism lens was new to the researcher. These realities presented insider/outsider positions.

Resulting positionality enabled an extensive network amongst key government officials, the private sector and civil society. Personal and professional networks

readily shared contacts and made introductions. These introductions helped access elite respondents, breaking walls and building trust between the researcher and the respondents. While it is widely recognized that elite interviews present distinctive methodological challenges owing to the power and intimidation that come with the actual approaching and interviewing elites, this was not experienced in this study, partly because of the researcher's positionality and the introduction by friends. The fact that the researcher is a Kenyan citizen and understands the culture and the urban policy and the administrative landscape further made the city and national level respondents feel comfortable sharing their experiences. The researcher's possession of a priori knowledge of the city enabled asking more meaningful questions which generated insightful and deeply reflective conversations, some of which extended longer than three hours.

The researcher was constantly engaged in a reflexive process throughout the study: on the development of the arguments, on data collection, on data analysis and interpretation of findings. Cognisant of the potential impact of the silent voice of 'self' (Creswell & Poth, 2022; Patton, 2015) in both data collection and analysis, the researcher endeavoured to remain objective, constantly questioning self, own interpretations and reporting of responses. The researcher endeavoured not to assume having any advantage in the capacity to understand the underlying dynamics and their implications. These reflections were captured in a field log. See section 4.6.1.3 for more discussion on this. A different font colour was used during data analysis and interpretation of findings to aid this process. Additionally, the fieldwork experience and preliminary findings were discussed with colleagues both in UCL and in Nairobi, and who gave feedback and raised questions, offering opportunities for reflexivity. Giving lectures to students offered a unique opportunity to reflect deeply on the methods, the experience and the researcher's positionality.

The researcher remained an outsider seeking critical insights from respondents, who were treated as experts. The researcher's relative newness to the disaster, urban upgrading sectors and comparative unfamiliarity with the workings of the bureaucracy in the sectors allowed analysis of the processes with some distance. As a constructivist, the researcher also recognized the complexities, multiplicity of truths and experiences in Nairobi (Edirisingha, 2012). As such, the researcher approached the research context with an open mind, open to new knowledge with a keenness to

understand the context through the eyes of research participants despite having some knowledge of the context.

The researcher expected that his comparatively younger age might introduce power imbalance between him and respondents in senior policy positions. This is because, in Kenyan society, age tends to be associated with wisdom, expertise, and authority. Additionally, most PhD students in Kenya tend to be relatively older, majority aged over 40 (Mueni et al., 2020). The power imbalance was, however, not experienced during the research. On the contrary, older respondents sitting in senior policy positions were pleasantly surprised and intrigued by a relatively young Kenyan pursuing a PhD. This worked in favour of the researcher, enabling a rapport, interest in his career trajectory and extensive meaningful conversations. This is partly because the researcher also worked in urban policy. Consequently, respondents viewed him as 'one of them'. This dynamic enabled a relationship of trust, yielding more honest answers.

Gender plays a crucial role in shaping a researcher's positionality by influencing access, power dynamics, participant interactions, and data interpretation. As a Kenyan male, the researcher felt safe walking alone in Mukuru informal settlement. The researcher was able to blend in with the locals and not fear when walking along the narrow alleys. In the same context, he constantly reminded himself of own biases as a Kenyan male. This was to actively avoid imposing own assumptions onto the data, especially the understanding of how different actors, especially women, exercise power, agency, and their perceptions of vulnerability.

Reflections on power relations in the data collection led the researcher to consider interactions with the study participants who were kind enough to share their time, knowledge, experience and thoughts, especially those drawn from poor urban settlements. Unequal power relations between the researcher and respondents engaged in the third phase of data collection was obvious. Most of the respondents were dependent on daily wages or daily sales for their livelihoods. The question of whether to give a token of thanks for the time given by these community actors was unsettling. It presented ethical dilemmas, most prominently, justice, and coercion vs appreciation. Such research can reinforce power asymmetries and extractive relationships between the interviewer and respondents, some of which the study may

be seeking to study. These dilemmas led the researcher to reflect on the power relations between him and community actors. To address the ethical dilemma, the researcher surprised the community-level interviewees with Ksh. 500 (£3) as a token of appreciation at the end of the interview. This was not payment for the information nor their time, but a token of appreciation. Juxtaposed against the researcher's positionality, a few questions arose: How can one ethically show appreciation in such a context? At what point does it become unethical to give a token of appreciation? On one hand, these questions open Pandora's box on how research can reinforce extractive relationships. On the other hand, it invites further interrogation of the meaning(s) of ethical research conduct. This presents a compelling area for future research.

4.6 Methods of Data Collection and Analysis

The research adopted different qualitative methods including document analysis and semi-structured, in-depth interviews to collect data and to understand varying perspectives of different epistemic communities. A field log was also kept to document observations, unexpected acquaintances, and reflections from informal conversations during the data collection process. The choice of these methods was motivated by the desire to give a voice to stakeholders, allowing them to express their perspectives, experiences and opinions (Leavy, 2020) as well as not to influence the information that respondents give, instead allowing it to emerge from them (Creswell & Poth, 2018, 2022). The data was then analyzed using critical discourse analysis and thematic analysis. NVIVO was used to draw emerging themes and relations. The use of different qualitative methods was purposefully to strengthen the arguments and findings, and to provide a nuanced understanding of the different objects of analysis. Table 5 summarizes the questions, the context they apply to, and the corresponding methods used for data collection.

Table 5: An Illustration of Research Questions With the Corresponding Data Collection Methods and Context

#	Research questions	Methods	Research Context
1	Who has the power to set the urban development policy agenda in Nairobi?	Discourse Analysis 19 in-depth, semi-structured interviews	National and city-level urban development policy debate space

		with people having formal policy responsibility	
2	In what ways does institutional pluralism shape the production of pro-poor urban development decision-making and implementation spaces in Nairobi?	13 semi-structured, in-depth interviews with city-level policy actors	City-level (project-bound and everyday) decision-making and implementation spaces
3	What transformative practices were brought into pro-poor urban upgrading in Nairobi between 2015 and 2022?	12 in-depth, semi-structured interviews with community actors	Community-level (everyday) decision-making & action space

Source: Researcher 2024

4.6.1 Data Collection

The primary data collection methods in this research were document analysis and in-depth, semi-structured interviews. Document and text analyses were used to draw patterns, understand relationships and highlight dominant interests in the kind of urbanity arising in Nairobi and how their interrelationships and involvement shape riskscapes in urban poor settlements. Data collection was divided into three phases. Phase one entailed a mix of documentary analysis and in-depth, semi-structured interviews while the latter two phases were limited to in-depth, semi-structured interviews.

Focus Group Discussion (FGD) was dropped as a data collection method for ethical reasons. This was principally because the country had just come out of closely contested and disputed elections and the privacy of the respondents could not be guaranteed. Given the timing, it was also considered that FGDs would lead to strategic silence (Dimitrov, 2019), especially if the views of marginalized groups were in contradiction to those of the community leaders or their louder counterparts. The departure from FGDs in favour of in-depth, semi-structured interviews with all groups including marginalized groups such as women, youth, and persons living with disabilities gave less powerful participants a fair environment to communicate their

views without the dominant views of the loudest participants. The methods and procedures are discussed in detail below.

4.6.1.1 Document Analysis

Document analysis is a systematic procedure for reviewing or examining documents relevant to a particular field of study. It involves extensive reading to examine and interpret text from secondary sources to elicit meaning, gain understanding, and develop empirical knowledge(Creswell & Clark, 2022; Leavy, 2020; McCorkle & Yelvington, 2021). It is an extensive reading covering reports, books, journal articles, newspaper articles, minutes of meetings and project reports. Document analysis in this study was a two-stage process.

The first stage involved the review of contextual literature, focusing on literature on African urbanism and urbanization, policy and planning reviews; and institutional mapping and assessment. This was useful for identifying actors; understanding the institutional landscape, overlaps and gaps; and gaining insights into the overall impact on, opportunities for and barriers to inclusive strategies for breaking cycles of risk creation in Nairobi. It was principally to understand what has been done in previous studies, identify gaps in literature and view African urbanism and urbanisation through a theoretical lens. It was a continuous and iterative process.

The second stage of document analysis entailed text analysis (Fairclough, 2013). This textual analysis was done manually. The true power of textual analysis is in engaging in deep thinking with texts to identify meaning. It is useful for understanding the assumptions made at the time of policy and plan formulation (Ibid). It was an immersive phase where all selected documents were read from cover to cover to understand the ways in which dominant policy actors define, interpret, communicate and deploy such concepts as risk, risk creation, sustainability and resilience. It also assessed the authors' affiliation with the concepts. This analysis set the stage for in-depth, semi-structured interviews with actors with formal policy mandates.

The documents analysed included project reports, plans, guidelines, policies and legislations which extensively discussed urbanization, climate change adaptation, disaster risk reduction and sustainable development at the global, national and city levels. Data from the documents were extracted into a Microsoft Excel file, recording

information about specific aspects of urban development policy and framing of issues. Reviewing these documents is also one way of reading Nairobi's urban development policy debate space and the motivations behind the policy choices. The documents are not older than 2015. The year 2015 was selected as the cut-off since it marked a new dawn in global sustainable development discourse following the promulgation of the Sustainable Development Goals, the Paris Agreement, and the Sendai Framework for Disaster Risk Reduction. At the same time, negotiations for the New Urban Agenda were at a fever pitch, opening space for mainstreaming breaking cycles of risk creation, adaptation and resilience across governance levels. A complete list of the documents is outlined in Table 6.

Table 6: Outline of documents analysed

Document name		Year of publication	Ownership	Scale of influence
1	New Urban Agenda	2016	UN-Habitat	Global
2	Sendai Framework	2015	UNDRR	Global
3	Transforming our world: The 2030 Agenda for Sustainable Development	2015	United Nations	Global
4	Paris Agreement	2015	UNFCCC	Global
5	Disaster Risk Management Bill, 2021	2021	GoK	National
6	Law and Policies that Protect the Most Vulnerable Against Climate-Related Risks in Kenya	2021	GoK	National
7	National Climate Change Learning Response Strategy, 2021 – 2031	2021	GoK	National
8	Kenya Country Report on the Implementation of the New Urban Agenda	2021	GoK	National
9	Kenya Vision 2030 3rd Medium term plan, 2018 – 2022	2018	GoK	National
10	National Climate Change Action Plan, 2018-2022	2018	GoK	National
11	Urban Planning for City Leaders: A Handbook for Kenya	2018	GoK / UN-Habitat	National
12	National Land Use Policy	2017	GoK	National
13	Kenya's popular version of the New Urban Agenda	2017	GoK	National
14	Climate Change Policy, 2016	2016	GoK	National

15	Climate Risk Management Framework for Kenya	2016	GoK	National
16	National Urban Development Policy	2016	GoK	National
17	National Report on Human Settlements and the New Urban Agenda	2016	GoK	National
18	National Adaptation Plan, 2015-2030	2015	GoK	National
19	Nairobi Climate Action Plan 2020 – 2050	2022	C40 & NCCG	County
20	Eastlands Urban Renewal Plan	2018	GoK/ NCCG	County
21	Nairobi Integrated Urban Development Plan (NIUPLAN)	2015	JICA & NCCG	County
22	County Integrated Development Plan (CIDP), 2018 – 2022	2018	NCCG	County

Source: Field data, 2022

4.6.1.2 In-depth, Semi-structured Interviews

In-depth, semi-structured interview is understood as dialogue between the researcher and the respondent, guided by a flexible interview protocol and supplemented by follow-up questions, probes and comments with the purpose of exploring issues or topics in detail (DeJonckheere & Vaughn, 2019). Interviews yielded rich data about respondent's experiences and revealed how they construct reality and conceive processes. The interview protocol was based on a defined set of topics: visioning, construction of pro-poor decision-making and implementation spaces and transformation.

The fundamental purpose of in-depth, semi-structured interviews was to gain a nuanced understanding of the lived experiences of respondents, understanding their perceptions and attitudes (Gaskell & Bauer, 2017; DeJonckheere & Vaughn, 2019). In the absence of observable outcomes and or impacts, getting this construction is important, particularly from key informants who are at the heart of or have been part of the decision-making processes. While this is one of the advantages of in-depth interviews, the preference for this method, in part, stemmed from the researcher's intellectual puzzle. It is also because in-depth interviews enable process tracing (Gaskell & Bauer, 2017). In this case, they enabled the researcher to get beneath canned answers and lethargic participation. Participants found the questions to be

different from what they were used to, inviting reflection on their part. It indeed did yield richer, more honest data.

The interviews were carried out in three phases. This is mainly because research questions were targeted at different actor groups. The first research question was targeted at senior policy actors in elite organisations. The second research question was targeted at city level policy actors while the third targeted community level actors. As such they were approached independently. This formed the basis upon which the three data collection phases were formed. The first phase was in July – September 2022, and the second and the third phases were in April and May 2023. The gap between the two phases was occasioned by the transfer from King's College London to University College London, and the civil unrest in Kenya following the disputed Presidential elections results in the 2022 general elections.

In phase one, most of the interviews were done virtually - on Google meet. While this was efficient as it saves on travel time, virtual space introduced an element of distance from the interviewee. This denied the researcher moments of nuance often before & after recording of interviews. Information provided in these moments can be rich in detail based on the level of trust between the interviewer and the interviewee. In phase two and three, most interviews were carried out in-person. In-person interviews were more personal and enabled open discussions. The choice of the venues for interviews was intuitive and respected privacy and the desire for a quiet conversation, comfort and convenience of the respondent. To maintain consistency across the interviews, questions were grouped into themes based on analytical terms. The interviews took 2.5 hours on average.

Elite interviewers formed phase one of the interviews. The term 'elite interview' broadly relates to power asymmetry and relative privilege between the interviewer and interviewee (Empson, 2018). For this research, the use of the term 'elite' is consistent with the descriptions provided by Scally *et al.,* (2021) who define an elite interviewee as a respondent in senior management, with functional responsibility in an area which enjoys high status, has considerable experience and influence in his/her area of work (Scally et al., 2021).

The elite interview requests were targeted at individuals in senior management positions drawn from international development, the public and private sectors, and international non-governmental organisations who have a good understanding of how their organisations shape the wider urban development decision-making space in Nairobi. This was principally to gain an in-depth understanding of how these elite organisations shape the pro-poor urban development decision-making and implementation space, and how they understand, interpret, and deploy such concepts as risk, risk creation, risk prevention and adaptation in Nairobi. Furthermore, the interviews sought to establish the usefulness of norms such as lobbying and trust in getting things done whose ideas, knowledge and evidence count regarding DRR & adaptation in the context of urban (re)development in Nairobi. There were moments of nuance when the respondents opened fully. To not interfere with these moments, some of these interviews were not recorded. The absence of recording cultivated an environment of trust, for informal, candid and rich conversations filled with deep reflections. The decision not to record some of the interviews was often made intuitively and not based on any rational judgment.

In phase two, interviews sought to understand the underlying dynamics that shape relationships and practices in project bound and everyday spaces of decision-making and implementation. It explores power and (dis)trust, and how they enable and or constrain relationships. Respondents were asked, inter alia, what their role in KISIP was, what their view of the city's urban development decision-making and implementation space was, how the decision-making and implementation structure of KISIP is – how the reporting lines are, the kind of accountability mechanisms inbuilt in the project and how such organizational forms contribute to the capacity for risk reduction. Further, they sought to establish what kind of relationships arise in response to the 'messiness' that arises when transplanted institutions are introduced in the extant institutional context, how the relationships form, how they, including informal practices create opportunities for more inclusive and sustainable outcomes, and the kind of risks inherent in such spaces.

In phase three, interviews sought to gauge the awareness of Mukuru residents of the SPA process and its ripple effects. Respondents were asked, inter alia, what the vision of Mukuru SPA was, how the vision and the plan challenged business as usual, how they addressed root causes of vulnerability and exposure to fires, flooding and water

stress, the intentionality of the processes for DRR, whether the SPA process inspired a change of institutional frameworks in support of inclusive pro-poor urban development beyond Mukuru, as well as associated physical interventions. It further sought to establish whether and if, the SPA process informed the development of new approaches for upgrading urban poor settlements, how multi-scale and cross-sector collaborations arising contributed to breaking administrative silos, and how Mukuru SPA process created opportunities to reframe understandings of flood risks, water stress and fires. The aim of the interviews was to identify transformative characteristics of the Mukuru SPA process and outcomes. See Appendix 3 for a detailed interview schedule.

4.6.1.3 Field Notes

Field notes were made in a field log to complement audio-taped interviews. This included observations such as change of tone and emotions when certain questions were asked. The notes were taken in a book and digitized at the end of each data collection day. Field notes allow the researcher to record impressions, environmental contexts, behaviours and nonverbal cues that may be missed out on in the audio-recording (Austin & Sutton, 2015). They were useful as a quick summary of the empirical data. They formed the first level of reflection at the end of the data collection day. This is in concurrence with the argument by Bhattacherjee (2012) that field notes are important for providing context to the interpretation of audio-taped data and can help remind the researcher of situational factors that may be important during data analysis (Ibid).

4.6.2 Transcription

The interviews were transcribed by the researcher. Words spoken in Kiswahili were then translated into English. In addition, handwritten field notes were typed out to complement the transcribed data. The interviews took the researcher around four months to manually transcribe from audio recordings into Word documents. Whilst this was a mundane and repetitive process, it was a vital part of the research process. It helped the researcher to immerse himself in the data and begin to draw out key themes alongside transcription. It is possible that the researcher would not have gained the same understanding had some of the various automated transcription software been used.

4.6.3 Data Analysis

The analysis is built from multiple sources of evidence, most significantly from the findings of interviews and documentary analysis. In the first phase of data collection, preliminary data analysis was performed simultaneously with data collection to ensure that the collected data is organized appropriately to obtain relevant information and arrive at a meaningful conclusion (Coffey & Atkinson, 2014). This was not so in the subsequent phases given the limited time. The researcher listened to audio recordings and read through the transcripts to look for patterns, themes and codes which provided the starting point for analysis.

Thematic analysis was used to analyse interviews. This involved reading through data to identify patterns in meanings across the data. Inductive coding was adopted to identify general themes and ideas that emerged as the researcher read through the data, drew patterns, and related themes. Both NVIVO and manual qualitative data analysis were applied in the coding, drawing patterns, and related themes.

The analytical work was iterative. Memos were written and notes were kept. The first stage of analysis was during transcription. Analytical notes were written simultaneously with transcription. The notes were written in a different colour for legibility. Upon finalizing transcription, interview summaries were reviewed for identification of preliminary codes and emerging themes.

The second stage of analysis involved the use of NVIVO. The NVIVO-aided analysis started out with some pre-set codes based on the analytical frame. Inductive coding was adopted to identify general themes and ideas that emerged as the data was read through. Coding began with specific descriptive categories which are subsequently collapsed into broader categories (Palys & Atchison, 2014). These were then categorized into themes.

Manual data analysis was preferred. This is partly because of the researcher's limited experience using NVIVO. This meant that data analysis took longer than originally anticipated. It is also partly because manual data analysis allows the researcher to be more involved in the analysis, to get closer to the data, enabling drawing of metaphors and making it easy to capture emergent ideas and themes. The manual method of analysis involved using colour codes to draw linkages between emerging themes.

4.7 Triangulation

Triangulation was a critical aspect in this study. It is understood as the combination of different methodologies or data sources in the study of the same phenomenon to achieve a nuanced understanding of a phenomena (Patton, 2015). It can also be used to test validity through the convergence of information from different sources (Fielding & Fielding, 2008). There are four forms of triangulation: methodological triangulation where different methods are applied to the same subject of inquiry, theoretical triangulation where the same issue is interpreted from different theoretical perspectives, data triangulation where multiple sources of data sources are used, and investigator triangulation where multiple researchers are studying the same problem (Patton, 2014; Fielding & Fielding, 2008; Eldh, *et al.*, 2020).

This research focused on three forms of triangulation: theoretical, data and methodological triangulation. Theoretical frame drew upon literature on institutionalism, institutional bricolage, shadow systems and transformation to address the research questions. Methodological and data triangulation were used across the entire study. The primary data collection methods (document analysis and in-depth, semi-structured interviews) were supplemented by data from field notes to provide an in-depth picture of the empirical cases (Creswell & Clark, 2022), providing an element of nuance. To address the first research question, for instance, in-depth, semi-structured elite interviews were preceded by an immersive document analysis. Elite interviews were used to corroborate the findings of document analysis. The interviews confirmed, and to a certain extent, sharpened the data obtained from document analysis. For instance, it was not possible to fully understand the diminishing role of urban planning in city visioning from data arising from document analysis. This was discussed in great depth during the interviews. Additionally, the focus of the NIUPLAN on elite-oriented infrastructure at the expense of the urban poor was confirmed during the interviews.

This dual approach was used to get a more vivid picture of 'who decides who decides' in the pro-poor urban development decision-making and implementation space in Nairobi. It was also used as a strategy to reduce the risk of researcher bias and enhance the credibility of the study. The use of

these multiple methods ensured that the explanation of the causal mechanism could be counted on as being solid in the context.

4.8 Data Management

The documentation and recordings from the interviews were transcribed with no names or identifying information. They were then coded, cleaned and reviewed against the original audio to examine the overall quality of each interview and assess the extent to which they responded to the research objectives. The documentation, recordings from the interviews and resultant transcripts were entirely anonymized and personally identifiable information (PII) was removed from the dataset so that respondents cannot be identified. The interview recordings and transcripts were each assigned unique and corresponding codes. The codes are based on a combination of numbers and letters. For example: Respondent 1 becomes RP1, and Respondent 2 becomes RP2. In rare cases there were joint interviews, as in cases where colleagues wanted to contribute together, letters were added to identify the individual voices. For example: there were RP3a and RP3b. See Appendix 7 for the full list of respondents and corresponding codes. These codes are used in direct quotations and reporting in the empirical chapters.

All data was stored in a secure UCL OneDrive folder only accessible to the researcher. These will be destroyed one year after submission of the thesis. Throughout the data management process, confidentiality, protection of human subjects, data sharing, storage and ownership is considered pertinent to the data management strategy.

4.9 Ethics and Ethical Consideration

Most research studies involve collecting information from people, about people (Creswell & Poth, 2018, 2022), and this is no different. Ethics and ethical issues were therefore actively anticipated and considered. These include beneficence, informed consent, respect, safety of participants, confidentiality, data protection (Creswell & Clark, 2022; Creswell & Poth, 2022; Hilton et al., 2019; Lahman, 2018) and structural marginalisation.

The issue of beneficence is substantially covered in the problem definition and impact of the study. The study responds to the call by Punch for research to address problems that not only benefit researchers but also the communities being studied and be

meaningful to others as well (Punch, 2015). The core of this study is at the interface of urban development, risk and social vulnerability. One of the spinoffs that the study hopes to yield is a policy brief to be shared with policy makers and respondents. Hopefully, this will spark a healthy debate on urban development decision-making, help rethinking the risk-development nexus as well as influence a paradigm shift in the way in which urban development is approached in Nairobi and other secondary cities across Kenya to break cycles of disaster risk creation.

There are a few other ethical issues that this research was susceptible to and could perpetuate. The first is structural marginalisation. Structural marginalisation occurs when a group of people are pushed to the periphery of a society. Many of the urban poor, and especially women and youth do not get their voices heard in urban development decision-making, and research can reinforce this. It is a possible consequence of contacting participants through gatekeepers such as village elders who carefully choose who talks, who doesn't and possibly what they say. To guard against structural marginalization and disempowerment, the researcher used his knowledge of the urban development action space and snowballing to recruit participants. The researcher kept track of respondents to ensure that diversity of actors was achieved.

The second ethical consideration was informed consent. Creswell (2022) points out that deception occurs when the respondent understands one thing while the researcher means the other. To guard against deception, information about the study was clearly conveyed to potential participants. Potential participants were sent a letter of invitation to participate in the research. Once they expressed their interest in participating, the information sheet together with a consent form were sent to them for their perusal. The information sheet clearly outlined the purpose of the study, targeted participants, potential benefits of participating in the study as well as risks and mitigation measures.

During interviews, the researcher reintroduced the project, explaining what it was about, expectations including voice recording, the intended use of the data as well as the risks and mitigation measures. The researcher explained that the data would be anonymized in the research outputs. Respondents were also informed that they were free to withdraw from the research if they did not feel comfortable and that they could

do so up to 30 days after their interview. Upon explaining this to them, they were then asked to sign the consent form before proceeding. In addition, a mix of Kiswahili and English was used for interviewing community-level actors. The materials were translated into English after transcribing. Where a quotation is made in Kiswahili, translation is provided, and the original writing is italicised and included in brackets. The researcher is multi-lingual. This made translation possible and easy.

The third ethical consideration was confidentiality and anonymity. There was the possibility that the interviewees would raise issues on sensitive or controversial topics that may have implications for their organisations, and themselves from a professional perspective. To reduce the likelihood of harm occurring, all data was anonymised to protect confidentiality, and all recordings were securely destroyed. Importantly, all participants were fully informed of the risks before they consented to participate in the study. Participants were also advised that if they felt that any topics may cause any reputational or professional consequences, they did not have to discuss the topics. Respondents were also informed that they are free to withdraw from the research at any given stage up to 30 days after the interview, and that all data associated with them would be withdrawn from the study and securely destroyed.

The other issue considered was misuse of direct quotation. Research ethics require researchers to refrain from using catchy phrases. This is because they provide neither in-depth focus nor validation (Silverman, 2014). Rather, quotations should be applied in a way that shows respect to respondents, reliability and maintaining respondents' confidentiality (Eldh, et al., 2020). Thus, in the empirical chapters, reasons why specific quotations are used are provided in the text. This includes direct quotation from documents and from interviews. As discussed in section 4.8, codes are used in direct quotations and reporting in the empirical chapters. These are for example: RP1, RP2, RP3a and RP3b. See Appendix 7 for the full list of respondents and corresponding codes.

4.10 Limitations

The methodology presented a few limitations. The limitations primarily arose from the selection of the sample frame. In the first research question, the choice of actors with formal policy responsibility downplayed the voices of the city-level and community-

level actors in visioning urban futures. Nonetheless, this question intended to understand how discourse and frames trickle down to policy and practice.

In the second research question, the limited focus on the two decision-making and implementation sites downplays the richness of different decision-making and action spaces that contribute to Nairobi's urbanity. Other sites such as sites of resistance where negotiations, contestations and co-production take place are missed. However, the focus of this question was to understand how top-down discourses are received at the city level - whether city-level actors push back against received visions and priorities or whether they collaborate, and with what implications for agency and capacity for breaking cycles of risk creation.

In the third research question, the sample frame constrained the topics raised. While it provided an in-depth understanding of the meanings and interpretations of transformation through the lens of the community, it fell short of providing a holistic view of transformation. Community members were not best placed to tackle the questions of transferability and scalability of Mukuru SPA process beyond Mukuru. This is partly because they do not have the aerial perspective which city-level and national-level policy actors may have. This would have been best discussed by city-level policy actors instead of community-level actors. However, the intent behind the selection of the type of respondents was to surface community viewpoints and to enable an understanding of transformation through their eyes.

4.11 Challenges

A central challenge experienced in this research journey was the disruption of data collection for a period of six months from October 2022 – March 2023. This was caused by UCL's decline to recognise the ethics clearance granted by King's College London. The researcher transferred from KCL to UCL at the start of the third year. KCL had already granted ethics clearance for the collection of empirical data. However, the UCL ethics committee declined to recognize the approval, insisting on seeking ethics clearance anew. This halted the collection of empirical data.

The researcher pursued exemption of the study from being subjected to new ethics clearance in line with the advisory on the UCL Research Ethics Committee (REC) webpage which outlines circumstances under which research can be exempt from

REC approval. However, the researcher was advised to apply for Low-Risk ethics clearance. The application process was iterative and took three months. Ethics clearance was finally granted on 27/3/2023 and empirical data collection resumed in April 2023. This disruption set back the tempo of the research and had ramifications on the PhD timeline and completion date. Six crucial months had been lost and the studentship had ended. How to survive post-studentship was a major concern for the researcher. To alleviate the challenge, RDR extended the scholarship by five months. The researcher also decided to move back from London to Nairobi to save costs. Alleviation of the situation notwithstanding, time lost could not be recovered.

4.12 Conclusion

The research design and methods deployed herein were appropriate for the study. They enabled the investigation of the different analytical objects which would not be possible singularly through any of the five conventional approaches provided by Creswell (2022). Phasing of data collection was also appropriate as learnings from the first two research questions shed light on how Nairobi's urbanism arises, how it is enabled and constrained by institutions, and how actors navigate these constraints. These are useful for understanding the not-so-obvious dynamics that underlie African urbanism. However, there are also limitations encountered during the research process. These included limitations introduced by the choice of study sites and the sample frame. While the study acknowledges this reality, it is also noteworthy that the sites provided enough scope to interrogate the objects of analysis. The gap arising due to a lack of viewpoints of multiple institutional actors, opens an opportunity for future research. This would provide a holistic view of transformative practices. Investigating factors that enable urban transformation from various actor perspectives would make a valuable and intriguing area for future research. This research provides promising starting points for such an investigation. It updates the characteristics of transformation developed by Scolobig *et al.* (2018), adapting it to the urban and Nairobi contexts.

Away from methodological challenges, field experience presented both pleasant surprises and unique challenges. Experiencing the materialities attributed to some of the processes investigated in the study and meeting some of the actors and bricoleurs directly involved in decision-making and implementation enriched the research

experience. Additionally, there was a difference between in-person and virtual interviews. The virtual environment had an element of distance between the researcher and interviewees. On the other hand, in-person interviews presented a closeness between them.

Last, the choice of three diverse study sites provided diversity and richness, allowing for in-depth interrogation of the analytical objects. They also provided good points of departure for engagement with diverse voices and elucidating different institutional arrangements and practices. For instance, focusing on the different sites of decision-making and implementation resulted in the discernment of relationships, institutional arrangements and practices inherent in city visioning, localization efforts and materialities some of which may have been missed but proved important for a more holistic understanding of different pathways to getting things done.

5.0 Nairobi's Co-evolving Urbanism and Riskscapes

5.1 Introduction

This chapter is dedicated to discussing the context in which this study is carried out. It considers the history of Nairobi city to set the context for the rest of the thesis. Specifically, it explores the historicity of Nairobi's urbanism, institutions, and actors, which characterise the urbanity and risk profile of Nairobi today. It presents the general aspects of the city's geography, its urbanism and urban change, and the omnipresence of flooding and water stress, as well as the planning legacy and how this has shaped the city's urbanity. Additionally, it explores the city's inequalities and riskscapes, as well as the administrative and urban development decision-making landscape. The chapter surfaces the root causes and drivers of disaster risk creation, surfacing failures of foresight leading to disaster risk creation.

5.2 Geographies of Nairobi City

Nairobi is the capital and the largest city in Kenya. It is the pulse of Kenya, but its horizon is far greater. Also considered as Africa's innovation capital, it is one of the continent's key financial, business, transport, communications and diplomatic hubs, and a gateway to East and Central Africa. The city is home to the only United Nations headquarters in the global south. It is in the southern hinterland of Kenya, on the eastern flank of the Rift Valley, on an inclined plateau near Athi River, extending to Ngong Hills to the southwest and Kikuyu escarpment to the West. It lies at a varying altitude of 1600-1850m above sea level (Mitullah, 2003; Rader, 1966), latitude 36 degrees 50' east and longitude 1 degree 17' south, about 140 kilometres south of the equator (Olima, 2001).

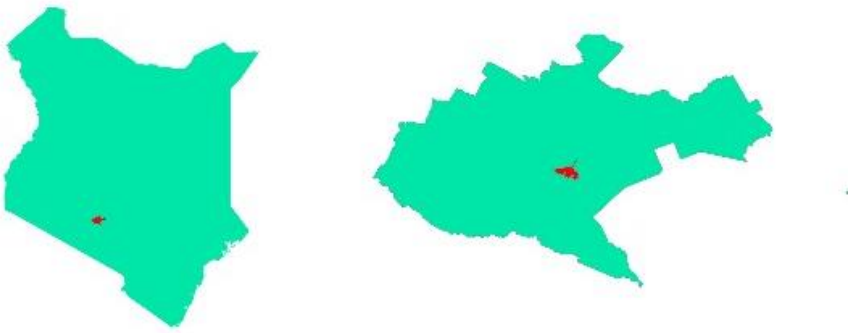

Figure 11: To the left is the map of Kenya and to the right is the map of Nairobi. Source: Author, 2024

The city's climate is a temperate tropical climate with cool evenings and distinctively cold mornings in the June-August period (Ogot & Ogot, 2020; Sverdlik, 2021). It has three seasons: the dry season, the wet season and the cold season. There are two wet seasons: March–May (long rains) and October–December (short rains), which bring about floods. The city has a population of 4.39 million (KNBS, 2019) and a growth rate of 4.1% per annum (UN DESA, 2016). It is by far the smallest, spatially, of the 47 counties, yet the most important economically, administratively and politically. It is divided into 17 sub-counties and 81 wards. Wards are the smallest devolved unit of democratic governance in the country. The present administrative boundary covers an area of 696 square kilometres, expanding from 3.84 square kilometres in 1910 (Owuor & Mbatia, 2008). The city is traversed by three main rivers: Nairobi, Ngong and Mathare rivers. Other smaller tributaries include Gitathuru, Ruaraka, Mbagathi, Kamiti, Kasarani, Mutuari and Riara.

5.2.1 Historicity of Modern-day Nairobi

5.2.1.1 Pre-Colonial Nairobi: Enkare Nyrobi

Historicity of Nairobi transcends modern urbanism and predates the Kenya Uganda Railways (KUR) (Muthuma, 2013). The name Nairobi comes from a Maasai phrase, *Enkare Nyrobi*, which loosely translates to a place of cool waters (Ogot & Ogot, 2020; Owuor & Mbatia, 2008; Sindi, 2024). The place was a wetland with sparse settlements (Muthuma, 2013; Owuor & Mbatia, 2008; Sindi, 2024). The principal pull factors of *Enkare Nyrobi* were water and pasture (Owuor & Mbatia, 2008). This made it a focal point for the Agikuyu and Maasai communities, which used it as a place to graze and refresh their livestock. As the two tribes exploited the natural resources in the area, they also interacted through barter trade, exchanging grain, jewellery, pottery and iron products (Owuor & Mbatia, 2008; Muthuma, 2013).

Enkare Nyrobi's pre-colonial urbanity does not fit the northern (or Western) concepts of urbanism, which are often anchored in built-up density, centralized infrastructure, and linear historical progression (Chirikure, 2020; Smith, 2006). Northern urbanism concepts consider urban areas as central places characterised by functional specialisation and populated by socially heterogeneous groups (Chirikure, 2020). Consequently, urban areas are considered aggregates of political, social, cultural, religious, economic, environmental, and other services and amenities (Chirikure,

2020; Smith, 2006). They emphasise permanence, formalised urban centres, structured city planning, individual property ownership, and industrial growth. On the other hand, *Enkare Nyrobi's* pre-colonial urbanism was characterised by nomadic and pastoralist lifestyles, flexible land use, communal governance, and strong environmental adaptability (Muthuma, 2013; Lado, 1993). Settlement patterns were fluid and seasonal, with temporary encampments instead of permanent urban infrastructure (Owuor & Mbatia, 2008; Muthuma, 2013; Ogot & Ogot, 2020). The indigenous Maasai land-use systems around *Enkare Nyrobi* were based on pastoralism and complex grazing and natural resource management systems (Lamprey, 1975; Lado, 1993; Owuor & Mbatia, 2008; Muthuma, 2013; Ogot & Ogot, 2020). Land use was flexible and adjusted according to ecological needs, such as the availability of water and pasture (Lado, 1993; Mwangi & Ostrom, 2009). This contrasts sharply with northern concepts of urbanism, which equate urbanity with fixed architecture, gridded streets, or bureaucratic governance, and where urban centres developed around industrialisation, trade and governance associated with the capitalist mode of production and have a more static and predictable approach to land use planning. This can be partly attributed to the hegemonic approach of the colonial administration, which ignored ethnogeographic knowledge and the physical nature of the environment (Muthuma, 2013; Lado, 1993).

It was a place where the functions of a trading centre were performed. There was a market for the exchange of goods (Owuor & Mbatia, 2008; Muthuma, 2013; Ogot & Ogot, 2020). According to Ogot and Ogot (2020), the Maasai and the Agikuyu communities traded with the Swahili and Arab caravans from the Coast, and later with those employed by the Imperial British East Africa Company (IBEAC). The Agikuyu brought maize, beans and potatoes to the market while the Maasai came with goats and cows (Ibid). However, there were few, if any, permanent structures (Ogot & Ogot, 2020; Owuor & Mbatia, 2008). The area had vast land with no apparent permanent settlements. Occasionally, the nomadic Maasai would build their *Manyattas* (cow dung huts) on the higher grounds (Emig & Ismail, 1980; Owuor & Mbatia, 2008). *Enkare Nyrobi* was a place of comings and goings, of temporariness. This description mirrors that of small trading centres in villages across Kenya's hinterland, where traders meet to exchange goods on set days and at set times. This study reaffirms the argument by Owuor and Mbatia (2008) that *Enkare Nyrobi's* urbanism and urbanisation predate

colonial times. Based on the economic and socio-cultural functions it performed spatially and its temporariness, pre-colonial urbanity (the everyday social, economic and political production of space and urban life) and urbanism had different expressions. Its pattern of pre-colonial urbanity was not in the Western concept of towns, as might be expected, but it was a place where the functions of a town were carried out.

The erasure of these indigenous spatial logics began with the British colonial appropriation of land in and around *Enkare Nyrobi* and the establishment of a railway depot and administrative capital in the early 20th century, which introduced a modernist planning system based on European standards. The name *Enkare Nyrobi* was anglicised, changing it to Nairobi (Muthuma, 2013). This disjuncture between colonial and indigenous spatial imaginaries laid the groundwork for ongoing tensions in Nairobi's post-colonial urban development planning.

5.2.1.2 Colonial Nairobi

The history of modern-day Nairobi began by chance in June 1899 as a railway depot and camp for the construction of the Kenya Uganda Railway (Ogot & Ogot, 2020; Kirimi, 2024; Olima, 2001). As discussed in the section 5.2.1.1, from the outset, the city's formal planning process did not recognise the dynamics, wisdom and needs represented by indigenous cultural and land administration practices. This made informality a structural feature in Nairobi's urbanism (Anyamba, 2011). The expropriation of land during the establishment of Nairobi, for instance, did not take into consideration the rights of the natives and their use of the land. The crown assumed ownership of the land and responsibility for both land administration and land use planning (Oyugi & Owiti, 2007). This led to the formation of the first squatter settlements, setting in motion informal urbanism, spatial injustice, social vulnerability and systematic deprivation in the city. Informal settlements became a prominent feature in colonial Nairobi. They remain a wicked problem deeply rooted in the land question, spatial injustice, poor governance, corruption and clientelist politics (Mwau & Sverdlik, 2020).

The choice of the site for the construction of the railway depot and workshops is attributed to its geographical advantages including availability of adequate water, ample level land for railway tracts, sidings and quarters, and an ostensibly 'deserted

land free for appropriation' (Ogot & Ogot, 2020; Syombua, 2021; Kirimi, 2024;). Railroad engineers saw it as the most suitable location to build yards and workshops before tackling the unforgiving topography across the Kikuyu escarpment and the drop into the Great Rift Valley (Rader, 1966; Ogot & Ogot, 2020). Its altitude made it even more appealing for white settlers because it guaranteed cool temperatures void of tropical diseases like Malaria. It is also situated nearly midway between the Indian Ocean and Lake Victoria, at 327 miles west of the Indian Ocean and 257 miles east of Lake Victoria (Ogot & Ogot, 2020). These two reasons made it appealing as an administrative and residential location for white settlers (Kirimi, 2024; Owuor & Mbatia, 2008).

In 1900, the headquarters of the Kenya Uganda Railway was moved from Mombasa to Nairobi (Ogot & Ogot, 2020; Olima, 2001; Mitullah, 2003). This marked the beginning of the evolution of Nairobi as an administrative centre (Achola, 2002; S. Owuor & Mbatia, 2008). In addition to the relocation of the KUR headquarters from Mombasa to Nairobi, the shift of the provincial offices from Masaku (present-day Machakos) to Nairobi affirmed the idea of Nairobi as an administrative and commercial centre for the protectorate (Owuor & Mbatia, 2008). In 1905, Nairobi replaced Mombasa as the capital of the British East African Protectorate (Owuor & Mbatia, 2008; Olima, 2001).

However, the decision to build the railway town at *Enkare Nyrobi* seemingly did not involve any proper assessment of the site (Kamau, 2013, 2015). Concerns about the suitability of the site as the administrative and commercial hub for the colony were raised right from the start of the 20th century. Granted its swampy nature, public health officers warned that the town was exposed to a myriad of public health concerns (Campbell, 2005; Kamau, 2013). Shortly after its birth, the swampy conditions triggered the breakout of a plague in 1901(Aganga, 2024). Medical officers encouraged Charles Elliot, the then Commissioner for the Protectorate, to appeal to London to relocate the town to a more solid ground (Campbell, 2005). Elliot wrote to Sir Winston Churchill, then Colonial Secretary. His letter read in part:

> *"Doctors are unanimous in condemning this site. They pointed out that it was a depression with a very thin layer of soil and the decomposition of animal matter was abnormally slow. It should be removed."*

However, as discussed by Kamau (2013), lethargy and bureaucracy maintained the status quo. Relocation of the town to higher grounds was ruled out on cost grounds. The move was argued to be too expensive. Instead, draining the central area was preferred. This was partly because the city was not expected to grow (Kamau 2013).

In 1906, Sir James Hayes Sadler, who succeeded Sir Charles Elliot as the Commissioner for the Protectorate, wrote yet another letter to Churchill. In his letter, he complained about the emergence of Kenya's capital. He expressed inter alia, that the site selected for the establishment of the railway town by Kenya Uganda Railways (KUR) lacked adequate drainage, lay in a depression with a thin layer of soil or rock and was water-logged for most of the year. Reflecting on the position taken earlier by his predecessor, Sir Charles Elliot, he argued that this was a critical point in the history of Nairobi (Kamau, 2013). The letter read in part:

> *"...at the commencement of the 1902 plague...the then-commissioner, Sir Charles Elliot, was strongly of the opinion that the site, which had been selected three years before by the manager of the Uganda Railway without consulting medical or sanitary authorities, was, with its inadequate drainage, unsuitable for a large and growing population. [It is a] depression with a very thin layer of soil or rock. The soil was water-logged during the greater part of the year."*

Winston Churchill responded, in what is arguably the decision that sealed the fate of Nairobi and its co-evolving urbanism, exposure and vulnerability to water stress and flooding. Citing a lack of foresightful planning, he wrote:

> *"It is now too late to change, and thus lack of foresight and of a comprehensive view leaves its permanent imprint upon the countenance of a new country."* ~ Sir Winston Churchill, 1908

Following the adamance of the colonial office and the attitude of the Kenya Uganda Railways towards the proposal to relocate the town, Sadler gave up his push for the relocation, instead focusing on improving the town's risk-reducing infrastructure and addressing the concerns that Eliot had raised. Acknowledging the missed opportunity to relocate Nairobi to a more suitable, higher ground as suggested by his predecessor, Saddler, he wrote:

> *"It is, I admit, too late to consider the question of moving the town from the plains to the higher position along the line some miles to the north. We had a chance in 1902, and I think it was a pity that we did not do so then as advocated by Sir Charles Elliot."*

If it were granted, the relocation of Nairobi would have been akin to the proverbial stitch in time. It would have saved the city from perennial flooding and concomitant vulnerability to environmental hazards like floods. This raises a series of questions. Why did the natives, the Maasai, not establish permanent settlements at *Enkare Nyrobi*? Might the railway engineers have selected a different site if they had considered the extant land use practices of the natives? What if the white settlers had taken an interest in understanding how *Enkare Nyrobi* was used and why? Additionally, how might the wisdom of the natives have shaped the adaptation of the town to flood risk and concomitant vulnerabilities? Whereas some of these questions are addressed herein, others are beyond the scope of this study.

The history of modern urbanism and urbanisation of *Enkare Nyrobi* from a wetland to a bustling metropolis can be likened to the process of institutional transplant (de Jong, 2013), transfer of policy concepts and institutions to a recipient institutional context (*like Enkare Nyrobi with its extant land use practices, belief systems and wisdom*) from other policy models promoted by 'outsiders' (like *Kenya Uganda Railway and the colonial administration*), and are subsequently implemented by outsiders in the recipient institutional context, which often marginalized natives and indigenous knowledges and practices. From the very beginning, the city's formal planning process did not recognise the dynamics, wisdom and needs represented by indigenous cultural and land administration practices. The expropriation of land during the establishment of Nairobi, for instance, did not take into consideration the rights of the natives and their use of the land. Additionally, the choice of the site of the town and subsequent decisions which shaped the city did not take cognizant of the vulnerabilities posed to the city and its residents.

Early urban development planning and decision-making in Nairobi focused on accommodating the interests of the Kenya Uganda Railway and white settlers more generally. This was at the expense of the disaster risks and associated vulnerabilities the site portends. The vulnerability of the natives, who constituted the low-income and

the urban poor, was of even lesser concern. This stance and bias in favour of economic imperatives set the city on a path of disaster risk creation from the outset.

Disregard for long-term public health considerations for the urban poor set the town on an enduring path of segregation, segmentation and stark inequalities (Campbell, 2005). Segregation and segmentation influenced spatial planning, the allocation of resources and the development of risk-reducing infrastructure and services (Ogot & Ogot, 2020; Owuor and Mbatia, 2008; Campbell, 2005; Olima, 2001), establishing an enduring influence on the distribution of flood risk and water stress across the urban divide. Between 1932 and 1947, the then municipal council spent just a meagre 1-2% of its revenue on risk-reducing infrastructure and services for neighbourhoods where Africans lived (Campbell, 2005). Most of the revenue went towards servicing the white suburban areas (providing risk-reducing infrastructure and services such as roads, water, public lighting and sanitary services), a trend that continues to date.

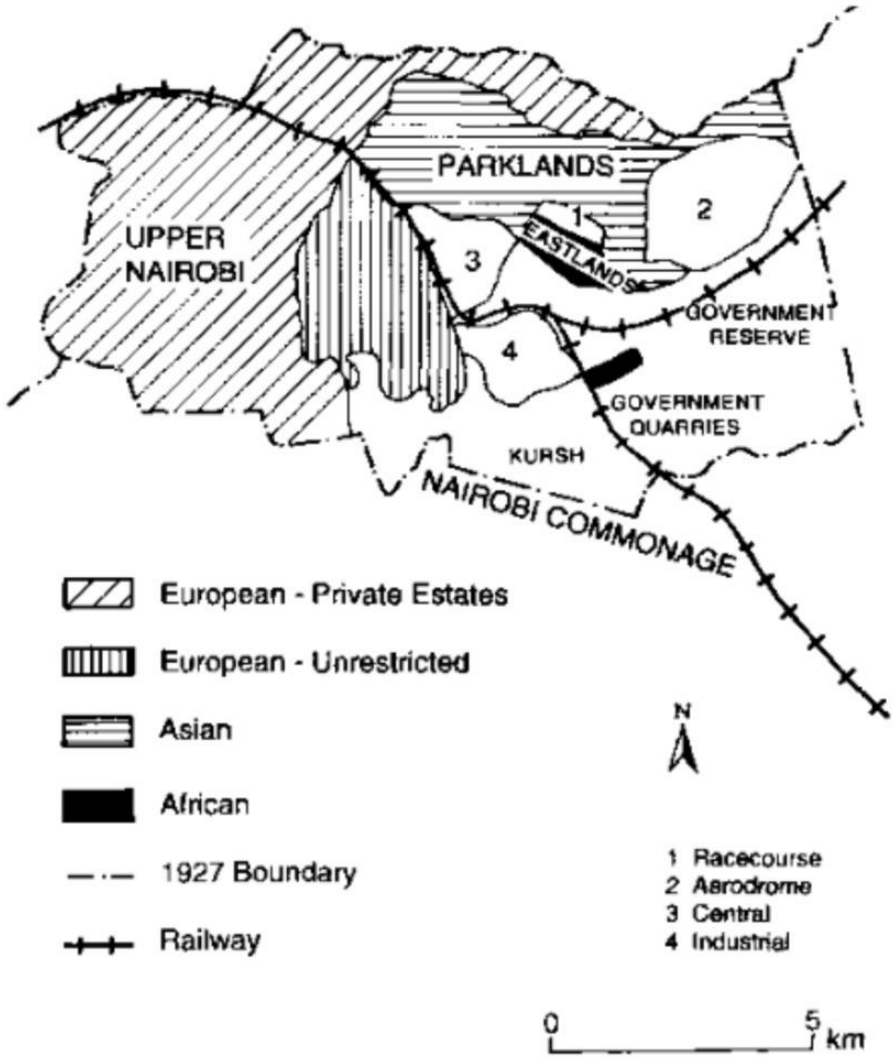

Figure 12: 1909 segregation of urban areas in Nairobi. Image © Mazingira Institute

The same pattern is evident in the city's visioning and development planning. Thorton White's 1948 master plan demonstrates this. The plan established a spatial hierarchy that racially segregated the city into European, Asian, and African zones (Anderson, 2002). It designated 13% of the residential districts to Africans, 25% to Asians and the remaining 62% to Europeans, against Nairobi's demographic composition of 60% Africans, 30% Asians and only 10% Europeans (Ogot & Ogot, 2020). It emphasised zoning, infrastructure development for elite areas, and the marginalisation of indigenous African populations. The African residential areas were in flat, flood-prone areas. Those who were not planned for, the urban poor, were pushed to marginal areas located along the city's river networks and prone to floods (Crosson, 2023; Ouma, 2024). These characteristics of a city stratified and segmented socio-economically remain salient in the 21st century Nairobi. The result is a pattern of

spatially and socio-economically segmented disaster risk, with the urban poor disproportionately exposed and vulnerable. Formerly ‘white quotas’ are exclusive neighbourhoods for the elites (Ogot & Ogot, 2020).

5.2.1.3 Post-Independence Nairobi

At independence, the Nairobi City Council was in good financial health. It used to be a relatively autonomous local government with its systems, including a revenue collection system and a public works system. This allowed the council to bridge the infrastructure and service deficit in the predominantly African residential areas (Ogot & Ogot, 2020). It included expanding piped water, street lighting, telecommunications, parks and gardens, municipal sewerage, electricity, construction of schools and tarmacking of most roads in the Eastlands part of the city. In the 1970s, City Hall started experiencing governance challenges. Council members were corrupt and became preoccupied with jobs, contracts, licenses and tenders, and interference with technical staff (Ogot & Ogot, 2020; Werlin, 2006). Mismanagement led to the departure of qualified staff and deterioration in the quality of services (Ogot & Ogot, 2020). An equally big challenge was interference by the central government and its quest to control the governance of the city. Combined, these inhibited the implementation of the spatial development vision for the city, a problem that persists to date.

The first attempt at shaping Nairobi’s urban futures through a coordinated spatial development framework in the postcolonial era came through the Metropolitan Growth Strategy of 1973, which was meant to guide development until 2000. It largely retained the spatial logic of the 1948 plan (Obudho & Aduwo, 1992), albeit with intentions to manage Nairobi’s rapid population growth through new housing and decentralisation strategies. However, this plan was never fully implemented. These ambitions were undermined by political inertia, limited funding, widespread corruption, governance pitfalls, weak institutional coordination, and inadequate capacity within the Nairobi City County Government to implement the plan.

In the aftermath of the failed implementation of the Nairobi Metropolitan Growth Strategy, Nairobi's planning approach during the 1970s and 1980s shifted toward sectoral planning. This mode of planning broke down comprehensive urban development into thematic or functional sectors such as housing, transport, health,

education, and water, managed by individual ministries or parastatal agencies (Omenya, 2020). While sectoral planning allowed some responsiveness to urgent service delivery needs, it entrenched fragmentation. Lack of coordination among sectors meant that planning decisions were rarely harmonised spatially or institutionally, often resulting in infrastructure and service provision that reinforced spatial inequality and duplicated efforts. This period coincided with the era of structural adjustment programmes.

The advent of structural adjustment programmes had an impact on every aspect of Nairobi's urbanism. Cuts in public funding and deregulation of various sectors catalysed informality across sectors. In the urban planning and housing sectors, emphasis was placed on 'enablement' and democratic governance (Burgess, et al., 1997). The implementation of these new approaches was done in tandem with the gradual phasing out of strict building and land use regulations, reducing the role of the government to gatekeeping (Mwau & Sverdlik, 2020). The structural adjustment programmes took power from the government and put it in the hands of both the private sector and the civil society (Buckley & Kalarickal, 2006). External donors were increasingly involved in sector-specific projects, further exacerbating siloed implementation. The role of the government changed from an agent delivering development to a bystander that enables development to be provided by others (Ogot & Ogot, 2020; Mwau & Sverdlik, 2020). This catalysed informality. Formal settlements were gradually informalized. Settlements and buildings began to be altered through extensions and alterations without approval from the then Nairobi City Council (Mwau, et al., 2020; M & Musungu, 2010; Mwaniki, et al., 2015). This period also saw the proliferation of informal settlements as state capacity to provide housing waned, and planning institutions were increasingly bypassed or sidelined.

Urban poor settlements constitute just about 5% of Nairobi's residential area but are home to 60% of Nairobi residents (Njoroge et al., 2020; Sverdlik, 2021). This inequality is linked to segregationist urban planning and the misappropriation of land post-independence to the benefit of a few well-connected individuals (Ogot & Ogot, 2020). The breadth and depth of this misappropriation were exposed by the Ndung'u report, which revealed that over 200 thousand title deeds were issued irregularly through the intervention of the President, politicians and senior civil servants between 1963 and 2002 (Ndungu Commission, 2005). The main beneficiaries were senior civil servants,

politicians and well-connected businessmen (Klopp, 2000). The net effect is a highly unequal city where just ten percent of residents live in two-thirds of the land in the city, while over sixty percent of the residents live in urban poor settlements (UN-Habitat, 2016; African Population and Health Research Center (APHRC), 2014).

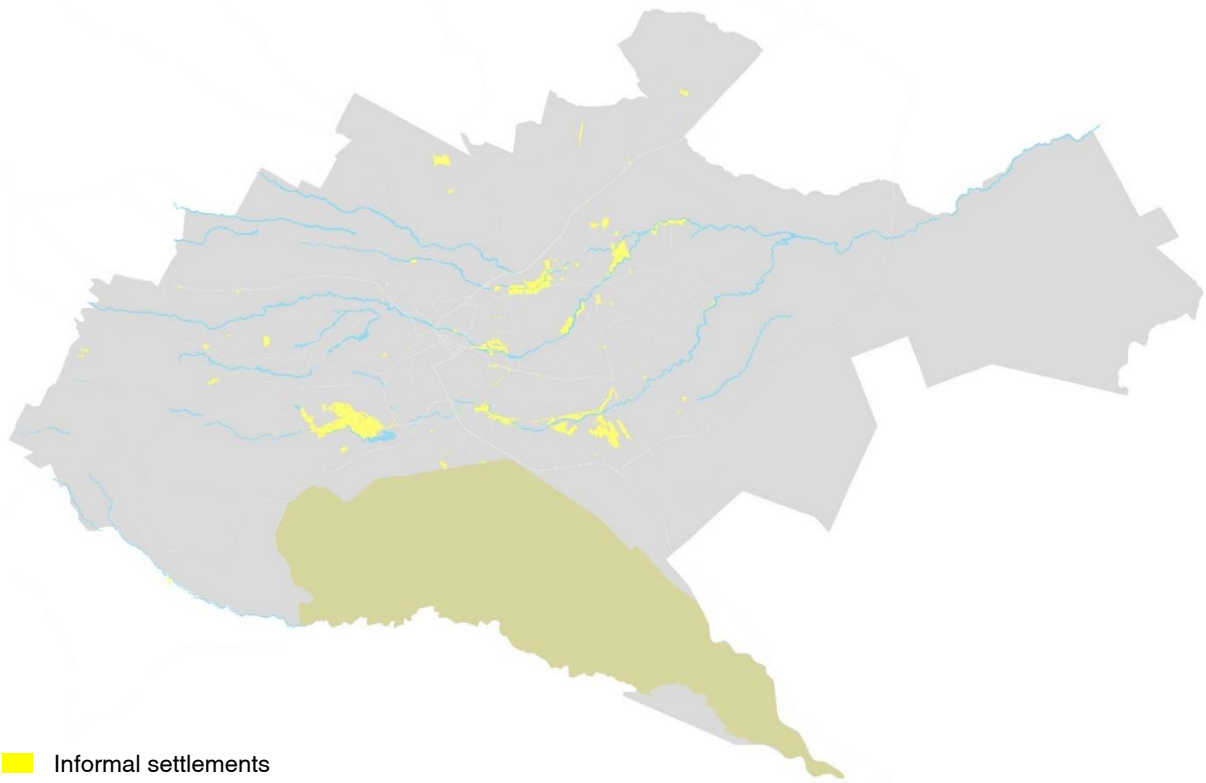

Figure 13: The above map shows the distribution of informal settlements in Nairobi City County Source: Author, 2024

The urban poor settlements are located in partly legal flood plains along the city's rivers and have deficient or non-existent risk-reducing infrastructure and services (Ouma, 2024). The settlements are not formally recognised by the government, a colonial legacy. As such, they are not included in the city county government's development planning frameworks (Ouma, 2024; Njoroge *et al.,* 2020). This makes it difficult for these settlements to benefit from the provision of risk-reducing infrastructure and services by the government. Their exposure based on their location, the lack of risk-reducing infrastructure and services, and concentrated poverty interact to heighten the social vulnerability of the communities living therein.

Figure 14: An urban poor settlement bordering Loresho, an affluent neighbourhood in Nairobi. Photo credits: Miller 2016

Figure 15: An image of the Royal Golf Course bordering the Kibera informal settlement. Image © Johnny Miller

Following decades of piecemeal development, a new development framework, the Nairobi Metro 2030 Strategy, was developed in 2008. This was part of Kenya's Vision 2030 development blueprint. As with its predecessor, it emphasised infrastructure investment, economic clustering, and connectivity, but largely prioritised pro-growth

over pro-poor concepts like vulnerability, equity or breaking cycles of risk creation. Finally, the Nairobi City County Government developed the Nairobi Integrated Urban Development Master Plan (NIUPLAN) with the support of JICA. NIUPLAN was the first integrated spatial and sectoral plan after decades of fragmented efforts, aiming to coordinate transport, land use, housing, environment, and infrastructure planning. It was launched in 2014. However, its implementation has faced challenges due to political capture, weak inter-agency coordination, disconnects between planning and budgeting processes, and the lack of enforcement mechanisms (Mwau & Sverdlik, 2020; Sverdlik et al., 2025).

5.3 Vulnerability of Nairobi

Studies establish that like in other peer cities in the region, urban disaster risks in Nairobi are everyday, chronic and associated with high vulnerability and low to moderate hazards (Pelling & Wisner, 2009; Zerbo, *et al.,* 2020; Fraser, *et al.*, 2017). It has an extensive urban risk spectrum including floods, fires, water scarcity, air pollution, building collapse and infectious diseases, which intersect with inadequate provision of risk-reducing infrastructure and services, especially in low-income neighbourhoods, inadequate, segmented urban planning and benign disregard for exposure of the city.

The focus of this study narrows to flooding and water stress, two enduring environmental risks in Nairobi. This twin hazard is compounded by irregular infill development, uncoordinated development of risk-reducing infrastructure and uncontrolled urban expansion encroaching on wetlands and green spaces. The subsections below provide an overview of flood risk and water stress situations in Nairobi.

5.3.1 Water Stress in Nairobi

Somehow contradictory is the fact that despite deriving its name from *Enkare Nyrobi*, which means a place of cool waters, Nairobi suffers from water stress, which is not a new problem for the city. It is, in fact historical, slow-setting and enduring disaster risk in the city (Mulwa et al., 2021). The rivers and swamps that marked *Enkare Nyrobi* sufficed for subsistence needs. Nonetheless, it became drastically scarce in the phase of competing domestic, industrial and commercial demands (Rader, 1966). This

occurred amid rapid unplanned urbanisation (Mulwa et al., 2021; Ochungo et al., 2019), watershed degradation and unsustainable land use change (Mulwa et al., 2021), overexploitation of water aquifers (Mumma et al., 2011; Oiro et al., 2020) and severe droughts. Water scarcity threatens lives, livelihoods, quality of life and biodiversity in the city (Odhiambo, 2023).

A review of the literature suggests that water scarcity in Nairobi has been a constant presence since the genesis of the modern urbanism of Nairobi. In 1899, the first water supply dam was constructed in the Chiromo area to supply water to the railway town (Akallah & Hård, 2020; Nyanchaga, 2016). Kikuyu Springs was tapped as the primary source of water for Nairobi in 1906 (Nyanchaga, 2016; Akallah & Hård; 2020). It remains one of Nairobi's main sources of water to this day (Ibid). In 1926, there was a severe drought and a series of fire events, which proved difficult to manage due to a lack of adequate water. Rader (1966) discusses that following these events, a weir was constructed on the Ruiru River to boost the supply of water. Severe drought struck again in 1945-46, 1975, 1977, 1980, 1983- 84, 1991-92, 1995-96, 1999-2000, 2004, 2009, 2011, 2017, 2020-2022 (Nyanchaga, 2016; Rader, 1966; UNEP, n.d.) and the city experienced severe water stress (Ibid). Strict rationing was introduced, and city taps were reduced to trickles. A few more dams were constructed, including the Ndakaini dam. These dams alleviated the problem but did not solve it (Ibid). In 2013, studies revealed that the city was experiencing a daily deficit of 130,000 cubic metres of water (NCCG & JICA, 2014). The northern collector corridor was proposed and is expected to alleviate the chronic water stress, albeit temporarily. In the context of climate change, it is imperative to appreciate that a strategy based on the expansion of supply to address the city's perennial water stress is simply unsustainable. It is clear that from the early days, disaster risk management in Nairobi was reactionary.

Water stress in Nairobi is compounded by climate change, rapid, unplanned land use change, and poor water scarcity risk management (Akallah & Hård; 2020). For instance, Nairobi has seen the rapid construction of high-rise buildings in ecologically sensitive zones (Kirui et al., 2022; Makunda C, 2018). Wetlands that were once roaring with life are now dry and barren as densification and sprawl intensify. News of drying wetlands, rivers and boreholes is no longer the exception but the norm (Odhiambo, 2023; Watson, 2017). In 2017, water levels at the city's main water reservoir fell to below 25 percent (Watson, 2017).

Figure 16: A photo of Manguo swamp next to Limuru town one of Nairobi's satellite towns in 2017. Photo credits: Jane Macharia/Mongabay

Figure 17: A photo of Manguo swamp taken in 2022. Photo credits: Calvin Rock Odhiambo/Mongabay

The increase in water scarcity has been directly proportional to the city's bulging population, densification, intensification, rapid, unsustainable land use change and unregulated groundwater abstraction. These are all functions of choices, actions and inaction. Property developers and industries are responding by digging their own wells and boreholes (Chakava *et al.,* 2014). According to some estimates, there are 3000 commercially run boreholes in Nairobi today (Akallah & Hård; 2020). These factors interact to alter the aquifer recharge system (Mulwa et al., 2021; Oiro et al., 2020), further lowering the water table (Mumma et al., 2011; Oiro et al., 2020) and exacerbating water stress. These are forms of maladaptation and point to urban development decision-making that is blind to water scarcity risk management. These particularities interact with an unstable climate to compound water scarcity in Nairobi (Government of Kenya, 2018; Mulwa et al., 2021; The World Bank Group, 2021).

5.3.2 Flooding in Nairobi

Floods, like water stress, constitute a perennial urban disaster risk in Nairobi (Owuor & Mwiturubani, 2021, 2022). Annually, floods result in the loss of lives and livelihoods, significant displacement of people, major disruptions to essential services such as

education, healthcare, and electricity, as well as the collapse of buildings and damage to critical infrastructure (Opere, 2013; Business Daily Africa, 2015; Kinyanjui, 2021; Kilavi et al., 2018; Mutwiri, 2019. A study by Kilavi et al. (2018) indicates that Kenya experienced 17 major flood events between 1964 and 2004 (Kilavi et al., 2018), with Nairobi being particularly affected. Notable flood events occurred in 1961, 1997–1998, 2006, 2012, 2018, 2019, 2020, 2022, and 2024 (FEWSNET et al., 2020; IFRC, 2021; Kilavi et al., 2018; Opere, 2013; Parry et al., 2012). The 1997–1998 flood event alone cost at least USD 870 million, equivalent to approximately 11 percent of the country's gross domestic product (Davis et al., 2009).

Nairobi is naturally susceptible to floods. The historicity of flooding in the city traces back to Enkare Nyrobi and the origins of modern urbanism in the city (Kamau, 2013, 2015; Sindi, 2024). The name Enkare Nyrobi refers to the swampy nature of the area. Ideally, Nairobi's history as a swamp should prompt the prioritisation of risk-sensitive urban development planning and decision-making. However, this historical context is largely forgotten, only recalled during intermittent flood events and by a few journalists and historians (Sindi, 2024). Many empirical studies have looked at various elements of the city's urbanism and concomitant risks, including inter alia, the impact of land use and land cover change on environmental quality (Oyugi et al, 2017), housing challenges (Mwaniki et al., 2015) planning mistakes (Opiyo, 2009); application of flood modelling and models (Randa et al., 2022) and the nexus between settlement planning and flooding (Owuor & Mwiturubani, 2022). While some studies have explored urban development and its implications for disaster risks, there has been limited in-depth, empirical research that specifically examines how urban development decision-making and action influence flood hazard and exposure in the city. Understanding this relationship is crucial as we consider Nairobi's adaptation strategies to extant and future disaster risks.

In recent years, Nairobi has experienced major flood events approximately every two years. Significant recent floods occurred during March–May 2018, October–December 2019, March–May 2020, and March–May 2024 (IFRC, 2021; Kilavi et al., 2018). The physical scars left by flood events are not only reminders of Nairobi's exposure to flooding, but also stark markers of the city's uneven vulnerability. They trace a

geography of inequality, where flood risks are disproportionately borne by the low-income and the urban poor living in poorly serviced and marginalised areas.

As discussed in the section 2.2.2, public officials view floods and flood-related disasters as both an act of God and a consequence of climate change. Yet, they are a product of public policy choices that favour the wealthy at the expense of the poor. This deflection of responsibility reinforces the status quo, where the most vulnerable bear the greatest burden for the vicious cycle of flood risk (Raju *et al.,* 2022). Recent flood-related disasters in Nairobi and the attendant demolition of urban poor settlements located along the rivers provide a case in point. Figure 3 shows urban poor settlements demolished to 'mitigate impacts of flooding,' whereas Figure 4 shows homes in one of the city's affluent neighbourhoods submerged by flood waters following the March-May 2024 rains. While the government argued that the decision to demolish buildings and structures located along the rivers was meant to reduce the risk of floods and landslides, the implementation of the decision solely targeted urban poor settlements. Affluent neighbourhoods, which were equally flooded and sit on riparian land, remain untouched (Wakhungu et al., 2024).

Figure 18: A photo showing eviction and demolition of urban poor settlements along Ngong River in Mukuru on 10th May 2024. Photo credit: Pascal Kipkemboi, KDI.

The recent flood events highlight a complex interplay of factors that exacerbate the impact of flooding in the city. These factors include rapid and unregulated land use changes (Owuor & Mwiturubani, 2021, 2022; Mulwa et al., 2021), changes in the biophysical and hydrological characteristics of the city (Abuje et al., 2020; M. O. Owuor & Mwiturubani, 2022; Randa et al., 2022), episodes of heavy rainfall (Kilavi et al., 2018), blockage of waterways (Randa et al., 2022), the city's geographic location on a swamp (Ogot & Ogot, 2020; Rader, 1966; Kirimi, 2024; Aganga, 2024; Kamau, 2013) and increased human settlements in floodplains (Juma et al., 2021). The rising population of people living in low-lying flood-prone areas will continue to raise the impact of flooding, and present new and challenging flood scenarios in the coming decades.

In Runda, one of Nairobi's wealthiest neighbourhoods, the construction of high-end developments and paved roads without adequate drainage infrastructure typify maladaptive practices. Encroachment on natural water channels and wetlands, which previously absorbed excess rainwater, has elevated flood risk (CNN & Larry Madowo, 2024; KTN News, 2024). In early 2024, unprecedented floods were witnessed in the estate. The floods are an outcome of a deluge coupled with greed, encroachment on wetlands and corruption. The floods have been blamed on unscrupulous individuals who are misappropriating and backfilling a nearby dam (CNN & Larry Madowo, 2024; KTN News, 2024). This is put into perspective by one of the residents interviewed by CNN, who opined: *"Someone is backfilling slowly by slowly, so the dam is becoming smaller and smaller and there is no outlet to release the excess water elsewhere*." Another resident corroborates this observation, arguing that *"this is happening because the dam currently doesn't have an outlet, it has been blocked by a private developer*." Nearby homes, roads and lower-lying areas bear the brunt of the floods. This example embodies the unethical behaviours identified by Lewis and Kelman (2012) as drivers of disaster risk creation and maladaptive practices that generate risk or allocate it for the urban poor.

Figure 19: A photo showing homes in Runda, one of Nairobi's affluent neighbourhoods flooded following March-May 2024 rains. Photo credit: Denis Mwangi / Pulse Kenya

Figure 20: A section of UN Avenue flooded following a deluge on May 5, 2024. Photo credits: Francis Nderitu | Nation Media Group

In sum, the physical scars left by recurrent flood events in Nairobi serve as more than just indicators of the city's exposure to hydrometeorological hazards. They are spatial manifestations of entrenched inequality, deeply-seated corruption and greed. These marks reveal how vulnerability to flooding is unevenly distributed across the city, disproportionately affecting low-income and the urban poor. In this sense, flood risk in

Nairobi is not merely a natural phenomenon but is shaped by socio-political processes that produce and reproduce risk.

5.4 Urban Development Decision-making in Nairobi: Institutions and Actors

Institutions and actors shape disaster risk creation, who is allocated risk, who gets served by risk-reducing infrastructure and services, and who gets evicted to pave the way for the implementation of DRR or adaptation actions (Collins, 2008; Collins, 2010; Ranganathan, 2015; Frick-Trzebitzky, 2017).

The city's urban development planning system remains disjointed and fragmented, marred with multiple institutional frameworks, overlapping and competing mandates, a multiplicity of actors and inadequate coordination (Kimani & Musungu, 2010; Mwaniki, *et al.,* 2015). It is at these interfaces that much bricolage takes place to navigate the complexities presented by bureaucracies and vested interests to blend and clear some of the discrepancies between 'the way things are designed to happen' and 'the way they happen in practice.' This is discussed in greater detail in the subsequent section.

5.4.1 Institutions

Post-colonial urban planning and development decision-making in Nairobi was characterised by highly centralised governance and weak organisational capacity at the local government level, with the national government wielding significant control over urban policy, planning, decision-making and implementation (Council of Governors, 2023; Onyango & Agong, 2018; World Bank, 2014). The Local Government Act (Cap. 265), adopted from the colonial government, guided urban planning. Cities, municipalities, county councils, town councils, and urban councils operated under limited authority and oversight from the national government through the then Ministry of Local Government (Council of Governors, 2023; Onyango & Agong, 2018; Tostensen & Scott, 1987). Urban development planning and decision-making processes were top-down, lacking meaningful public participation and foresight. Centralised decision-making, bureaucratic inefficiencies, and discordant local and national planning made it difficult for the effective implementation of programmes at the local level (Council of Governors, 2023; Tostensen & Scott, 1987).

Coupled with corruption and poor enforcement of planning regulations, the city expanded with little formal planning or state intervention, leading to haphazard development and environmental degradation (Ogot & Ogot, 2020; Werlin, 2006). Disaster risk creation outpaced and continues to outpace disaster risk reduction measures. These dynamics have deeply shaped Nairobi's urbanity, leading to a city characterised by extreme socio-economic disparities, fragmented urban form and uneven vulnerabilities.

The Constitution of Kenya 2010 ushered in a new approach to urban development planning and decision-making that recognises the role of urban planning and governance in sustainable development, establishing it as an important function to be shared across both the county and national government levels. It further placed participatory decision-making at the heart of development planning and decision-making in Kenya (UN-Habitat, 2019). This established public participation at the heart of city visioning.

The institutions associated with urban development decision-making, and which have implications for disaster risk creation, can be understood through the diverse laws and policies that govern urban development decision-making in Nairobi City County. These include policies and legislation (Mwaniki, *et al.,* 2015; UN-Habitat, 2019). Table 7 provides a summary of policies and regulations that govern urban development decision-making and implementation in Nairobi. These laws are an attempt to realign mandates and envisage integrated urban development (UN-Habitat, 2019). However, there remains a myriad of overlaps, contradictions and duplications (ibid).

Table 7: Laws and Policies Governing Urban Development Decision-making in Nairobi

Laws and policies governing urban development decision-making in Nairobi	
Constitution of Kenya Establishes a devolved system of governance, giving county governments, including Nairobi, the authority to manage urban development within their jurisdictions. Emphasizes the right to accessible and adequate housing, reasonable standards of sanitation, and a clean and healthy environment. It also establishes disaster management as a function of both the national and county governments.	
Institution	Description
National Laws and Policies	

1	Urban Areas and Cities Act 2013 (Revised in 2019)	Provides for participation of residents in decision-making and city visioning. Bestows upon county governments the responsibility for delivering public services and mandates them to formulate Integrated Urban Development Plans and establish Urban Management Boards.
2	Physical And Land Use Planning Act 2019	Concerned with integrated planning and provides a planning framework. Provides for the preparation and implementation of physical development plans and provide general development control regulations at national, county, and local levels.
3	Land Act 2012	Provide for the sustainable administration and management of land and land-based resources, and for connected purposes
4	Survey Act 1961	Provides for practice of land survey and management of survey records
5	National Lands Commission Act 2012	Concerned with land management. Provides for the establishment of the National Lands Commission that is mandated with managing public land on behalf of county and national governments and provide oversight over land-use planning
6	Environmental Management and Coordination Act (EMCA) 1999	Concerned with environmental risks. Provides for environmental impact assessments (EIAs) for proposed developments and mainstreaming environmental sustainability risk knowledge into development planning. It also establishes the National Environmental Management Authority (NEMA).
7	The Building Code (1968)	Focuses on construction standards. It sets standards for building construction to ensure safety, durability, and resilience of urban infrastructure. It integrates preventing risk creation into constructions practices albeit implicitly.
8	County Government Act 2013	Mandates county governments to affect devolved government system and to formulate County Integrated Development Plans, County Spatial Plans and Municipal Plans
9	Intergovernmental Relations Act 2012	Provides for establishment of a framework for consultation and co-operation between the national and county governments and amongst county governments.
10	National Government Coordination Act 2013	Provides for the establishment of an administrative and institutional frameworks for coordination of national government functions at the national and county levels of governance
11	Housing Act 1953 (Revised in 2012)	Provides guidelines for developing housing schemes, and addresses issues related to the development and improvement of housing conditions across the country. It also provides guidance on responsibilities of the different levels of government.

12	Affordable Housing Act 2024	Seeks to address the housing shortage and improve access to affordable, decent housing, especially for low and middle-income households. This legislation is a key component of the government's Affordable Housing Program. It provides a framework for public-private partnerships and strategies for lower costs of delivering housing.
13	Disaster Risk Management Bill 2021	The bill provides for the integration of strategies for breaking cycles of risk creation in development planning at both county and national levels. The bill seeks to mainstream risk knowledge in urban development planning and requires urban development plans to include disaster risk assessments.
14	National Disaster Management Authority (NDMA) Act 2016	Provides for the establishment of the NDMA and focuses primarily on drought. The Act is silent on other disaster risks, and even more on urban risks.
15	National Climate Change Action Plan	Addresses climate-related disasters and promotes adaptation and resilience to climate risks in development planning, including urban planning processes. NCCG has a city-level climate change action plan.
16	National Policy for Disaster Management in Kenya (2012)	The policy aims to strengthen institutional capacities, promote public awareness, and ensure effective coordination and response to disasters. It also recognizes the cross-cutting nature of disaster risks and the need for a multi-sectoral approach.
	City Level Actors	
17	Nairobi City County Participation Act 2016	Gives statutory recognition to community and neighbourhood initiatives in complementing county government service delivery, to enable structured co-operation between the county government, residents and businesses, and to generally regulate and facilitate activities of the associations.
18	Nairobi City County Integrated Development Plan (CIDP) 2023 – 2027	Concerned with development planning. It is a strategic plan that outlines development priorities, projects, and programs for a five-year period, aligned to an electoral cycle. It integrates urban planning, infrastructure development, service delivery, environmental management, and sets priorities and guides all county government expenditures. CIDPs are required to incorporate DRM and DRR strategies.
19	Nairobi City County Disaster Management Act 2015	Provides for the development of comprehensive plans for disaster response and recovery, tailored to the unique risks faced by the city. Also provides for the establishment of the Nairobi City Disaster Management Committee.
20	Nairobi City County Regularization of Development Act 2015	Provides a framework for bringing informal and unapproved developments into compliance with established planning and building regulations to provide risk reducing infrastructure and services to the residents of the concerned areas.

21	Nairobi Integrated Urban Development Masterplan (NIUPLAN, 2014 - 2030)	Provides a long-term vision for the spatial development of Nairobi, including land use zoning, infrastructure development, and environmental conservation. The NIUPLAN.
22	Nairobi City County Urban Renewal and Regeneration Policy (2019)	Focuses on the regeneration of old and dilapidated areas within the city, promoting redevelopment, improved infrastructure, and better living conditions
23	Nairobi City County Climate Action Plan (2020)	Focuses on integrating climate change mitigation and adaptation into urban development policies, and normative programs and practices of the city.

Source: Researcher, 2024

5.4.2 Actors

Nairobi's urban development decision-making space is complex and messy. This 'complex mess' is characterised by multiple actors cutting across the public sector, the private sector, the informal sector, the civil society, and international development, all of which have different interests and varying levels of power. It is at the confluence of these interactions that Nairobi's emerging urbanity, flood risk and water stress and concomitant vulnerabilities are produced. For clarity purposes, the actors are categorised hereunder as actors with formal policy mandate and de facto actors. This mirrors Figure 1 and Figure 2, which illustrate the distinct functions of risk management, infrastructure management and urban development management, and the transition and attendant complexities of urban development governance. This section specifically discusses the messiness of urban development governance.

a) Actors with Formal Policy Mandate for Urban Development Decision-making

This section identifies the actors with formal policy mandates for urban development decision-making and implementation in Nairobi. It focuses principally on formal responsibility. In the public sector, responsibility is shared between national and city-level authorities. The principles of autonomy, cooperation, and interdependence guide this relationship (Council of Governors, 2023; World Bank, 2014). Figure 21 illustrates

the formal structure for urban development decision-making and implementation in the city. The dotted lines and arrows connecting county and national actors indicate that these actors operate across, between, and within both governance levels.

Figure 21: Formal Planning Architecture for Urban Development Decision-making and Action in Kenya, Author

The national government is responsible for the formulation of policies, coordination and management of standards and codes to be applied across the country, capacity building and providing technical assistance to counties. This is through state departments and independent commissions (SDHUD, 2017; Republic of Kenya, 2017; Auditor General, 2020) (MTIHUDPW, 2021) (GoK, 2017; Republic of Kenya, 2019). (Ministry of Lands and Physical Planning, 2018). A more detailed description of the mandates is outlined in Table 8. In addition to the state departments are parastatals and independent commissions with delegated authority. These include the National Lands Commission (NLC) and the National Environment Management Authority (NEMA).

At the city level, the responsibility for urban development decision-making and implementation, and by extension, reducing disaster risks, lies with the county government. The county government is legally mandated to perform all urban governance functions, including urban planning and development control, transport

planning and disaster risk management. These normative functions are inadvertently aimed at breaking cycles of disaster risk creation. Other key actors with complementary responsibilities include the County Assembly, which is the legislative arm of the county government. The assembly's primary roles include representation, legislation and oversight of the executive (Nairobi County Assembly, 2020; Republic of Kenya, 2010). It approves budgets and expenditures of the county government, integrated spatial development plans and policies for the management and exploitation of the County's resources and the development and management of its infrastructure and institutions.

Table 8: Actors with Formal Policy Mandate for Urban Development Decision-making

Actors With Formal Policy Mandate for Urban Development Decision-making		
Actor		Key Mandate
National level actors		
1	State department of housing and urban development (SDHUD)	Providing policy direction and coordination of all matters related to housing, urban planning and development including management of housing policy, management of building and construction standards and codes.
2	State department of infrastructure (SDI)	Providing policy direction and coordination of all matters related to roads and infrastructure development. Its functions include development and custodianship of the national roads development policy, development, standardization and maintenance of roads, testing and advisory on materials and protection of road reserves.
3	State department of physical planning (SDPP)	Providing policy direction, general principles for land planning and coordination of all matters related to inter alia, the national lands policy and management, land information systems, national spatial infrastructure and physical planning for land use at the national level.
4	National Lands Commission (NLC)	Administering public land on behalf of the national and county governments, recommending a national land policy to the national government, and monitoring and providing oversight over land use planning in the country.
5	National Environment Management Authority (*NEMA)*	Overseeing and coordinating the implementation of all policies relating to the environment. It promotes the integration of environmental considerations into development policies, plans, programmes and projects to reduce environmental risks and concomitant vulnerabilities. It also advises on land use planning, considers environmental impacts of development projects and issues development permits.
City Level Actors		

6	Land, Housing and Physical Planning sector, NCCG	Policy formulation and leadership in the areas of, inter alia, forward planning, regulation and development control, development approval, supervision of enforcement, slum upgrading, land survey, public housing development and management, and rating and valuation. It is also tasked with regularization of development and overseeing the implementation of urban renewal and regeneration projects of the county government, and general coordination and monitoring of the implementation of county spatial plans.
7	Public works, road and transport sector, NCCG	Public infrastructure development and management, and management of transport. These include maintenance of roads and streets under the county government including roads within neighbourhoods and informal settlements, public lighting and drainage.
8	Water, energy, forestry, environment and natural resources sector, NCCG	Policy formulation and leadership in the areas of, among others, air quality monitoring, action and management, environmental quality including maintenance and management of public spaces, planting of trees and solid waste management.
9	Nairobi City Water and Sewerage Company (NCWSC)	A subsidiary of NCCG, NWSC is mandated to provide clean water and sewerage services to city residents in a financially sustainable manner and in accordance with laid down regulations. This includes development and maintenance of related infrastructure.
10	County Disaster Management Committee	Coordinates local disaster preparedness, response, and recovery efforts. The committee includes representatives from various sectors and civil society.
11	Members of the County Assembly	Representation, legislation and oversight (Nairobi County Assembly, 2020; Republic of Kenya, 2010). The assembly approves the budget and expenditure of the county government, approves development plans and policies for the management and exploitation of the County's resources and the development and management of its infrastructure and institutions.

Source: Author, 2024

Although the above discusses the architecture of formal urban development decision-making and implementation in Nairobi, and Figure 7 presents a clear and neat bureaucratic structure, this is far from reality. The way things happen is discussed in the succeeding section.

Noteworthy, there are long-standing tensions between national and city-level public sector policy actors over urban governance functions. Under the guise of addressing the rampant and deeply embedded corruption (Mwau & Sverdlik, 2020), bricoleurs at

the national level have from time to time usurped the functions of the county government while promising to improve service delivery (Ouma, 2021; Wire, 2020; Ngala, 2021). This erodes constitutionalism, undercuts democratic governance, fuels relationships of distrust, and constrains the agency and power of NCCG policy actors to reduce disaster risks. It disempowers NCCG policy actors. This capture of decision-making and implementation by national-level bricoleurs leads to different ways of doing things, often in the shadow systems. This is discussed in the succeeding section.

b) Actors With Real Power for Urban Development Decision-making

Nairobi's urban development decision-making and implementation space is messy and complex. This complexity and messiness are compounded by a multiplicity of actors cutting across sectors and governance levels. This sub-section unpacks this space and the actors therein. It reveals that there is a difference between formal mandate and real power for urban development decision-making and implementation.

National level, public sector actors include, *inter alia,* the Presidency, the Ministry of Interior and National Coordination, the State Department for Housing and Urban Development (SDHUD) and the State Department of Infrastructure (SDI) through the Kenya National Highways Authority (KeNHA) and Kenya Urban Roads Authority (KURA) (Republic of Kenya, 2007; KeNHA, 2018). The Presidency, through the President's Delivery Unit (PDU), directly coordinates flagship programmes and projects of the national government (The National Treasury, 2020; Vision 2030 Delivery Secreteriat, 2017). The pressure from the unit, and regular and impromptu inspection of urban development projects by the President, exerts presidential pressure towards a delivery-based governance (Hymowitz, 2017) and institutes target culture (ibid). The PDU exemplifies an irregular system. It is so powerful that it oversights ministries (Hymowitz, 2017; Kigochi, 2018). This supervisory function of the PDU is irregular, yet a formalised practice. This is because the PDU is non-existent in Kenya's formal governance as per the constitution.

The chiefs, assistant chiefs and village elders also wield significant influence on urban development decision-making and action, especially in urban poor settlements where they enforce 'development control' and allocate land (Smit, 2018). The actors are often

seen as corrupt, non-responsive and more fixated on maintaining their power and patronage.

Civil Society Organisations (CSOs) are also actors. They are as diverse and heterogeneous as their interests and include non-governmental organisations, residents' associations, community-based organisations, public interest groups, creative collectives, professional associations and women's groups (Frantzeskaki, et al., 2018). They play different roles, including inter alia, facilitating negotiations of the social contract and claiming rights; influencing processes and outcomes; advocating for social inclusion and a focus on social vulnerability; pushing back against extractive forms of governance; and advocating for environmentalism (Dodman, 2017; Lines & Makau, 2018; Dodman, 2017; Mitlin, 2012). Closely-knit identity groups such as *Akiba Mashinani Trust* and *Muungano Wa Wanavijiji* make horizontal linkages possible (Kinyanjui, 2012), bringing together groups with similar interests to exert collective power and speak with a unified voice (Takeshita, 2020; Tehlova, 2019).

The omnipresence of private sector actors in urban development decision-making and implementation is striking (Mwangi & Chiwetu, 2020). They wield significant power in the kind of urbanity arising in Nairobi, like in many other African cities (Smit, 2018). Their influence is through capital and consultancies. The private sector is increasingly at the highest tables of decision-making and implementation. Consultants have become policy brokers between technical and political-level public officials. It is not uncommon to find consultants like KPMG coordinating government projects on behalf of the government of Kenya and brokering relationships between the government and donors. Consequently, public sector policy actors increasingly need to prove themselves to an ever-skeptical political class and populace. A similar observation is made elsewhere by Mazzucato and Collington (2023).

Large local and international real estate developers play a pivotal role in urban development policy and decision-making in Nairobi (Ibid). Private finance, including commercial banks and insurance companies, is shaping the city's urban form through investment in several large development projects, mainly shopping malls, office complexes and apartment blocks. The Two Rivers Mall, a mixed-use development including a shopping mall, middle-class housing, and recreational opportunities, is redefining integrated urban living in the city (Tubei, 2017). The project was adopted as

one of the Vision 2030 flagship projects (Centum, 2021; da Silva & Charles, 2018), underscoring the observation made by (Dodman, *et al.,* 2017) that investments in African cities are frequently governed by projects rather than by planning (da Silva & Charles, 2018). It also demonstrates the influence of the private sector in urban policy, governance and development in Nairobi.

The Kenya Private Sector Alliance (KEPSA), the Kenya Property Developers Association (KPDA) also play a prominent role in urban development decision-making in the city (KEPSA, 2018). In the Affordable Housing Programme, the government is working with several foreign and local companies through a public-private partnership model and continues to lobby for partnerships with local strategic partners in implementing the affordable housing agenda (Mwangi & Chiwetu, 2020). The Affordable Housing Programme (AHP) is a government initiative aiming to deliver 1,000,000 affordable housing units (ibid).

The city also has a peculiar type of private sector that owns a large part of the real estate, the twilight private sector. The term "twilight private sector" typically refers to a segment of the private sector which operates in a space characterised by ambiguity or lack of clear regulation, often at the intersection of formalised and informal systems (Ferguson, 2006; Robinson, 2009; Simone, 2004). In the context of Kenya, it is a segment of the private sector that is little discussed yet wields significant influence on the kind of urbanity arising in Nairobi. They mainly own tenement buildings. These actors have high risk tolerance and care less about the hazard exposure of their tenants and buildings, so long as they are making money. The twilight private sector complicates urban governance and weakens the capacity to break cycles of disaster risk creation. Twilight private sector actors exert significant influence over urban planning and development processes without being subject to the same oversight as the more formalised private sector actors (Peck & Tickell, 2002; Simone, 2004).

Coupled with the changing nature of urban governance towards entrepreneurialism and consumerism, asymmetrical power relations mean that the interests of businesses and the affluent are typically protected and prioritised over the low-income and the urban poor (Dodman, *et al.,* 2017). It also means that economic imperatives are prioritised over disaster risk concerns. Figure 22 shows the obvious and invisible actors in the city's urban development policy, decision-making and implementation

space. The information therein is based on the researcher's knowledge. The objective is to outline the various actors and their influence on pro-poor urban development decision-making.

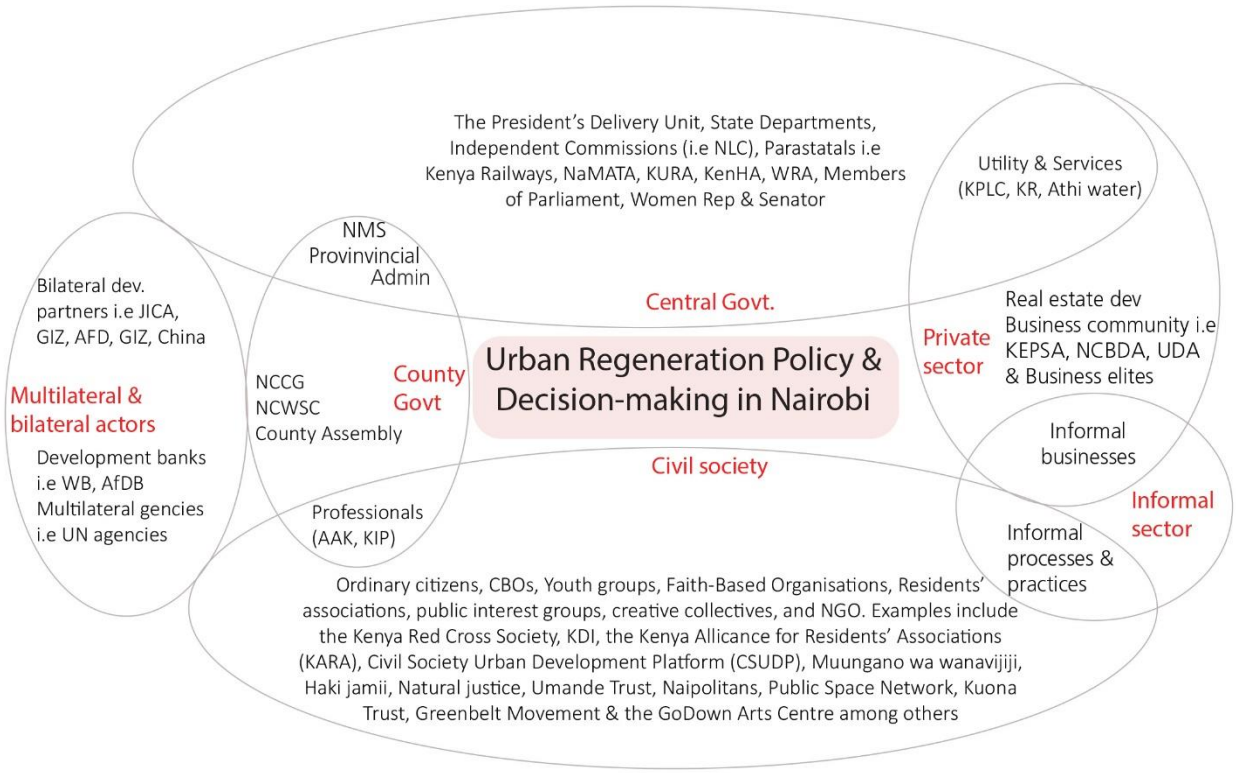

Figure 22: Actors in Urban Development Decision-making and Implementation in Nairobi

The role of external actors in Nairobi's urban planning has been constant, albeit evolving. Initially, British advisors influenced planning direction. From the 1970s onward, multilateral and bilateral actors such as the World Bank, the United Nations and JICA became key players, often shaping planning frameworks, infrastructure priorities, and institutional reforms. They exert significant influence over urban development trajectories, reshaping urban spaces to align with their financial interests, often with minimal consideration for local needs, socio-spatial conditions, or broader public welfare (Kaika & Ruggiero, 2016; Waldron, 2019). They draw their power from funding, discourses and technical support. In this way, they influence what gets done and how it is done. For example, World Bank-led urban upgrading and housing programs such as KISIP have introduced market-oriented reforms and emphasised technical solutions, sometimes sidelining local capacities or reinforcing top-down governance. See more on KISIP in Chapter 7.0. The World Bank, AFD, JICA, AfDB, the EU and China are some of the particularly active actors. Figure 22 and Figure 23 are to be read together. They demonstrate that urban change in Nairobi occurs in a

dynamic governance and administrative landscape. Neoliberalism, shifting patterns of urban governance, the changing nature of politics, and formal and informal practices are all part of the complexity and 'messiness' in the city's urban development decision-making space, as both contributors and responses to them.

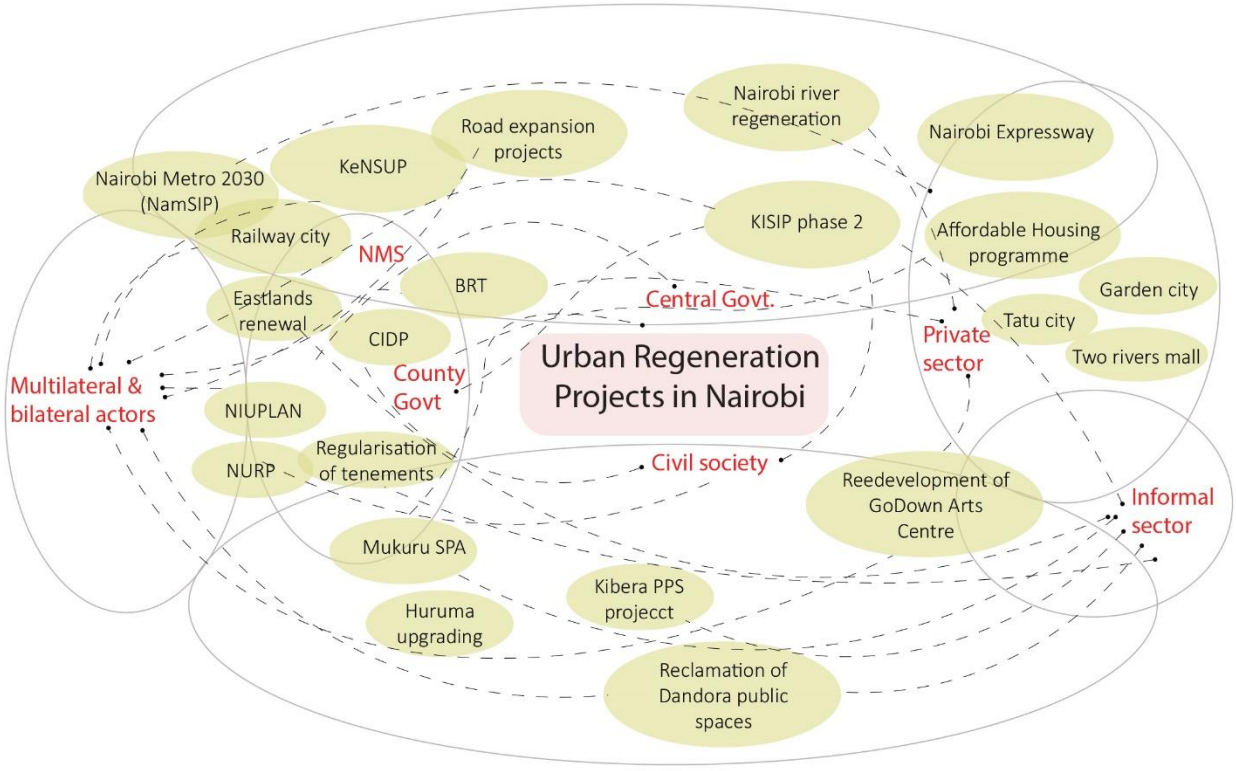

Figure 23: Ownership of key urban development projects in Nairobi. Source: Author, 2024

Figure 23 shows the ownership of key plans and development projects in the city, representing funding, management, legal mandate and de facto delivery. The oval shapes show where the plans and projects predominantly sit within the institutional set-up, while the dotted arrows show linkages with other actors within the city's development planning and decision-making space. Many of the projects are co-owned by multiple actors, including the national government, the county government and bilateral and multilateral development partners. The Nairobi City County Government owns NIUPLAN, CIDP, the Regularisation programme, the Mukuru SPA and the Nairobi Urban Renewal Pilot (NURP). The NURP is the first phase of the Eastlands Urban Renewal Programme and is implemented under the Nairobi Metropolitan Improvement Project (Dierkx, 2019). During the 2017-2022 electoral period, the responsibility for the implementation of flagship projects of the NCCG has been assumed by the national government. The national government, the county

government and the World Bank co-own the Nairobi Metropolitan Services Improvement Project (NaMSIP), the Nairobi Railway City project, the urban renewal of Eastlands, the Bus Rapid Transit and the major roads expansion projects across the city.

Over time, the involvement of bilateral and multilateral actors and the private sector has intensified, particularly in large-scale infrastructure development such as the Nairobi Expressway, urban upgrading and the Affordable Housing Programme. These projects reflect a growing influence of multilateral development banks (MDBs) and private consultancies in Nairobi's urban governance, often driven by global competitiveness and investment priorities rather than equity or inclusivity.

5.5 Situating the Study Sites

This section presents two study sites: the Kenya Informal Settlements Improvement Project (KISIP) and Mukuru SPA. KISIP pertains to Research Question Two: *"In what ways does institutional pluralism shape the production of pro-poor urban development decision-making and implementation spaces in Nairobi?"* This question explored how decision-making spaces are produced and the broad relationships between actors in project-bound spaces of decision-making and action (KISIP) and everyday spaces of decision-making and action (NCCG urban planning department). Mukuru SPA, on the other hand, pertains to Research Question Three: "*What transformative practices were brought into pro-poor urban upgrading in Nairobi between 2015 and 2022?"* This question examines neighbourhood inclusion, decision-making and implementation as a policy space. It explores whether the Mukuru SPA process is transformative as claimed (Makau, *et al.,* 2020; Satterthwaite, *et al.,* 2020). Sub-sections 5.5.1 and 5.5.2 provide more detailed information on the study sites.

5.5.1 Kenya Informal Settlements Programme

The Kenya Informal Settlements Improvement Project (KISIP) is a national government-led project aimed at improving living conditions and strengthening security of tenure in informal settlements in select towns in Kenya (Anderson & Mwelu, 2013), one of which is Nairobi. The project was funded through financial assistance from the World Bank, the Swedish International Development Cooperation Agency (Sida) and the Agence Française de Development (AFD)(Muraguri, 2011; Repcon

Associates, 2014). The World Bank provided a $100 million loan, while Agence Française de Dévelopement (AFD), Swedish International Development Agency (SIDA) and the government of Kenya contributed $45mn, $10mn and $10mn, respectively (Anderson & Mwelu, 2013). The financial contribution was distributed as follows: World Bank (60%), SIDA and AFD (30%) and the Kenyan government (10%) (ibid). The study did not establish whether these contributions from development partners were loans or whether some of them were grants.

This study approached KISIP phase one, referred to herein as KISIP I, through a DRR lens. It considers its overarching aim of improving living conditions for people living and working in informal settlements through the improvement of tenure security and provision of risk-reducing infrastructure and services to be implicitly aimed at reducing vulnerability and exposure.

KISIP I was initially funded for five years and implemented in 15 towns in 14 counties (Anderson & Mwelu, 2013). At the end of the initial five-year period, financial support was extended for an additional five years (ibid). KISIP I was implemented from 2011 – 2019. KISIP I started before the advent of the devolved system of governance in Kenya. Devolved governance units were not in place at the time the project was designed and negotiated. Consequently, the project was implemented in the counties through the State Department of Housing and Urban Development in collaboration with municipalities. This set the project on a path of hierarchical control. KISIP phase two, referred to herein as KISIP II, was extended to 33 counties. Unlike its predecessor, KISIP II involves a three-tier actor arrangement (GoK, 2019) of national and county governments, and the community. Its implementation was ongoing at the time of this study. The scope of this study is, however, limited to KISIP I.

KISIP I was designed around four components: a) institutional strengthening, b) improving security of tenure, c) investing in urban basic infrastructure in informal settlements based on plans co-developed with communities, and d) support for proactive planning to better anticipate urban growth and prevent the formation of new slums (Mangira, 2021; Muraguri, 2011; Repcon Associates, 2014). Interviews with national-level policy actors detailed activities under tenure regularisation and provision of infrastructure and revealed that these two were the principal components (RP22; RP23). The frugal focus on the more process-oriented, less visible component is

evident in the results. It suggests a lack of foresight and evidences an institutional logic motivated by pragmatism and the target culture. Findings reveal that KISIP undertook the preparation of settlement-level development plans, surveys, registry index maps, and letters of allotment and titles, strengthening the security of tenure for about 125,000 people (Shah et al., n.d.; The World Bank, 2019). The quotation below underscores this:

> *"The key interventions we use to improve informal settlements are mainly tenure regularisation and infrastructure provision. Under tenure regularization, we have planning, surveying, and issuance of ownership documents. On infrastructure, we have a menu of the kind of infrastructure that can be provided. It includes things like roads, walkways, drainage, public lighting, and water and sanitation." ~ RP22*

Some of the outcomes directly attributed to the project are the delivery of a bundle of risk-reducing infrastructure and services, including roads, storm water drainage, high-mast lighting, and improved water and sewerage systems in beneficiary informal settlements (The World Bank, 2019). Reports indicate that 1.3 million urban poor have benefited directly from KISIP interventions (Shah et al., n.d.; The World Bank, 2019). Figure 9 depicts a side-by-side view of a road before and after KISIP intervention.

Figure 24: The photos above show a flooded road in an informal settlement before and after upgrading by KISIP. Photo courtesy of the World Bank

5.5.2 Mukuru Special Planning Area

The 'Mukuru belt' of informal settlements is part of the over 150 informal settlements in Nairobi (Corbun et al., 2017; Greibe Andersen et al., 2021; Horn et al., 2020). It is an agglomeration of six informal settlements, including *Mukuru kwa Njenga, Mukuru*

kwa Reuben, Viwandani, Mukuru Kayaba, Fuata Nyayo, and *Mariguini* (UC Berkeley, UoN, Muungano Wa Wanavijij, SDI, AMT, Strathmore University & Katiba Institute, 2017; Corburn & Asar, 2019). The settlements are located within the city's industrial area, seven kilometres southeast of the city centre. In this study, Mukuru refers to *Mukuru kwa Njenga, kwa Reuben* and *Viwandani*. This follows the delineation of Mukuru Special Planning Area (SPA) as provided for in the gazette notice declaring the area an SPA. Located on the banks of the Ngong River, Mukuru SPA sits on 689 acres and hosts an estimated population of 301,683 living in 100,562 households (Corbun et al., 2017; Greibe Andersen et al., 2021; Horn et al., 2020). More than 90 percent of the residents are tenants (Corbun et al., 2017; Horn et al., 2020).

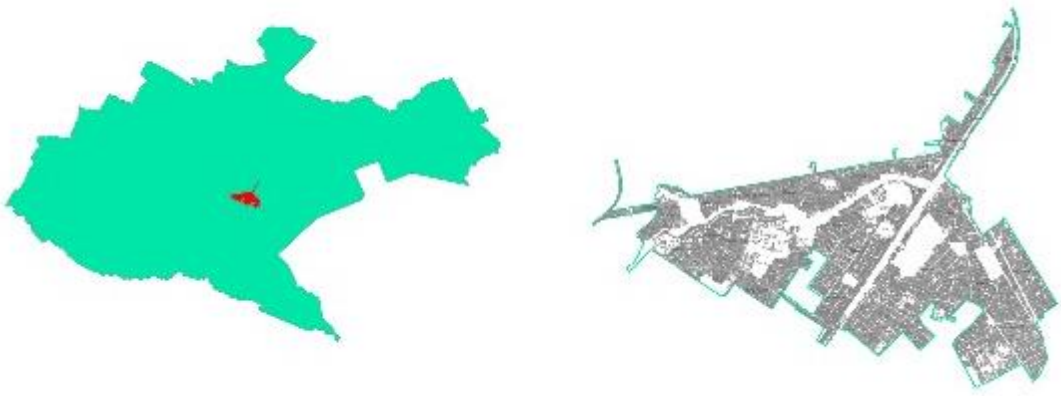

Figure 25: A Map Showing the Location of the Study Context. Source: Author, 2024.

Residents of Mukuru have faced a myriad of multi-hazard events, including inter alia, floods, fires and water stress (Corbun et al., 2017; Hati, 2020; Horn et al., 2020). In 2018, 27 percent of households reported experiencing floods (Greibe Andersen et al., 2021). Mukuru's proximity to Ngong River, its lower elevation relative to the average elevation in Nairobi, and its black cotton soil expose the settlement to flood risk. This is compounded by poor construction practices blocking waterways, lack of risk-reducing infrastructure and services such as drainage and solid waste management, respectively, and poor regulation of construction (Makau, et al., 2020; Corburn & Asar, 2019). On the other hand, fire events are attributed to hazardous, '*sambaza*' electricity connections, high structure density, poor construction materials and inadequate access roads, which inhibit access by fire engines during fire events (RP30; RP31;

RP32; RP33; RP34; RP36; RP37; RP38; RP39). This was put into perspective by RP33 as follows:

> *"Before the SPA, our settlement was congested with iron sheet houses and many fire incidents. Fire engines would not come in because there were no roads. Many times, fire incidents would raze everything, and this would recur from time to time, almost twice or thrice per week."* ~ RP33

Over 85 percent of electricity connections were illegal and unsafe (Corbun et al., 2017). This electricity is provided by cartelistic networks which tap power from the Kenya Power & Lighting Company (KPLC) infrastructure (Corbun et al., 2017; Hati, 2020; Horn et al., 2020) in what is locally referred to as '*sambaza*'. Residents blame this '*sambaza*' method for causing electrocution and power outages (RP32; RP33; RP34 and RP37). These hazard events are exacerbated by inter alia, concentrated poverty, rising populations and systematic deprivation of access to risk-reducing infrastructure and services (Corbun et al., 2017; Greibe Andersen et al., 2021).

In the same context, Mukuru residents bear the brunt of the poverty penalty (Corbun et al., 2017; Hati, 2020; Horn et al., 2020). The poverty penalty is a phenomenon where the poor must accept both a higher price and a quality penalty for a good or service compared to the non-poor (Nóbrega, 2022). They take different forms, including fines or fees that disproportionately burden lower-income people (Global Centre on Adaptation, 2022; Mendoza, 2011; Nóbrega, 2022). According to the 2017 Mukuru Settlement profile, residents would pay up to 172 percent more for lower quality water and between 45-142 percent more for electricity compared to their counterparts in neighbouring formal settlements (Corbun et al., 2017). It is against this background that the Nairobi City County, in an unprecedented and affirmative action, declared the area covering *Mukuru kwa Njenga, Kwa Rouben* and *Viwandani* a Special Planning Area (Hati, 2020; Horn et al., 2020) to deploy unorthodox practices and develop bespoke standards that could yield more inclusive, context-sensitive outcomes.

5.6 Conclusion

The disjuncture between colonial and indigenous spatial imaginaries laid the groundwork for ongoing tensions in Nairobi's post-colonial urban planning. Even today, the city's urban development decision-making actors and institutions rarely

acknowledge the layered and plural histories of spatial production that predate colonial impositions. Instead, Western planning ideals remain dominant, marginalising indigenous urbanisms and sustaining epistemic injustices in the visioning and intellectual leadership for urban planning, and the kind of urbanity being claimed in Nairobi. Recognizing *Enkare Nyrobi* as a legitimate urbanity in its own right opens possibilities for more inclusive, ecologically grounded and resilient urban and risk futures in Nairobi.

Nairobi's urban riskscapes are rooted in decades of disaster risk creation and perpetuation. Persistent, recurrent floods and water scarcity are a constant reminder of *Enkare Nyrobi* and its modernisation journey, its *laissez-faire* approach to urban development planning and decision-making and its blindness to disaster risks, sustaining the vicious cycle of disaster risk creation. Despite the obvious challenges associated with the location of the city on a swamp, there was and continues to be a benign disregard for the exposure presented by the location of the city and a need for risk-sensitive, resilient urban development. There continues to be insufficient investment in resilient infrastructure to adapt to the risks, and resistance against the hegemony of planning to guide urban development decisions that are fair, resilient and inclusive. Post-independence urbanism occurred and continues to happen in the absence of urban development decision-making sensitive to risks.

Nairobi's urban planning since independence reflects a long-standing tension between inherited colonial forms, externally driven priorities, and the aspirations of a rapidly growing city. The persistence of colonial legacies, combined with post-colonial governance challenges, the growing influence of external actors and consultancies, has produced a planning system that is neither fully post-colonial nor fully neoliberal. It is a hybrid marked by weak public-sector capacity, entrenched shadow systems, irregular systems, multi-level capture and an increasing reliance on externally driven technical solutions. The implications for disaster risk creation are profound. Visions often prioritize pro-growth over pro-poor solutions. Urban poor settlements are often ignored or inadequately served. The disconnection between planning, implementation, and local realities reinforces cycles of disaster risk creation. Without deliberate reform toward inclusive, risk-sensitive, foresightful urban development planning and decision-making that centers local knowledge and resilience, Nairobi's urban futures risk deepening inequality and amplifying processes of disaster risk creation.

6.0 City Visioning

6.1 Introduction

This chapter elucidates who has the power to set the urban development policy agenda in Nairobi. It does so by answering the first research question: Who sets the vision and agenda for pro-poor urban development and especially the participatory part within it, and with what consequences for the generation of risks for the urban poor? Drawing on extensive document analysis and elite interviews, it focuses on broader decision-makers who shape the pro-poor urban development decision-making and implementation space.

The chapter begins with examining the multiple visions claimed by different actors in Nairobi, including how the visions are held, who owns them and whose knowledge and ideas count in urban development decision-making. It highlights short-termism and how it limits insights into how urban development decisions create or perpetuate risk and vulnerabilities. It then discusses multi-level capture of city visioning, considering how different layers of actors across governance levels exert influence and control over city visioning and implementation. Next, it interrogates the materiality of the city, with a focus on the 'big middle'. Like city visioning, the materiality of the city is central to understanding how visions are received, and enacted or not, at the city level. Finally, it focuses on the localisation of city visions, linking visioning to materiality. It explores localisation through the lens of public participation, discussing the main frames for public participation promoted by formal urban policy actors in Nairobi and juxtaposing them against the everyday practice of public participation. The links between visioning, localisation and materiality are essential for understanding how socio-physical and institutional changes are realised and shape urbanity.

6.2 Nairobi's Multiple Visions

Nairobi is characterised by multiple overlapping, multi-layered, and often conflicting visions held by actors with different stakes in the kind of urbanity arising, as well as different levels of power. Findings attribute these varied visions to different factors, including inter alia, overlapping and duplicated roles and mandates and institutional hybridity. These arise from bureaucratic and shadow systems, informal practices and lack of coordination to shepherd city visioning. The visions are classified herein into

two broad categories: normative statutory visions and project-based visions. They are discussed in greater detail below.

6.2.1 Normative Statutory Visions

Normative statutory visions are understood herein as the overarching, idealised objectives and goals embedded within formal institutions. These visions are typically articulated in legal and policy documents to guide decisions, direction and priorities of governance, planning and urban development. They shape the legislative, operational, decision-making and implementation landscapes, providing roadmaps for achieving set goals in the long term.

A key normative statutory vision shaping Nairobi's development is Vision 2030 (GoK, 2012), an overarching vision developed and owned by the national government. Vision 2030 aims to "*transform Kenya into a 'globally competitive and prosperous country with a high quality of life by 2030*" (GoK, 2012, p. ii), envisioning Nairobi as a desirable place to live, work, and play (Ibid). This blueprint provides both a strategic pathway and a long-term horizon, forming the basis for most policies, programs, and projects in Nairobi and other parts of the country. It acknowledges the need to address uncontrolled development, in line with the constitutional right to decent housing for all. Coordinated at the national level through the Vision 2030 Delivery Secretariat, the blueprint outlines strategic priorities and encourages the development of subsidiary visions. The Nairobi Metro 2030 strategy (GoK, 2008) and the Nairobi Integrated Urban Development Masterplan 2015 - 2030 (NCCG & JICA, 2014), referred to as the NIUPLAN, are examples of such subsidiary visions. These metropolitan and county-level visions respectively define how Vision 2030 is realised through integrated urban development planning. These lower-tier visions are multiple, overlapping, isolated, and often conflicting. Table 9 presents a summary of the different statutory visions, the predominant discourses that shape them and their relationships with other statutory visions.

Table 9: Summary of the different statutory visions, predominant discourses that shape them and relationships to other statutory visions. Source: Author, 2024

Strategy/vision	Aim	Focus	Timeline	Relations to other statutory visions
Kenya Vision 2030	Vision 2030 centres on economic, social, and political pillars to transform Kenya into a middle-income, industrialised country. It is shaped by sustainable development, climate change adaptation, global capital and neoliberalism discourses. The global capital discourse is evident in terms like “world-class” and “globally competitive,” while neoliberalism emerges in the emphasis on competitiveness and efficiency and public-private partnerships (PPPs), which effectively privatize public services. These influences are seen across sectoral goals, particularly in the focus on infrastructure and the vision of Nairobi as a globally competitive city. In the environmental sector, the blueprint emphasizes a clean, secure, and sustainable environment, while the housing sector envisions adequate and decent housing. Climate change adaptation discourse is reflected in policies promoting disaster risk reduction, place-based climate research, and the integration of climate change into national development planning.	Long-term national development strategy	2008–2030	Provides an overarching framework for national plans, including Medium-Term Plans (MTPs), Big Four Agenda, urban and climate action policies and plans
Big Four Agenda	The Big Four Agenda aimed to accelerate the achievement of Kenya Vision 2030, with a focus on four key pillars, one of which was the provision of 500,000 affordable housing units for the low-income population. The Affordable Housing pillar sought to ensure that the population had access to adequate and decent housing within well-planned urban areas. The dominant discourses in the Big Four Agenda include sustainable development, neoliberalism, and global capital, as evidenced by the emphasis on public-private partnerships as the primary mode of housing delivery and the focus on creating an enabling environment for such arrangements.	Government's priority development agenda	2018–2022	Directly contributes to Vision 2030 goals, concentrating on MTP III priorities, and overlaps with the NIUPLAN.
Third Medium Term Plan (MTP III)	The MTP focuses on making Kenya globally-competitive, aligning with global capital and sustainable development discourses, while also reflecting SDGs and Africa Agenda 2063. It highlights climate change adaptation as a key element of national development, with MTP III offering a chance to integrate climate action into development planning, decision-making and implementation in all sectors.	Implementation of Vision 2030	2018–2022	Guides the implementation of Vision 2030 and sets milestones for future MTPs
National Adaptation Plan (NAP)	NAP focuses on enhancing climate resilience across sectors including urban systems. The Constitution of Kenya 2010 and Vision 2030 serve as the foundational framework and long-term goal, respectively, for the National Adaptation Plan (NAP). The primary discourse within the NAP is climate change adaptation. DRR is secondary. The document emphasizes reducing vulnerabilities to climate change and enhancing the adaptive capacity of systems and communities. A consistent narrative links the Paris Agreement, the Sustainable Development Goals (SDGs), Vision 2030, and the NAP, framing climate change as a significant threat to achieving Vision 2030’s objectives.	National climate adaptation strategy	2015–2030	Part of Kenya’s national climate response under Vision 2030
National Climate Change Action Plan (NCCAP)	NCCAP focuses on low-carbon development, resilience, and sector-specific climate actions. It is shaped primarily by sustainable development, climate change adaptation and neoliberal discourses. The sustainable development discourse is evident in the plan’s focus on balancing economic growth with environmental protection. Climate change adaptation discourse is central, as the plan emphasizes reducing vulnerability and enhancing adaptive capacity to climate impacts across sectors. Neoliberal discourse is evidenced in the promotion of public-private partnerships to finance climate initiatives and leverage global capital for sustainable development.	Action plan for climate change mitigation and adaptation	2018–2022	Supports NAP and Nairobi Climate Action Plan; aligns with Vision 2030 goals

National Land Use Policy	The policy focuses on land use planning, environmental conservation and equitable access to land resources. The dominant discourse in the national land use policy is that of sustainable development, reflected not only in the policy's overall objective but consistently throughout the document. As with other blueprints, the Constitution and Vision 2030 serve as foundational frameworks for the development of this policy. The policy emphasizes addressing systemic issues such as institutional pluralism and parallelism, advocating for long-term planning.	Framework for sustainable land use management	Adopted 2017	Provides governance frameworks for sustainable land and urban management, guiding national and city-level visions
National Urban Development Policy	The NUDP focuses on sustainable urbanization, infrastructure, housing, and transport. It underscores the pivotal role of urbanization in national development, viewing it as an opportunity for socio-economic transformation and poverty reduction if managed sustainably. It advocates for well-planned, efficient, and livable urban centers in line with the Constitution of Kenya and Vision 2030. Global capital discourse is evident across the document as it is aimed at improving competitiveness, attracting investments, and promoting world-class infrastructure, positioning urbanization as an economic engine. Another ubiquitous discourse is neoliberalism. The document promotes public-private partnerships and the commodification of public goods. Climate change adaptation is also central to promoting climate-resilient housing and infrastructure.	Guideline for sustainable urban development	Adopted in 2016	Provides governance frameworks for sustainable land and urban management, guiding national and city-level visions
Nairobi Metro 2030 strategy	The Nairobi Metro 2030 Strategy focuses primarily on economic growth, transport infrastructure, and spatial planning across Nairobi Metro region. The dominant discourses in the strategy are those of sustainable development and neoliberalism, as exemplified by the ambition of creating a world-class African Metropolis (GoK, 2008, pg. 1) …offering world-class business setting, recognized nationally, regionally and internationally as a centre of business excellence. Neoliberalism also plays a significant role, particularly in the privatization of municipal services. Sustainable development discourse is evidenced in its aim at improving the quality of life in the NMR without burdening future generations or the hinterlands with adverse impacts and an extractive relationship. Further, it positions urbanization as a lever for socio-economic change and sustainable development.	Regional development plan for the Nairobi Metropolitan Area	2008–2030	Steps down Vision 2030 by fostering regional integration and connectivity
Nairobi Integrated Urban Development Masterplan (NIUPLAN)	The NIUPLAN focuses on infrastructure, housing, land use, and environmental sustainability for Nairobi's growth. The dominant discourses therein are those of sustainable development and global capital, as exemplified by the vision of creating "*an iconic and globally attractive city aimed at regional integration and sustainability*." Neoliberalism also plays a significant role, particularly in the privatization of municipal services, as reflected in the Department of Environment's mandate to establish public-private partnerships (PPPs). These discourses further manifest in the vision for the Central Business District (CBD), which aspires to create *"a compact urban core that is creative, livable, green, efficient, competitive, and inclusive.*"	Comprehensive urban development framework for Nairobi	2015 - 2030	Aligns with Kenya Vision 2030 goals for Nairobi's urban transformation
Nairobi Climate Action Plan	The action plan refers to the IPCC AR6 report, the Paris Agreement, and the race to zero. The dominant discourses observed herein are sustainable development, neoliberalism and climate change discourses. It is a testament of the permeating influence of these discourses in shaping policy decision-making and action across levels. The plan focuses on realizing carbon neutrality, infrastructure resilience, and green spaces, and supporting the achievement of international and national climate change mitigation goals and the SDGs. Public Private Partnership model of financing features prominently across the document as a resourcing plan.	Climate adaptation and mitigation for Nairobi	2020–2050	Works alongside NAP, NCCAP, and NIUPLAN for climate-resilient urban development

At the metropolitan level is the Nairobi Metro (2030) Strategy. The strategy envisions the Nairobi Metropolitan Region (NMR) as "*a world-class African metropolis, supporting the national development agenda espoused in Vision 2030*" (GoK, 2008, p. 28). It seeks to optimise the city's role in national development, transforming it into a *"globally competitive business, industrial, and service region"* (GoK, 2008, p. xvii), and *"Africa's most attractive and competitive investment destination"* (GoK, 2008, p. xvii). The strategy aims to create a 'world-class' living environment with modern housing, healthcare, cultural amenities, a working environment with a wide range of work opportunities and recreational facilities (Ibid). Developed in 2008 by the Ministry of Nairobi Metropolitan Development, the strategy is now under the custodianship of the State Department of Housing and Urban Development, which coordinates its implementation through the Nairobi Metropolitan Services Improvement Project (NaMSIP), financed by the World Bank (GoK, 2008; Kithakye, 2011). Central to the city's plan to improve its 'international competitiveness' is the development of regional and global service hubs for business, trade and finance. Additionally, the plan also centres on the 'enhancement of tourism'. Implications of this predominant focus on elite infrastructure and services on the provision of risk-reducing infrastructure and services for the urban poor and disaster risk creation are discussed further in the thesis.

At the city level, the Nairobi Integrated Urban Development Plan (NIUPLAN) provides an overarching development vision for the city. Developed by the Nairobi City County Government (NCCG) with technical and financial support from the Japan International Cooperation Agency (JICA), the NIUPLAN envisions Nairobi as an "*iconic and globally attractive city aimed at regional integration and sustainability*" by 2030 (NCCG & JICA, 2014, p. 6-12). This vision aligns with the aspirations of the Nairobi Metro Strategy and Vision 2030 (NCCG & JICA, 2014). It spatializes the aims of Vision 2030 (Ibid). NIUPLAN is a key framework guiding Nairobi's urban growth, everyday urban development planning and decision-making on, inter alia, housing, urban renewal, solid waste management, land use planning and infrastructure investments. It aligns public and private sector projects with long-term goals for sustainable development. Specifically, it supports coordinated decision-making and implementation across sectors, enhancing service delivery and directing investments. Nonetheless, its practical influence is dependent on successful implementation.

In the same context, evidence suggests that informal settlements are conspicuously missing from the development priorities of the NIUPLAN. The priority programmes of the NIUPLAN include urban development, urban transport development, urban infrastructure development, environment improvement, and urban development management strengthening programs, all of which do not focus on addressing the issue of urban poor settlements. These are consistent with the principal policies for the Nairobi Land Use Plan 2030, which aim to:

> *"Decentralise business, administrative and commerce functions; expand and renovate CBD; preserve and restore green and water environment to create ecological network; conserve agricultural activities; restructure industrial area; beautify the city for Kenyan pride."* (NCCG & JICA, 2014, p. ES -11).

The omission of urban poor settlements is consistent across the document, suggesting the pervasiveness of the modernisation discourse. This is despite over 60 percent of Nairobi's residents living in poor urban settlements (Mpanje et al., 2022). The attitude of the JICA study team was that if adequate housing was put in place, urban poor settlements would be naturally erased from the city's urban fabric. This is evidenced by the plan's selective reference to Article 43 Section (1) Clause (b) of the Constitution of Kenya, 2010 which states that *"every person has the right to accessible and adequate housing and to reasonable standards of sanitation" and* to Section 3.6.9 Clause 213 in of the National Land Policy which states as follows: *"(c) Put in place appropriate mechanisms for removal of squatters from unsuitable land and their resettlement,"* and *"(e) Ensure that land subject to informal settlement is developed in an ordered and sustainable manner"* (Sessional Paper No. 3 of 2009 on National Land Policy, 2009) cited in (NCCG & JICA, 2014, p. 6-12). The findings are corroborated by interviews. RP1 postulates that:

> *"The plan skirts around the issue of informal settlements because JICA did not want to touch the question of informal settlements. Essentially, saying that we are going to fund the plan, but do not touch 60 percent of your population. This was a very serious deficiency. Yes, you are planning the city, but who are you cutting off?"*

The NIUPLAN instead emphasises affordable housing, urban renewal (RP2; RP;12 RP27a & RP27b) and sub-sector development (NCCG & JICA, 2014). According to the plan, *"provision of housing for low-income people is an important responsibility of the central and county governments"* (NCCG & JICA, 2014, p. 6-27). This is a classic technocentric northern approach to urbanism, which can be blind to Nairobi's complex dynamics of urban poor settlements, urban riskscapes and processes that generate disaster risk.

Findings reveal that the city's urban development policy and planning agenda were set predominantly by the JICA study team, steering the NIUPLAN towards pro-growth urban development. This is evidenced in both the principal land use policy and priority programs of the NIUPLAN. The urban development priority program, which aims to *"promote and accelerate integrated and efficient urban development"* (NCCG & JICA, 2014, p. 11-2), prioritises *"CBD development, sub-centre development and Urban renewal" (Ibid)*. The focus on these priorities is linked to the Japanese approach to urban development planning, which is infrastructure-heavy. It suggests a motivation to open space for investment opportunities, illuminating the influence of neoliberal and extractive global capital discourses. The preoccupation with efficiency can be inadvertently at the expense of inclusivity. This raises a fundamental question: Whose interests is the NIUPLAN catering to?

A new national development vision, the Big Four Agenda, was introduced in 2017 (GoK, 2018d, 2018b, 2018a; Mutinda, 2020). Following the August 2017 general elections, the Uhuru administration embarked on an ambitious program to build 500,000 affordable houses and support infrastructure for low-income populations by 2022 (GoK, 2018b; Mutinda, 2020). This ambitious target reconfigured state-market relations, creating a spatially significant program founded on both pro-poor urban development and neoliberalism, viewing housing from a real estate perspective. The Affordable Housing Programme overlaps with NIUPLAN's focus on urban renewal and links directly to the third Medium Term Plan of Vision 2030 (MTP III). In addition to improving housing conditions for Kenyan citizens, the MTP III aims to enhance Kenya's ranking in the 'Ease of Doing Business index' and addresses various sectors to drive economic growth, such as agriculture, tourism, trade, financial services, and the blue economy (GoK, 2018d). It aligns development priorities with international

commitments like the Sustainable Development Goals (SDGs) and the Paris Agreement.

Other notable normative visions include the National Adaptation Plan (GoK, 2016a), the National Climate Change Action Plan (NCCAP) 2018-2022 (GoK, 2018c), the National Land Use Policy (GoK, 2017), the National Urban Development Policy (GoK, 2016b) and the Nairobi Climate Action Plan 2020-2050 *(CAP)* (NCCG, 2022). NCCAP (*2018-2022),* for instance, aims to strengthen the country's path towards sustainable, climate-resilient development while achieving 'low-carbon' climate-resilient development. At the time of this study, NCCAP (2023-2027*)* was still under development and was anticipated to borrow heavily from its predecessor. The CAP, developed by C40 Cities, aims to address the city's climate-related challenges through a comprehensive framework centered upon carbon neutrality, focusing on key sectors including transport, energy, and waste management (NCCG, 2022; GoK, 2018c). Proponents of the CAP view it as an alternative vision for mainstreaming climate change considerations into urban development planning and decision-making. This view downplays the importance of the NIUPLAN while simultaneously asserting the superiority of 'external' knowledge over the city's normative visions.

Findings suggest that city visioning in Nairobi resembles a process of modernisation, characterised by technocentric, formal planning based on Western standards and institutional arrangements, often marginalising local wisdom and the peculiar challenges inherent in the context. It often overlooks the needs and priorities of most city residents, further reinforcing inequalities, structural exclusion, and social vulnerability. As highlighted by RP3, Nairobi's urban form reflects the neglect of the provision of risk-reducing infrastructure and services for many residents, which directly heightens disaster risks:

> "*We are positioning ourselves as a financial hub, as a haven for the international community, but at whose expense. We as citizens suffer because of these decisions, and I think Nairobi should prioritise us... It shows in our urban form. Our infrastructure is collapsing, we have a growing population, small businesses are being pushed out, our environment is suffering, our drainage and waterways are*

clogged...because we put the interest of the private sector ahead of the wider societal interest."

Further, these multiple visions at different decision-making levels reflect the hybrid and fragmented nature of governance arrangements in the city's pro-poor urban development decision-making and implementation space and the multiplicity of actors with varied interests and degrees of power. This hybridity and fragmentation lead to incoherent policies and misaligned development efforts, further complicating efforts to break cycles of disaster risk creation or reduce risks. Additionally, the interests and priorities of the private sector and international actors outweigh those of the broader population, compromising the capacity to break cycles of disaster risk creation. In summary, extant city visioning and urban development decision-making practices deepen vulnerabilities by failing to address the systemic issues facing most city residents. This approach limits the city's ability to break the cycle of disaster risk creation, especially for its most vulnerable populations.

6.2.2 Project-based Visions

Project-based visions differ from normative statutory visions by focusing on the use of projects and how these are organised and diffused among urban development decision-makers (Borgström et al., 2016). The term "projectification of visioning" here refers to the shift from long-term, integrated planning to short-term, pragmatic visioning driven by target culture, funding models, and short-term governance practices characteristic of contemporary urban governance (Dymitrow & Ingelhag, 2019; Schoper et al., 2018).

A proliferation of projects as an organisational solution in urban planning, housing, slum upgrading, water and sanitation, and transport is prevalent in the city. This trend is attributed to multiple factors: Overlapping and contradictory legislative mandates, vested interests, perceived governmental passivity towards long-term planning and visioning, lack of political will, greed and myopia among decision-makers and the public alike, and reliance on external funding to implement visions and provide risk-reducing infrastructure and services. Dependence on development partners and donors often constrains the agency of city-level policy actors and that of residents to shape development priorities and city visioning agendas (RP5, RP7, RP12, RP13, RP27a, RP27b). These factors are discussed in greater depth in subsequent paragraphs.

Despite the existence of the NIUPLAN, NCCG lacks the power to enforce and coordinate the implementation of the plan. Urban development decisions are influenced predominantly by short-term political and commercial interests (RP1, RP2, RP3, RP6, RP10, RP11, RP16). For example, the construction of all-weather roads, drainage channels and even small-scale sewerage connectors is contingent on the benevolence of politicians through kitties such as the Constituency and Ward Development Funds, an example of formalised tokenism. This approach to delivery reinforces gaps in the provision of risk-reducing infrastructure and services. As RP11 emphasised, individuals and organised groups are increasingly stepping in to address service provision gaps. For instance, developers of new middle-class apartment complexes and private homes install boreholes to ensure a reliable water supply:

> "*People have put up their own sewerage systems (septic tanks), some have dug boreholes and are providing water to people around them. They are simply reclaiming their agency for action and are doing things for themselves in line with the visions and the dreams of the kind of city they wish to have*."

The Nairobi City County Government (NCCG), though formally mandated to set and coordinate the city vision, lacks the power (funding and technical capacity) to do so effectively (RP1, RP2, RP5, RP7, RP13, RP27a, RP27b). Elected leaders prioritise short-term gains over long-term planning, disconnecting statutory visioning from decision-making and funding, thus leaving the implementation of normative statutory visions dependent on donors and capital actors (RP1, RP2, RP9, RP10, RP27a, RP27b). The poor implementation of the NIUPLAN provides a case in point. Following the adoption of the plan in 2014, NCCG was to develop a series of implementation tools, including inter alia, Urban Design and Development Control Guidelines, and Integrated Detailed Area Action Plans for the sub-centres. At the time of this research, NCCG had yet to develop these crucial NIUPLAN implementation tools, citing a lack of funding. On the other hand, capital projects of interest to the private sector, political elites and international actors, such as the Railway City and Eastlands Urban Renewal, are advancing without the guidance of these crucial implementation tools. Moreover, NCCG policy actors often fail to articulate their priorities, ceding the power to set the urban development agenda to more charismatic and articulate international actors and

consultants (RP7, RP9), a phenomenon also noted elsewhere by Mazzucato and Collington (2023).

The prevailing political economy characterised by the rise of pragmatism, loss of trust in public service, target culture, and short-termism has marginalised urban planning professionals and practitioners from decision-making and action spaces (RP2, RP5, RP9, RP10, RP11, RP12). The lukewarm attitude towards urban planning, which is associated with foresight and city visioning, is partly because it doesn't yield immediate results, and its outputs do not directly yield immediate political dividends. It is compounded by the fact that urban planning is, by and large, an elite service least known to and consumed by the general population. Most citizens neither understand nor appreciate the importance of planning, a situation exacerbated by poverty and precarity, leading to a 'right now' mentality among the populace. Urban planning is perceived as an abstract, process-oriented endeavour without tangible outcomes, making it unattractive for investment. RP16 puts this viewpoint into perspective:

> "*Physical Planning produces policies and or maps…but who sees the policies? Wanjiku does not care about policies and maps. Wanjiku just wants roads, dispensaries and markets. She doesn't even care where you put that dispensary. She would say, this land is not being used, put the dispensary here*." – RP16

Urban Planning is still not considered important on the national stage, opening space for the projectification of both funding and city visioning (Borgström et al., 2016). It has replaced long-term integrated city visioning with project-based visions both at the county and national levels. The wide differences in the financial allocation to the State Department of Physical Planning (SDPP) *vis-à-vis* the State Department of Housing and Urban Development (SDHUD) over the last five budget cycles provide a case in point. During the financial years (FY) 2019/20- 2023/24, the SDPP was allocated a combined recurrent and development budget of KShs. 7.2 billion in FY 2019/20, KShs. 6.1 billion in FY 2020/21, KShs. 5.5 billion in FY 2021/22, KShs. 4.3 billion in FY 2022/23 and KShs. 9.3 billion in FY 2023/24 (GoK, 2023, 2024). In the same period, the SDHUD was allocated a combined recurrent and development budget of Kshs.28.8 billion in FY 2019/20, KShs. 28.2 billion in FY 2020/21, KShs. 15.5 billion in FY 2021/22, KShs. 11.7 billion in FY 2022/23 and KShs. 80.6 billion in FY 2023/24 (GoK,

2023, 2024). The same is replicated at the county level. This interview excerpt from RP16 corroborates the data presented above, reinforcing the observation that pragmatism and target culture are reshaping governance and public expenditure. The respondent states:

> *"Right now, the government is putting money in housing because the President wants to see 200,000 units by the end of the year… He is not investing in Physical Planning because nobody sees the results, but in housing, he can simply say, 'I promised to build 200,000 houses and here they are.' Physical Planning produces policies and maps… but who sees the policies? The common citizen does not care about policies and maps. They just want roads, dispensaries, and markets."*

Project-based visions and informal practices undermine established institutional frameworks and constrain NCCG's ability to guide city visioning and pursue inclusive strategies which would break cycles of disaster risk creation. For example, Presidential pressure enables the bypassing of embedded institutions, including normative statutory visions, policies and legislations. This obscures spatial intelligence and hinders holistic thinking that integrates risk knowledge, equity, social justice, and environmental considerations (RP10, RP11, RP16), consequently defeating efforts to break cycles of DRC. One example of Presidential pressure enabling the bypassing of embedded institutions and normative statutory visions is the development of the Nairobi Expressway in 2020. The $550 million, 27 km elevated highway was implemented through a public-private partnership model in a 30-year concession arrangement (Centric Africa Limited, 2019). The project was not anticipated in the NIUPLAN, reinforcing observations by Murray (2015a; 2015b), Watson (2013), and Noorloos & Kloosterboer (2018) that mega-urban developments frequently bypass established planning frameworks, exclude public participation, and evade accountability. Further, the design of the Expressway overlooked flood risk. It is commonplace for the elevated highway to turn into a temporary ‘river’ during a deluge, channeling flood waters to neighbourhoods downstream. It exemplifies how project-based urban development decisions can inadvertently create or transfer disaster risk from one locale to another. The lack of spatially intelligent, area-based visions results in fragmented urban development, exacerbating vulnerabilities, often transferring risk from affluent neighborhoods to impoverished ones, creating *"islands of tranquility*

surrounded by a sea of disaster hotspots" (RP2). This trend has significant implications for urban planning. Findings align with Arif Hasan's (2021) assertion that neoliberalism has supplanted holistic urban visioning with fragmented, project-based approaches.

The development of the Nairobi expressway exemplifies the disconnect between mandated and actual power for urban development decision-making and action. It highlights tensions between canonical and shadow systems in urban development decision-making and action, how informal practices can erode accountability systems, and how the fusion of political and commercial interests can override planning and defeat efforts to break cycles of disaster risk creation. As highlighted by RP3, there is dissonance between how urban development decision-making and action ought to happen and how it happens on the ground, agreeing with the institutional bricolage view that there is a difference between formal mandate and how things happen:

> *"Unfortunately, the reality and political economy that structure how urban development decisions in Nairobi are made are different. It's not right, but that is the reality in the city, and this is probably the reality of most African cities."*

These findings raise questions about the extent to which normative visions guide urban development decisions and priorities, and the extent to which project-based visions reference normative statutory visions. The lack of spatially intelligent, area-based city visioning exacerbates inequalities by promoting short-term, project-based approaches over holistic, integrated urban visioning, resulting in fragmented urban form, which shifts disaster risks from affluent to impoverished areas and creates differential vulnerabilities. This trend, coupled with neoliberalism, undermines efforts to address root causes of disaster risk, perpetuating cycles of disaster risk creation that are difficult to break.

6.3 Ideologies Underpinning City Visioning

Ideologies such as capitalism and neoliberalism and discourses such as sustainable development heavily influence Nairobi’s visions. These are evident across different formal policy documents, practices and arrangements that shape the city’s visions. On the other hand, disaster risk and climate change are emergent discourses. Sustainable development is also evident in the documents, presented as a strategic pursuit to be

realised through urban development projects (NCCG, 2013). The documents align well with the 2030 Agenda for Sustainable Development. This cuts across the different levels of governance. The vision for NCCG's housing sub-sector, which is to be a leader and valued community partner in building 'sustainable and resilient' neighbourhoods, provides a case in point (NCCG, 2018). This is also depicted in the NIUPLAN's vision for the CBD: "*a compact urban core that is creative, livable, green, efficient, competitive and inclusive*" (NCCG & JICA, 2014). The subsections below discuss these ideologies and how they materialise in Nairobi's urbanism and riskscapes.

6.3.1 Capitalism and Neoliberalism

Neoliberal and capitalist ideologies are manifest in frames, institutional arrangements, relationships, development pathways, policy choices and practices. Reviewed formal policy documents are saturated with neoliberal vocabulary such as 'competitiveness' (GoK, 2008; GoK, 2012; NCCG, 2018), attractiveness'(NCCG & JICA, 2014), 'world-class' (GoK, 2008, 2012, 2016a; NCCG, 2013), globally acceptable' (NCCG, 2013) privatisation and public-private partnerships (NCCG, 2018; Real Plan Consultants, 2019). This demonstrates the deep entrenchment of neoliberalism and its linkage with political and economic forces in Nairobi's urban development policy and decision-making debate space. These framings emphasise market mechanisms, privatization, and the role of private sector investment in urban development decision-making and implementation of city visions.

Decision-makers are preoccupied with positioning the city as a 'globally attractive destination' (RP3, RP4, RP5; RP27a & RP27b). This is also observed in the National Urban Development Policy's focus on improving the ease of doing business in urban areas, encouraging policies which attract local and foreign investment and facilitating the provision of 'world-class' infrastructure and services to make urban areas more ''competitive' for business and tourism (GoK, 2016a). These framings are not merely technocratic; they are politically expedient. Neoliberal ideology is actively co-produced by the political elite in their quest to deliver visible, high-impact projects within short electoral cycles. In this context, private capital becomes both a partner and a beneficiary, reinforcing a development logic oriented towards quick wins, ribbon-cutting ceremonies, and showcase infrastructure. Evidence suggests a stronger

prioritisation of visitors, expatriates, and foreign investors over the structural needs of the majority population. As such, there is a strong emphasis on elite-oriented infrastructure and services in affluent neighbourhoods at the expense of impoverished neighbourhoods. RP3 highlighted that the drive to position the city as a regional financial hub and international safe haven limits investments in pro-poor, risk-reducing infrastructure, services, and social amenities, asking pointedly: *"We are increasingly positioning ourselves as a financial hub for the region, a safe haven for the international community, but at whose expense?"*

Evidence suggests that neoliberal ideologies have structurally adjusted urban governance towards entrepreneurial governance. This includes emphasis on financially viable segments of the population at the expense of the urban poor. The bias towards market-based solutions and elite-oriented infrastructure and services is evident. For instance, the Nairobi Railway City, the Nairobi Expressway and the focus on home ownership through the Affordable Housing Programme demonstrate this. As discussed earlier, the deliberate omission of urban poor settlements from the priority programmes of the NIUPLAN, alongside a concurrent focus on urban renewal, sub-centre development and affordable housing instead of social housing, illustrates this (RP2; RP5; RP12). These are not accidental exclusions but are outcomes of political decisions that align with capital interests and electoral calculations. Neoliberalism becomes the mode through which elite political actors channel investments, discipline urban space, and manage their constituents. This development pathway effectively reinforces power imbalances, takes away the power to vision the city from citizens, and inadvertently exacerbates social vulnerability and reduces the adaptive capacity of much of the population. For example, when small businesses are pushed out and risk-reducing infrastructure and services like drainage, waterways, sewerage systems and public open spaces are neglected or even destroyed, communities become more vulnerable to localised floods as their adaptive capacities are reduced.

The entrenchment of entrepreneurial governance, characterised by market-driven policies and the prioritisation of private sector investments, significantly influences urban planning function and practices. It undermines the public-sector planning function and marginalises local voices in shaping their futures by emphasising private-sector interests over the needs of vulnerable communities, leading to unequal urban development outcomes (RP5; RP12). For example, the focus on public-private

partnerships (PPPs), such as the affordable housing programme and the Nairobi Expressway, and urban planning that prioritises private sector investment has shifted attention from long-term planning to short-term, project-based development. This orientation caters to the temporal logic of political incumbents seeking visible results and investors seeking fast returns, reinforcing a cycle in which the future of the city is subordinated to immediate political-economic incentives. This argument by RP15 illustrates this viewpoint:

> *"Urban planning should be more entrepreneurial and less regulatory – to facilitate private sector investments and be less of a gatekeeper." – RP15*

In this context, actors with commercial interests perceive normative planning processes as impediments to development, as they introduce unwelcome constraints. In the same context, those with power and capital push for deregulated environments where they can build 'whatever they want, wherever they want'. These neoliberal stances undermine the mediating function of public sector urban planning, enabling elite capture of city visioning and reducing the capacity for integrated foresight needed to address the root causes of vulnerability and disaster risk. The dominance of market solutions strangles the public-purpose nature of Urban Planning, turning it into an elitist service that serves the few. It reinforces existing power asymmetries, enables the capture of city visioning by capital interest.

A critical mechanism through which these neoliberal and political-economic logics are operationalised is through the focus on quantitative metrics. The NIUPLAN, for example, is overwhelmingly quantitative and underwhelmingly qualitative, an attribute closely linked to neoliberal planning rationalities. The plan places a strong emphasis on technical indicators, infrastructure development, and measurable outcomes, with detailed projections for population growth, water demand, energy demand, sewerage demand, housing needs, and transport flows. These ambitions are typically expressed in numerical terms, such as kilometres of roads and sewerage systems built, cubic metres of water provided and the number of housing units built. For example, the plan states:

> *"The total length of existing trunk sewers is about 162 km, collecting wastewaters from the sewerage service areas totaling about 208 km^2,*

which accounts for approximately 40% of the total area covered by the water supply service" (NCCG & JICA, 2014, p. ES-6).

While this quantitative orientation aims to present planning as objective, efficient, and investor-friendly, it depoliticises development and masks inequality. Metrics tend to obscure key social questions, such as who is served, who is underserved, and who is unserved, and thus become tools that validate elite-centric orientation while marginalising the needs of the urban poor and the low-income communities. Furthermore, these metrics support a political economy that favours short-term, high-visibility projects, typically infrastructure-heavy and capital-intensive, which align with both electoral cycles and investor interests. By emphasising measurable outputs over structural outcomes, they reinforce superficial success narratives while ignoring the lived realities of vulnerable populations.

This reductionist logic marginalises qualitative, normative, integrative, foresightful, and public-interest dimensions of planning, such as equity, justice, social vulnerability, inclusivity, well-being, breaking cycles of risk creation and cultural values. Consequently, further entrenching elite capture and entrepreneurial governance. This leads to fragmented, unequal, and risk-blind urban development. Metrics, in this sense, are not neutral tools but governing technologies of neoliberal urbanism that obscure power asymmetries, justify elite capture, and reproduce cycles of vulnerability and disaster risk.

From the preceding discussion, it is evident that neoliberal and capitalist ideologies, entangled with political and economic forces, significantly shape the urban development decision-making and implementation space in Nairobi. These ideologies are not merely reflected in discourse, but are deeply embedded in the institutional logic, planning practices, and political imperatives of the city. They benefit elite interests at the expense of the urban poor, exacerbate urban vulnerabilities and constrain the capacity to break cycles of disaster risk creation. By prioritising profit-driven, large-scale infrastructure over inclusive, participatory city visioning, and favouring quantitative matrices over qualitative dimensions of urbanity, Nairobi's urban development trajectory continues to marginalize vulnerable populations and reinforce a vicious cycle of disaster risk creation.

6.3.2 Resilience to Climate Change

Resilience to climate change is also emerging as a critical discourse shaping the city's vision and normative priorities. Emerging city visions have galvanised around the notion of resilience, a view supported by Borie *et al.* (2019). At the global level, the Sustainable Development Goals (SDGs) call for 'inclusive, safe, resilient and sustainable' cities (SDG 11). The government is aligning policies and strategies with climate change action. City visioning is a core component of global ambitions to deliver Climate Change Adaptation and Disaster Risk Reduction. Revision of the National Slum Prevention Strategy and the Physical Planning Handbook to respond to climate change and related risks demonstrates this (RP1; RP15; RP22; RP23). However, some of these efforts unintentionally reinforce cycles of disaster risk creation. In discussing the mainstreaming of climate change and DRR into normative visions and programmes, RP 15 postulates that:

> *"Disasters were not an issue when the Physical Planning Handbook and the Physical Planning Act were first developed in the mid-1990s. These are emergent issues. The Physical Planning Handbook is undergoing revision to integrate Disaster Risk knowledge and climate change."*

The National Adaptation Plan, the Climate Change Act 2016 and the National Climate Change Action Plan (NCCAP) 2018-2022 are notable normative vision documents. NCCAP (2018-2022) sought to strengthen the country's path towards sustainable, low-carbon, climate-resilient development. On the other hand, the National Adaptation Plan (NAP) 2015-2030 aims to enhance climate resilience, reduce vulnerability, and integrate climate change adaptation into national and sectoral planning (GoK, 2016a).

The adoption of the Nairobi Climate Action Plan (NCCG, 2022), developed by C40 and the establishment of a climate change unit within the NCCG, illustrate the trickle-down effect of climate change discourses in everyday urban development decision-making spaces. The CAP focuses primarily on mitigation, turning a blind eye to adaptation, which is the priority for the government of Kenya. Critics argue that the biased focus of Nairobi's CAP on mitigation is simply because of the business interests of global capital actors (RP3; RP5; RP9). Findings link it to the conditionalities attached to the funding to develop the vision. The funding for CAP is from the UK government under the European Climate Planning, which prioritises mitigation over

adaptation. As highlighted by RP3, actors with financial power set the climate action agenda in urban visioning:

> "*The major focus of the British government is on mitigation. As such, our climate action plan and the process around its implementation tend to lean towards mitigating emissions of greenhouse gases*. *The challenge is then for the city to ensure that adaptation is part and parcel of its implementation*." ~ RP3

In theory, adaptation is focused primarily on local challenges and involves adjusting to actual or expected climate impacts. This includes actions to minimise damage, address local needs and vulnerabilities, and enhance resilience to the effects of climate change (Calvin et al., 2023; Sumi et al., 2010; UNEP, 2023). Mitigation, on the other hand, focuses primarily on solutions and investments such as transitioning to renewable energy sources, improving energy efficiency, and enhancing carbon sequestration (IPCC, 2023; Sumi et al., 2010). Mitigation primarily targets economic and technological shifts, including transforming industries and economies towards low-carbon pathways. This process of 'greening urban visioning' is akin to what Bigger and Webber (2020) have termed green structural adjustment programmes (Green SAPS)(Bigger & Webber, 2021). These Green municipal structural adjustments are leading to adjustments in normative and knowledge programs in the city and are shifting power in the city-level restructuring to consultants and global capital actors.

This section has discussed how foreign influence and neoliberal agendas land in the city, and how powerful actors wield greater power in city visioning with little regard for local needs and priorities. Further, it evidences how such concepts as resilience are deeply normative. This is to say that resilience is not a neutral or purely technical 'bouncing back' concept as is often presented, but that it is inherently about whose interests are strongest in resilience building, whose resilience matters and the kind of city visions aspired. It is shaped by underlying social, political and cultural values that are often competing (Borie et al., 2019). Exploring city visioning through the lens of urban planning in Nairobi, the section elucidates how powerful elites and foreign governments bias what is valued, and ultimately, how that influences the kind of urbanity arising in Nairobi and the capacity for breaking cycles of risk creation.

6.4 Multi-level Capture of City Visioning

In this study, multi-level capture refers to the phenomenon where different layers of actors across different governance levels exert influence and control over urban development decision-making processes including visioning and implementation, shaping them to align with their vested interests, often at the expense of the masses. This occurs through financial dependency, knowledge transfer, policy discourse, and conditional funding. City visioning is characterised by capture at multiple levels. As RP6 succinctly observes, *“urban development decision-making in Nairobi is controlled by powerful elites – those with financial resources and those with access to funding.”*

The first level of capture is by international actors. Findings reveal that international actors have captured visioning at the city level. This capture is effected and reinforced through discourses which shape normative statutory visions; technology and knowledge transfer; funding conditionalities; implementation arrangements such as consultancies and public-private partnerships, grants and debt (RP1; RP4; RP5; RP6; RP7; RP10; RP12; RP13). These are discussed in greater depth in subsequent paragraphs. Discourses are often attached to development assistance and packaged in grants, loans, and technical support. Global funding mechanisms such as the Global Environmental Facility (GEF), Global Climate Fund (GCF), Clean Air Cities Fund, Financing Locally Led Climate Action (FLLOCA), and Adaptation Fund are examples. City leaders fall into this trap partly because of limited financial resources at the city level, as both the national and county governments set aside negligible resources, if any, for development.

As indicated earlier, the government is dependent on ‘development partners’ to finance the development budget, which often comes with strings attached (RP1; RP4; RP5; RP6; RP7; RP10; RP12; RP13). In this way, public sector policy actors cede their power and agency for city visioning to global capital actors and consultants. Citing the collaboration between the Kenyan government and Agence Française de Développement (AFD) on KISIP II, RP5 contends that *"AFD's funding comes with conditions. To access their financial support, we must comply with their stipulations."* This notion is reinforced by RP7, who discusses the approach of technical agencies in their dealings with local governments. She observes that:

> *"Technical agencies have a take it or leave it approach when they work with local governments. They design their programs in consultation with the donors and are often designed to meet the requirements of the donor but not necessarily to fit into the agenda of the beneficiary cities."*

Findings indicate that many technical and funding agencies have a hegemonic approach when relating to local governments. Their development assistance is often tailored to their own commercial and strategic interests, often with little regard for local priorities and needs (RP5; RP6; RP7; RP13). Reflecting on his experience leading city-level program implementation in a multinational agency, RP7 notes that priorities are typically established through documentation prepared in the Global North, after which African experts are convened to provide feedback and minor adjustments. Explaining this reality, he avers that:

> *"What happens is, you get this documentation from the north, then they call this sort of team of African experts to add value to the document, then give feedback on the priorities."*

This process essentially dictates the agenda for city visioning. When these externally driven agendas are coupled with funding and presented to the city-level policy actors, they act as a form of leverage, compelling decision-makers to accept the assistance without fully assessing their alignment with local priorities, needs or existing city visions. Granted the financial incentive, policy actors often find ways to absorb the development assistance even without establishing how exactly the intervention would fit into the local context and existing visions. Effectively, debt is used to facilitate access for international markets, including markets for foreign expertise, technology and products, often to the detriment of the local economy and capacity for breaking cycles of risk creation. The study concurs with Kaika & Ruggiero (2016) and Waldron (2019) that international actors increasingly dominate urban development, advancing neoliberal agendas with minimal consideration for local needs and contexts.

The second level of capture is by elites at the national and city levels. The interviews reveal that private interests have infiltrated and captured public policy and development decision-making, blurring the distinction between private and public agendas (RP4; RP7; RP10; RP13). In discussing this entanglement, RP4 asserts that:

> "*Private interests have infiltrated the corridors of city planning and governance, making these processes complicit in the capture of decision-making processes and spaces, and the prevailing inefficiencies. Developers, driven by market trends, dictate where to invest and exert significant influence over zoning decisions and policy revisions, often prioritizing capitalist goals over public interests*."

This entanglement between public policy and private interests constrains public-sector policy actors from mediating between public and private interests, as well as mediating disaster risks. Instead, the public sector has become an enabler for private investments. The recently launched KSh. 7 billion Affordable Housing Project offers an example. This is put into perspective by RP5:

> *"The government recently launched a KSh. 7B Affordable Housing Project which is to produce 4054 housing units in Kibera when completed. The project will be delivered through a PPP under a Design-Build-Transfer Model led by a private developer, Intex Construction LTD, through a loan facility from Kenya Commercial Bank. The developer is responsible for everything, including developing a plan and seeking approval… The role of the government in this project is to guide the process and relocate communities."*

Findings suggest that neoliberal policies have constrained the city of intellectual leadership for urban planning, defined as the ability to influence, guide, and inspire others through the generation and dissemination of ideas, knowledge, and their application in ways that inspire, influence, and mobilize others to pursuing shared goals or advancing policy, particular fields of practice or areas of work (Fullan & Quinn, 2015; Kellerman, 2012; Macfarlane, 2013; Senge et al., 2015). This decline has left urban visioning vulnerable to capture by different actors and vested interests. Consequently, the private sector has stepped in to fill the void (RP2; RP3; RP4; RP6; RP7; RP8; RP13; RP14). Data reveals that consultants have become policy brokers between technical and political level public officials (RP7; RP8; RP12; RP13). It is not uncommon to find a consultant appointed to provide professional services such as the preparation of a plan or the development of guidelines. Similarly, UN-Habitat observes that the appointment of consultants to represent the interests of the government in

committees, projects or commissions is a new development in Nairobi (UN-Habitat, 2018). The appointment of one of the directors of Planning Systems Services Limited to represent NCCG in the Nairobi River Commission is a case in point. Similar observations are made by Mazzucato & Collington (2023).

Private practitioners are often expected to adhere to policies and standards set by public sector actors (UN-Habitat, 2018). This is to guard against the excesses of private sector interests. However, in '*City Planning for City Leaders: A Handbook for Kenya*', UN-Habitat observes that it is not unusual for the government of Kenya to endorse and approve standards and guidelines developed by the private sector through outsourced services (Ibid). Interviews undertaken for this research corroborate this claim: most statutory visions and guidelines, including the NIUPLAN, the Development Control Guidelines, Nairobi Climate Action Plan, Eastlands urban regeneration and climate mainstreaming toolkit for KISIP are developed by consultants, both foreign and local. In the process, knowledge and expertise resident in NCCG are side-stepped in favour of external expertise.

Findings further suggest that global capital actors capitalise on the selfishness of local elites who trade their agency for oversight for a few thousand or millions of dollars (RP10; RP9; RP12). It is not uncommon to find urban development projects overriding extant institutions and normative statutory visions, bypassing processes such as Social and Environmental Impact Assessments (SEA), as well as being shielded from public accountability. The Nairobi Expressway exemplifies this. Implemented through a build-operate-transfer model, the project is operated by Moja Expressway, a subsidiary of China Road and Bridge Corporation. The details of the agreement of the project are opaque and in obscurity, creating cover for corruption and elite capture. In discussing this, RP 9 debates that:

> *"Africa represents a big market, and this is the biggest motivation. The biggest tragedy that Africa faces is poor governance. Foreign actors capitalize on the foolishness and selfishness of African leaders. What Africa needs is education and strong leadership. This requires game-changers who are transformational."*

The third level of capture is by politicians at different levels including *'politicians at locales'*. 'Politicians at locale' are opinion leaders with power and influence at the local

level. These actors often block initiatives that may threaten their interests. They are exemplified by Members of the County Assembly (MCAs). Politicians often perceive themselves as the ultimate decision-makers within their spheres of influence, believing that the responsibility for both decision-making and implementation rests solely with them (RP4; RP11, RP16). It is commonplace to find MCAs agitating to replace Settlement Executive Committee (SEC) members with their henchmen who can advance their interests by influencing public participation processes and outcomes. During one of the interviews, an MCA kept calling the respondent. He picked up the call on the loudspeaker and asked the researcher to listen in on the conversation. The MCA was calling regarding an ongoing urban upgrading project. According to the politician, he had the right to decide the kind of risk-reducing infrastructure his constituents get, who in his constituency deserves to be served and who doesn't. When the call ended, the respondent said: "*I just wanted you to listen to the conversation so you have a firsthand experience of the kind of pressure we go through daily*." This experience provided a first-hand view of the capture of visioning and the daily constraints faced by public-sector policy actors. While local elected leaders, as representatives of the people, should have a role in development decisions and implementation, this study postulates that involvement should not be tokenistic or serve to reward or punish specific voting blocks. It is increasingly difficult for public-sector policy actors to work independently, provide objective inputs into city visions, coordinate the visions or push back against the interests of powerful actors.

The above section has demonstrated how multi-level capture constrains the agency of public-sector policy actors to steer city visions in ways that can deliver inclusive urban development, which breaks cycles of disaster risk creation. Cumulatively, these have led to a culture of silence and complacency among city-level public sector policy actors, leaving the city without intellectual leadership for planning that can be trusted. This reality makes it impossible to contemplate disaster risks and issues like social vulnerability and equity in urban development decision-making and implementation.

6.5 Materiality: The Big Middle

A vast terrain of African urbanism, including Nairobi's, has remained largely underrepresented in urban theory (McFarlane, 2008), and so is Nairobi's urbanism. Writing about scholarly debates on Africa, Ferguson (2006) illuminates a strand of

shadows, including the shadow economy, the shadow state (Robinson, 2006), the shadow networks (Ferguson, 2006a; Honig, 2022; Simone, 2004) and the shadow systems (Pelling et al., 2015; Pelling & Wisner, 2014) in the context of urban resilience, breaking cycles of risk creation and climate change adaptation. This section invokes shadow systems to discuss materiality. The term “materiality” indicates a broad physical expression and outcome of intellectual, economic, cultural and ideological processes constituted through tangible, relatively durable physical elements of a city such as buildings, infrastructure and public furniture (Pilo’ & Jaffe, 2020). It is used here to discuss the physical manifestation of city visions in material elements or lack of it, how city visions are received and shape the physical outcomes and concomitant urbanity, or not.

Nairobi has several materialities, including inter alia, high-rise buildings, gated communities, planned inner-city neighbourhoods, informal settlements, transportation infrastructure, water and sanitation infrastructure, rivers, public open spaces, and tenement settlements. These materialities reflect a complex interplay of socio-economic, political and environmental dynamics, institutional dynamics and regulatory gaps, shaping a distinctive urban landscape characterised by a three-tiered socio-spatial system: The serviced, the underserviced (the big middle) and the unserviced communities. Below the big middle are the un-serviced communities. These communities, found in informal settlements, are often politically visible but materially excluded. They live in extreme precarity, concentrated poverty and are often excluded from formal planning and services, and recognition. They are often the focus of pro-poor interventions, urban upgrading and humanitarian programming. Above the big middle are the serviced communities. These are planned, formally recognised areas characterised by tenure security, full access to services, and formally regulated, professionally constructed housing, typically approved by planning authorities. They tend to have lower risk exposure due to their location, regulated development and investment in risk reduction. This community is often the intended or actual beneficiary of elite urban planning and private-sector investment. This three-tiered urban system is shaped by institutional and legal hybridity, state presence, risk exposure, and access to urban basic (risk-reducing) infrastructure and services. See section 2.5.2 for more discussions on this.

This section centres on the ‘big middle’, the partly serviced, partly legal, and partly formalised and underserviced communities, typified by tenement settlements. This materiality is key to understanding the dissonance between formalised, received city visions, which represent how things are designed to happen, and how things happen on the ground. The big middle represents a significant part of Nairobi’s materiality, providing housing for the city’s rapidly growing urban poor and working class. While precise data on the exact proportion of the ‘big middle’ within Nairobi's overall residential stock is limited, available information provides some insights. This ‘big middle' caters to low to lower-middle-income households (HUCHZERMEYER, 2007), earning between Ksh. 15,000 – 69,999 (USD110 - 520), It is partly serviced and partly legal with mainly legal employment and legal tenure. They are tenants, but with poor enforcement of tenant rights. The ‘big middle’ mainly comprises the working class living precariously, termed herein as the under-serviced communities. They have formal, informal or unstable jobs and are often excluded from both pro-poor and elite urban planning. Based on the most recent and reliable data sources, such as the 2019 Kenya Population and Housing Census, the proportion of the big middle can be estimated to be 30-35%. This estimate is further complicated by a technical building audit report, which revealed that over 70% of buildings in Nairobi are unsafe (KIPPRA, 2023; KNA, 2024). They are not approved, are built in hazard-prone areas, and lack basic risk-reducing infrastructure and services (World Bank, 2019).

The under-serviced communities typically live in unregulated inner city tenement neighbourhoods, densely packed rental apartments in peri-urban neighbourhoods (on newly subdivided land) and upgraded urban poor settlements or formerly site-and-services schemes (Mwau & Sverdlik, 2020). They are predominantly located in the historically African areas to the east of the city (Ibid). They are often forgotten as emphasis is placed on informal settlements and affluent neighbourhoods. The ‘big middle’ is also a site of disaster risk creation due to, inter alia, inadequate provision of risk-reducing infrastructure and services, environmental risks, location on marginal land with high exposure to natural hazards such as flooding, lack of structural integrity and poor regulatory oversight. Refer to the sub-section 2.5.2 for additional discussion on the ‘big middle’.

Like visioning, the materiality of Nairobi is driven predominantly by capital and politicians. It is shaped by the economics of deprivation and the singular pursuit of

profits at all costs (RP2; RP3; RP4; RP6; RP7; RP8; RP14; RP16). This affirms the observation of Mwau (2019) that tenements are a lucrative venture for developers due to high demand, low capital requirements, minimal maintenance needs, and attractive returns. According to him, investment costs are recovered within just five years. Material change is taking place rapidly, in pockets, at scale and in the absence of critical 'rules of the game' such as urban design and development control guidelines, a land use policy and local area development plans. Respondents generally agree that the appetite for profits overshadows the need to reduce disaster risks and address differential vulnerabilities (RP2; RP3; RP4; RP6; RP7; RP11; RP12). This is evident in both the infrastructure and housing sectors, leading to infrastructure apartheid (Myers, 2011), a situation of uneven and unequal distribution of infrastructure and services where the affluent are well-served while low-income and the urban poor are underserved or unserved (Ibid). This infrastructure apartheid is evident in Nairobi's urban form. Affluent neighbourhoods like Runda and Muthaiga enjoy planned housing with adequate sanitation, green and public spaces, and well-maintained infrastructure, while urban poor settlements like Pipeline lack these basic risk-reducing infrastructure and services. They have poor access to sanitation facilities, with open sewers and shared pit latrines, further perpetuating inequalities and vulnerabilities. It widens the inequality gap in access to risk-reducing infrastructure and services and complicates efforts to reduce disaster risks and break cycles of risk creation.

Implementation of pro-poor urban development is occurring organically and sporadically without coordinated visioning or foresight. It is represented by the 'big middle'. The big middle significantly influences the materiality of Nairobi but often operates in ways that circumvent accountability systems and formalised planning, and development control systems. In these settlements, tenants must carry water from the ground floor to the 7th floor, where staircases are uncomfortably steep and indoor lighting and air circulation are poor at best. Respondents agree in principle that the big middle is highly informal, and so is the capital that fuels it (RP10; RP11; RP12). In the words of RP10, one of the policy actors:

> "*Even this private sector that you are talking about is heavily informal. The capital we are talking about is also heavily informal, or off the radar of government recognition."* - RP10

The big middle is exemplified by *Kayole, Saika, Pipeline, Umoja, Mlolongo, Kasarani, Pangani, Huruma, Githurai,* and Zimmerman settlements. Residents of these settlements are often victims of buildings collapsing and have no access to risk-reducing infrastructure and services (RP4; RP7; RP10). They often must do something illegal, or their landlords must do something illegal, for them to have services. Both the landlords and tenants have a fair degree of risk tolerance and are willing to take the risk. RP13 explained: "*It is indeed a cheaper option, but you do not know when it will collapse*." This capital is off the radar of canonical systems. It is driven by twilight developers, an informal segment of Kenya's private developer community that is little discussed yet makes the most contribution to Nairobi's urban fabric (RP5; RP6; RP10; RP11; RP13; RP14). See section 5.4.2 for more context on the Twilight private sector.

Figure 26: A street view depicting materiality in Pipeline Estate in 2020. Photo courtesy of Margaret Njuguna/Capital FM

This twilight private sector thrives in a grey area between legality and illegality, where there is minimal state oversight or enforcement. This allows these actors to exploit loopholes or remain outside the bounds of formalised systems of regulation. It is an exploitative, gun-toting private sector which builds sub-standard buildings and doesn't conform to planning and building regulations (RP6; RP7; RP13; RP14). The developers have a narrow focus on profits and are not interested in protecting their buildings/ investments from future risks. Findings suggest that these actors do not care about people living in those buildings so long as they are making their money, whether

the buildings are fit for human habitation or not (RP6; RP10; RP13; RP14). In discussing this typology of the private sector, RP 14 posits that:

> *"Much of the materiality of the city is driven predominantly by an exploitative private sector that wants to do very sub-standard buildings, they do not care about the people living in those buildings as long as they are making their money per square metre in rent or sales, whether that building is not fit for habitation or not, they do not care"* ~ RP14

Regulating the big middle is a complex and challenging task. This is partly because policy actors are also part of the twilight developers, the business is lucrative, and income is invisible to the formal taxation framework (RP5; RP6; RP7; RP10; RP11; RP13). RP7 puts this into perspective, pointing out that *"the main problem is that some people putting up these buildings are holding positions of decision-making. They do not declare their conflict of interest."*

Members of Parliament (MPs) and Members of the County Assembly (MCAs) are also heavily shaping the materiality of the city. As discussed earlier, they are spearheading the construction of neighbourhood and or community risk-reducing infrastructure such as drainage channels, water and sanitation stations and access roads. These are funded through the Constituency Development Fund (CDF) and Ward Development Fund (WDF). The location and visioning of these projects are often the discretion of politicians, formalising and reinforcing clientelism and patronage politics, an observation also made by Opalo (2021). It is not uncommon to find public projects, such as roads, housing projects, bridges, drainage channels, and water and sanitation systems, among others, implemented in disregard of other ongoing, completed or upcoming urban upgrading interventions. This reflects the predominant management of urban space through self-contained local visions that act individually, in parallel and separately. These risk-reducing infrastructures are often implemented outside the spatial plan. The disjointed nature of implementation further reinforces the fragmentation of urban form. Criticisinging the continued existence of CDF for creating parallelism, RP2 argues that:

> *"There is no justification for members of parliament to implement spatial development projects. Instead, we need better-integrated visions and*

accountability in the implementation of community risk-reducing infrastructure projects." ~ RP2

This section has illustrated the dissonance between received city visions – how things are designed to happen, and how they happen, and futures aspired for in the canonical systems and the materiality produced in the shadow systems. The consequence of this dissonance is a context where disaster risk is not considered or even contemplated in decision-making and implementation. The dynamic and unregulated nature of this materiality constrains the capacity to break cycles of disaster risk creation. The precarity of the communities therein limits their adaptive capacities, locking them in a vicious cycle of disaster risk creation and vulnerabilities. The findings agree with McFarlane (2008), who states that materiality provides a key site for theorising urban change, politics, and possibilities.

6.6 Localisation of City Visions: Participation

Localisation, realised through the democratisation of city visioning, adapts city visions to local conditions, integrating socio-cultural narratives and urban riskscapes, recognising histories, lived experiences, knowledges, identities and aspirations of people. This section explores localisation through the lens of public participation. It discusses the main frames for public participation promoted by formal urban policy actors in Nairobi and juxtaposes them against the everyday practice of public participation. Public participation is crucial for the translation of city visions into material. Without it, there is a risk of creating contextually incongruent visions, leading to peculiar materialities that exacerbate vulnerabilities and inequalities, reinforcing processes of disaster risk creation.

In the pre-devolution period, public participation was predominantly conceptualised as 'involvement' (GoK, 2012), a framing that reflects a top-down approach to development decision-making. This formulation granted the state significant discretionary power in determining the extent to which local voices could be incorporated into development decision-making processes, as well as when and how public participation would be introduced in the decision-making cycle, who could participate, and the modalities of their involvement. The framing of public participation

within Vision 2030 exemplifies this approach. It portrays citizens as beneficiaries who ought to be educated to change behaviour to adapt to the received visions and concomitant futures. It emphasizes that:

> *"Citizens will be encouraged to value and respect public facilities through a series of public education and awareness programmes aimed at engendering a sense of civic responsibility and foster nation-building attitudes among all citizens."* ~ GoK, 2012

The advent of devolved governance in Kenya ushered in a paradigm shift in the framing and practice of public participation, placing it at the heart of development decision-making. In this new dispensation, citizens are presented as actors who should participate in co-creating those visions to co-produce desirable, inclusive materialities. Noteworthy, however, this is still within the range of tokenism, oscillating across informing, consultation and placation.

Participation is framed variously in different policy documents, including civic engagement, co-creation, co-provision, and co-production (United Nations, 2016a); collaboration (NCCG & JICA, 2014); and consultation and engagement (County Governments Act, 2012; GoK, 2016b, 2016a; UN-Habitat, 2018) in the whole cycle of visioning and implementation. This acknowledges the central role of participation in localising visions, adapting them to the socio-cultural and hazard contexts through processes of institutional bricolage. It is presented as a 'key element of modern administration and decision-making' (NCCG, 2022), a means for building ownership and effectiveness in development planning and decision-making processes (NCCG, 2022; Real Plan Consultants, 2019), a means for development control (NCCG & JICA, 2014); an asset for sustainable development (Ibid), building trust, and enhancing transparency, accountability and inclusivity(NCCG, 2022; UN-Habitat, 2018). The National Urban Development Policy describes it as an active engagement of members of the public in activities that affect them directly (GoK, 2016b), including planning, design, implementation, management, operation and maintenance of infrastructure and services (Ibid). These framings represent formal framings on how to localise city visions.

At the local level, strategies for involving communities in co-producing and localising city visions have been promoted with varying degrees of public participation. The

development of NIUPLAN and the Eastlands urban renewal project provides a case in point. According to the NIUPLAN report, the public participation approach deployed in the visioning exercise was developed to shape and mobilise public interest around common issues and to foster ownership of both the plan and associated outcomes (NCCG & JICA, 2014). This localisation involved merging community visions and aspirations with the received city visions (Ibid) and negotiating shared visions. In a similar vein, the report for the Eastlands urban renewal project presents public participation in the project as an engaging process throughout the planning cycle, aimed at strengthening ownership of the process and outcomes (Real Plan Consultants, 2019).

The above reflects what is written in documents. On the flip side, how things get done is different from what's written in statutory visions. Interviewed policy actors observe that public participation has become an exercise simply for ticking boxes to fulfil constitutional and legal requirements (Constitution of Kenya, 2010; County Governments Act, 2012; Kenya Policy on Public Participation, 2023). They argue that public participation has failed to achieve its original intention as envisaged in the constitution: to have the public shape their futures. Many urban development projects start with a fixed end in mind, regardless of public participation processes, if any. These processes are captured by powerful actors. In the words of one policy actor:

> *"What we call participation is actually not participation. I'll give you an example. In KISIP, some MCAs want to replace the Settlement Executive Committee (SEC) chairmen with their people who can represent their interests, simply to be able to influence public participation processes and outcomes of upgrading projects."*

On paper, the Eastlands urban renewal planning process had robust community engagement processes. According to the project report, the planning process included stakeholder consultations with various actor groups, including residents, civil society organisations, special interest groups and small-scale traders (Real Plan Consultants, 2019). However, it is criticised for inconsistency and for providing limited opportunities for engagement. Residents reported that the consultations were mostly sporadic and poorly communicated, leading to a lack of meaningful input from the broader community (Kuria & Obala, 2020).

Findings reveal that powerful actors decide the timings of public participation meetings, what information is shared with the public, and how and at what stage of the planning cycle public participation occurs (RP3; RP5; RP11). This starts with how communication on public participation is done (RP3; RP5; RP11; RP16). Powerful actors design tedious processes to defeat public participation. The message below, received by a respondent from a contact from the National Environment Management Authority (NEMA) regarding public participation in a project in her neighbourhood, illustrates this:

> *"Please do not hold your breath. Let someone from Ndemi Rd head there and demand hard copies of both the Terms of Reference and the actual EIA Report. They will be required to deposit their original ID before being handed the report to go make copies at their own cost and retrieve their ID on returning the documents back to NEMA."* ~ A public officer in NEMA

In the case of the Eastlands urban renewal project, NCCG and project consultants were perceived as dictating the framework and scope of participation. These actors imposed pre-determined visions and decisions on residents rather than involving them in shaping the visions, priorities, and methods of implementation. This highlights significant gaps in the localization of city visions and reveals how powerful actors capture city visions, marginalizing local voices. Such choices have lowered the expectation of residents towards public participation as well as their trust in city visioning processes and the county government. Consequently, the public is becoming apathetic to public participation as well as enraged by it (RP3; RP5; RP11; RP16).

This section underscores the growing disconnection between formal city visioning and the lived experiences of citizens, who feel sidelined in critical urban development decisions that shape materiality attendant urbanity.

6.7 Conclusion

The chapter makes a series of conclusions.

First, city visioning is shaped by complex power dynamics and driven by actors with varying degrees of power. Powerful foreign actors, local political-economic forces and neoliberal agendas dominate city visioning, prioritizing competitiveness, short-term economic gains, political expediency, efficiency and sustainability, often at the

expense of inclusivity, equity and the needs and priorities of the general populace, especially the urban poor. In this new urban political economy, local actors—including city governments, civil society, and communities—have lost agency over decision-making and city visioning, as global financial actors assert growing influence over urban form and function (Aalbers, 2020). The elevation of profit over equity has led to the systematic marginalisation of non-economic values in urban policy, exacerbating inequalities and contributing to processes of disaster risk creation.

Second, there is a lack of incentives and political will to pursue long-term, integrated, and risk-aware development that benefits all. City visioning continues to prioritise a narrow set of immediate, short-term impacts, overlooking the long-term and cascading effects of development choices that perpetuate cycles of risk creation. Decision-makers exhibit a myopic bias, with decisions primarily influenced by the value created or lost within the five-year electoral cycle. This short-termism severely limits insight into how urban development decisions perpetuate cycles of risk creation. Moreover, the multi-level capture of city visioning reinforces a project-based mode of governance, often driven by elite interests and detached from long-term planning frameworks. This 'projectification' undermines public-sector-led planning, delinks visioning from implementation, and constrains the agency of local actors in shaping their urban futures. This reinforces exclusionary development practices and deepens inequalities. Critically, certain flagship projects, such as the Nairobi Expressway, deserve deeper examination as emblematic cases of how large-scale infrastructure can actively contribute to disaster risk creation. For instance, while the Expressway is often framed as a symbol of modernity, it has altered surface runoff patterns and channeled flood waters into vulnerable settlements, heightening the risk of urban flooding. Such projects are not merely neutral technical interventions but act as material infrastructures of exclusion and risk. A more forensic, case-based understanding of how specific projects produce disaster risk is vital for exposing the limitations of extant urban development decision-making and action, and for reimagining risk-informed, inclusive urban futures.

Third, localization of city visions involves institutional bricolage processes, where actors negotiate to adapt received visions to the peculiarities of the institutional context, shaping how visions are received and/or enacted at the local level. This adaptation is influenced by actors' agency and institutional dynamics such as existing

governance arrangements, power relations, and policy and regulatory frameworks. Actors may resist or accept certain visions or aspects of the visions leading to adjustments or total rejection. Incongruences between city visions and localization are manifest in the materialities.

Last, while formal visioning aims to shape the kind of urbanity arising in Nairobi, it often fails to influence the actual materialities. The findings indicate that urban change is unfolding organically, driven largely by the 'big middle'. The settlement typology associated with this group remains underexplored, despite its significance. These households typically inhabit spaces that straddle the formal-informal divide. They are neither fully planned nor entirely informal. As a result, their neighbourhoods often evolve in regulatory grey zones, where building codes, infrastructure provision, and risk-reducing measures are inconsistently applied or entirely absent. This hybrid and loosely regulated urban form is becoming a dominant mode of urban expansion in Nairobi, yet it is systematically overlooked in both scholarship and policy. Critically, the built environments produced by the big middle contribute to disaster risk creation. This is through exposure to natural hazards, structural vulnerabilities, lack of risk-reducing infrastructure and services, and public-sector neglect. Understanding the big middle and how it affects DRC is essential for developing more inclusive, pro-poor and risk-sensitive urban futures. This is a fertile area for further inquiry.

7.0 Production of Pro-Poor Decision-making and Action Space

7.1 Introduction

This chapter investigates the production of pro-poor urban development decision-making and action spaces and the relationships between actors involved in everyday urban development decision-making and project-based decision-making. It raises questions about the construction of transformative, long-term urban development, decision-making and implementation spaces. Building on Chapter 6.0 City Visioning focuses principally on how international discourses and neoliberal agendas are received and enacted or not. The learnings from this and the previous chapter are useful for a nuanced understanding of how Nairobi's urbanity arises, how it is enabled and/or constrained by institutions, and how actors navigate these constraints.

The study centres on the Kenya Informal Settlements Improvement Project phase one (KISIP I) as a representative project-bound decision-making and action space, and the urban planning department of the Nairobi City County Government as the everyday decision-making and action space. The choice of these two sites sheds light on how actors working in urban poor settlements tinker with institutions to construct bespoke institutional arrangements to get things done. It provides insights into the nature of relationships between actors, interactions between formal and informal institutions, and the arising hybridity. It further illuminates one of the pathways actors use to manoeuvre the messy middle. This approach is widely applicable and relevant to understanding the changing nature of urban governance in Kenya, the tensions between central and devolved governance arrangements, the projectification of city-making and implications for breaking cycles of risk creation at the city and settlement levels. The chapter answers the second research question: "*How are pro-poor urban development decision-making and implementation spaces in Nairobi produced?"*

The chapter sheds light on the underlying dynamics that shape relationships and practices in these spaces. It explores power and (dis)trust, and how they enable and or constrain relationships. Findings reveal a pervasive sense of distrust among city-level and national-level public-sector policy actors, which influences decision-making and implementation processes. Moreover, project-bound decision-making spaces are found to redefine relationships between national and city-level urban development

policy actors. The study highlights the ephemeral nature of decision-making and implementation spaces in the city, limiting opportunities for the emergence of policy coalitions.

The chapter is structured around five sections. The first section introduces the Kenya Informal Settlements Project (KISIP). It traces the deployment of risk knowledge in KISIP, setting the stage for discussion of the project through a DRR lens in the subsequent sections. The second section explores the general aspects of decision-making and action, focusing on the actual practices of urban development decision-making and the actual presence of (dis)trust in relationships. It casts a lens on the limits to trust, the informal practices and formal institutions that enable a lack of trust to exist within a functioning policy or administrative space, the consequences of distrust for different actors and the policy space and responses to distrust from different actor positions. The third section delves into institutional pluralism, examining how power imbalances and incongruent institutional logics reinforce institutional pluralism. The fourth section investigates the strategies employed by policy actors to navigate and overcome the complexities of decision-making. It concludes by reflecting on the findings vis-à-vis the study objectives and suggests future research directions for fostering inclusive urban risk governance.

7.2 Plural Understandings of Risk

Whether KISIP I had an intentional risk-sensitive approach to urban upgrading or not is a contested subject. Some consider it to be risk-sensitive. Some consider it to be blind to disaster risks altogether. These two different viewpoints represent the views of city-level and national-level policy actors. The differences reveal plural understandings of risk. These are discussed in greater detail below.

City-level policy actors argue that the project overlooked disaster risks, raising concerns about whether its arising materiality transfers, compounds or breaks cycles of risk creation. Interviewed civil society actors contend that the project worsened disaster risks, noting that infrastructure investments such as roads failed to account for flood risk, with some lacking drainage systems, exposing the infrastructure and users to flooding during heavy rains. KISIP represents a missed opportunity for strategic city visioning that addresses disaster risks. Although it sought to reduce vulnerability and spatial inequalities in access to infrastructure, disaster risk knowledge

remained peripheral. As RP22 highlights, "*a whole program like KISIP invests in a settlement unaware of or without considering flooding as a risk and continues to invest and put resources in infrastructure development in that settlement*" Similar concerns were raised by NCCG policy actors across levels, who attributed this oversight to a lack of integrated planning and strategic visioning that could have anticipated risks. As a result, creating fragmented materialities. RP20 summarizes these concerns, noting that *"some local roads constructed by KISIP are not connected to arterial roads, sewerage systems are incomplete, paving is poor, and water pipes are not up to standard*."

In contrast to the views of city-level policy actors, interviewed national-level policy actors and consultants contend that the project was risk-sensitive. This viewpoint is based on the argument that all land use plans and engineering designs implemented under the project were subjected to both Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA). As RP24 explained, *"Risk is often considered as part of environmental screening as well as in the EIA. The environmental screening takes place before the socio-economic survey and is meant to understand the environmental challenges, including where floods occur, among others."* This suggests that risk was considered through a narrow environmental lens, and implicitly integrated into KISIP I through a normative process of EIA and SIA. RP22 further elaborated on the integration of disaster risk into KISIP implementation, stating:

> *"There are procedures and processes we follow. Under tenure, when we are doing the planning, we assess a settlement to understand its conditions, the kind of location it is, whether it is near ecologically fragile ecosystems, in hazardous areas and whether there are any risks in the settlement so that in our planning, we mitigate the risks and the likely issues like flooding. Apart from the land use planning that we know, we also do Environmental Impact Assessments where we identify the impacts and mitigation measures, and we include those recommendations in the land use plan. Similarly, when we are doing the infrastructure, during the design process, in cases where the settlements have not undergone the aforementioned tenure regularization process, we require the designers to also carry out both EIA and SIA to ensure*

that disaster risks are anticipated and mitigated in the implementation process ".

KISIP I's reliance on EIA and SIA offered a narrow, project-specific approach to addressing disaster risk and social vulnerability, focusing on immediate environmental and social risks that are visible while neglecting broader, longer-term vulnerabilities. This narrow scope limits the engagement with deeper social, political, and economic processes that perpetuate cycles of disaster risk creation. This approach missed opportunities for more integrated risk reduction. The emphasis on environmental and social assessments did not sufficiently integrate risk knowledge into broader urban upgrading, missing opportunities to create more comprehensive, risk-sensitive policies, decisions and actions. Consequently, although KISIP I achieved short-term infrastructure improvements, it failed to comprehensively address disaster risks, limiting its ability to break cycles of risk creation and address some obvious risks. Breaking cycles of disaster risk creation requires integrating risk assessments into the urban planning process from the outset, not as an afterthought during environmental screenings.

Although KISIP I did not explicitly tackle the root causes of disaster risks, the interventions implicitly focused on reducing vulnerability. Further, they planted a seed, influencing the understanding of the intersectionality of breaking cycles of risk creation and urban upgrading. Further, it influenced the modification of normative planning practices to explicitly integrate disaster risk knowledge. National-level policy actors are starting to recognise the limitations of existing normative processes in effectively addressing both current and future risks. A multi-hazard event in Kamere settlement, Nakuru, catalysed a shift in how disaster risk is approached in KISIP. Previously an afterthought, disaster risk and risk knowledge are now considered proactively, as noted by RP23:

"When constructing roads in Kamere, the steep terrain and rocky conditions, along with a sinkhole, were not anticipated. When rain came, it became a disaster. We had not thought about all these risks. As a result, geologists had to be involved, although their involvement was an afterthought. This experience was a wake-up call on how we implement interventions in settlements, which open downplayed disaster risks which

can come up during and after the project, potentially delaying or halting it."

RP22 corroborates this claim of a shift in how disaster risk is approached, revealing how risk knowledge is embedded in KISIP II processes:

> "*… In KISIP II, we are being intentional about disaster risks even when we are holding initial meetings with communities. We are sensitive to climate issues now and we try to ensure that they find space in our planning, in our designs, and engineering designs so that they are carried to implementation."* ~ RP22

7.3 General Aspects of Decision-Making and Action

A core design feature of KISIP was community involvement in development decision-making and implementation. The project's implementation structure allowed community voices to influence priorities in urban upgrading. Despite a pre-set infrastructure menu, interviews revealed that community representatives played a significant role in shaping the actual interventions. As RP22 explained: "*Although we have an infrastructure menu, it is the communities who decide what priorities exist in their settlement (…). They are guided by engineers and some of us to understand the kind of money that is available."*

Community involvement in KISIP was through Settlement Executive Committees (SEC), a community engagement model created to mobilise diverse voices in informal settlement upgrading within settlements where the project was implemented. It was designed as a diverse group representing various segments of the settlements. As RP23 explained:

> *"SEC is an 18-member committee including representatives of FBOs/CSOs, the elderly, tenants, structure owners, PWDs, orphans, widows/widowers, Chief and MCA. The chief and MCA are ex-officio members of the SEC," ~RP23.*

SEC worked together with consultants to co-create visioning scenarios and Part Development Plans. However, the arising outcomes were not often inclusive. This is attributed to SEC members capturing decision-making at the expense of the

community. According to interviewed civil society actors, the SEC did not represent the interests of the community. RP19 contextualised this form of capture, arguing that:

> *"The concept of the SEC is not wrong; the issue lies in how members are selected. The process begins with the local administration convening a baraza (community meeting), where they map out stakeholders, and the committee is then formed without further input".*

RP21a & RP21b corroborated this view, discussing that *"there is no criterion for selecting who gets invited to the baraza. The loudest community members and those close to the chief and the village elders are the ones who often get invited to such forums".* These claims open debate on the inclusivity of the SEC and of KISIP. Further analysis revealed that actual implementation was curated by national-level policy actors, suggesting that the KISIP I process was tokenistic.

7.3.1 De Facto Practice of Decision-Making and Action

KISIP I was designed and negotiated jointly by the national government, the World Bank, AFD and SIDA (Muraguri, 2011; Repcon Associates, 2014). According to Anderson and Mwelu (2013), it had a hierarchical organisational framework which included KISIP Steering Committee chaired by the Principal Secretary in the State Department of Housing and Urban Development; KISIP program coordination team (Secretariat); Central Technical Assistance Team (CTAT) and technical specialists to carry out activities such as procurement, financial management, monitoring and evaluation, slum upgrading, mapping, surveying and planning; KISIP County Coordinator at the county level to oversee day-to-day running of the program; county coordination team made up of department heads; County Technical Assistance Pool (TAPs) of consultants, Land Survey Expert and Settlement Executive Committees. This elaborate framework notwithstanding, this section demonstrates that the role of the county government in KISIP I was nominal and national-level policy actors wielded hegemonic power over decision-making and implementation.

Analysis characterises KISIP as an informal practice to navigate decision-making and implementation 'messiness' in an enduring urban poor development permacrisis. This permacrisis provides a point of departure for the creation of hierarchical control, providing a foothold for decision-making bubbles. Accordingly, it created room for

manoeuvre for national-level policy actors to engage in pro-poor urban development decision-making and implementation. It demonstrates how designed development interventions interact with informal practices that permeate and cut across formal structures to produce variations between what is designed and what happens in reality (Cleaver, 2012; Jones, 2015; Rusca, et al., 2015; Haapala, et al., 2016). This set the project on an enduring path of hierarchical control. This is discussed in subsequent sections.

The implementation of KISIP I was led by the national government, with limited participation from the county government, and was coordinated centrally by the KISIP national secretariat. This hierarchical control is a longstanding bone of contention between national-level public-sector policy actors and their counterparts at the city level. National-level policy actors attribute the dominance of the national government in the project to the fact that the project design was developed under the old constitutional order, before the introduction of the devolved system of governance. As RP22 explained:

> *"We designed phase one before the new constitution. This was around 2009 when we did not have county governments. So, in the design, the national government was doing everything, in consultation with municipalities, in those days. Most of the implementation was done by the national government, but in very close collaboration with municipalities." ~ RP22*

The implementation model of KISIP was based on consultancies, a neoliberal model which has been praised and criticised in equal measure (Mazzucato & Collington, 2023). See section 0 for a more in-depth discussion on the role of consultants. Consultants played a significant role as policy brokers in the decision-making and implementation of KISIP and critical players in the creation of room for manoeuvre in the messy policy debate space. The decision to procure consultants to do the work was negotiated at the project design stage and structurally built into the project design. According to the interviewed national-level public sector policy actors, the consultancy model was adopted because of inadequate technical capacity at both the national and local government levels (RP22; RP26 & RP23). As RP22 explained, putting it into context:

> *"(…) We didn't have adequate engineers and planners at the national and at the municipal level to spread across those 14 counties. This is when the issue of consultancies came in. Consultants came in to assist in planning and surveying, engineering designs, EIAs, SIAs, screening and preparing Relocation Action Plans (…). In KISIP I, these consultants were managed by us at the national government level."* ~ RP22

Interviews reveal that decision-making in KISIP I had two distinct pathways: top-down and bottom-up decision-making pathways. The top-down pathway was concerned with project design, expenditure, hiring of consultants and contractors, ownership of data, the integration of risk knowledge and decision on proposed infrastructure interventions to be funded. It was led by the KISIP national secretariat and the World Bank and was heavily influenced by consultants. The bottom-up decision-making pathway, on the other hand, was concerned with the formulation of Part Development Plans and survey plans, validation of the process and submission of arising outputs, and development of a priority list of DRR interventions based on a pre-set menu. It was led by the community under the guidance of consultants. In between the two pathways was the nominal role of NCCG, which included selection of settlements, link to normative programmes, practices and processes, and link to existing and other ongoing interventions.

Figure 25 is an illustration of the decision-making pathway in KISIP.

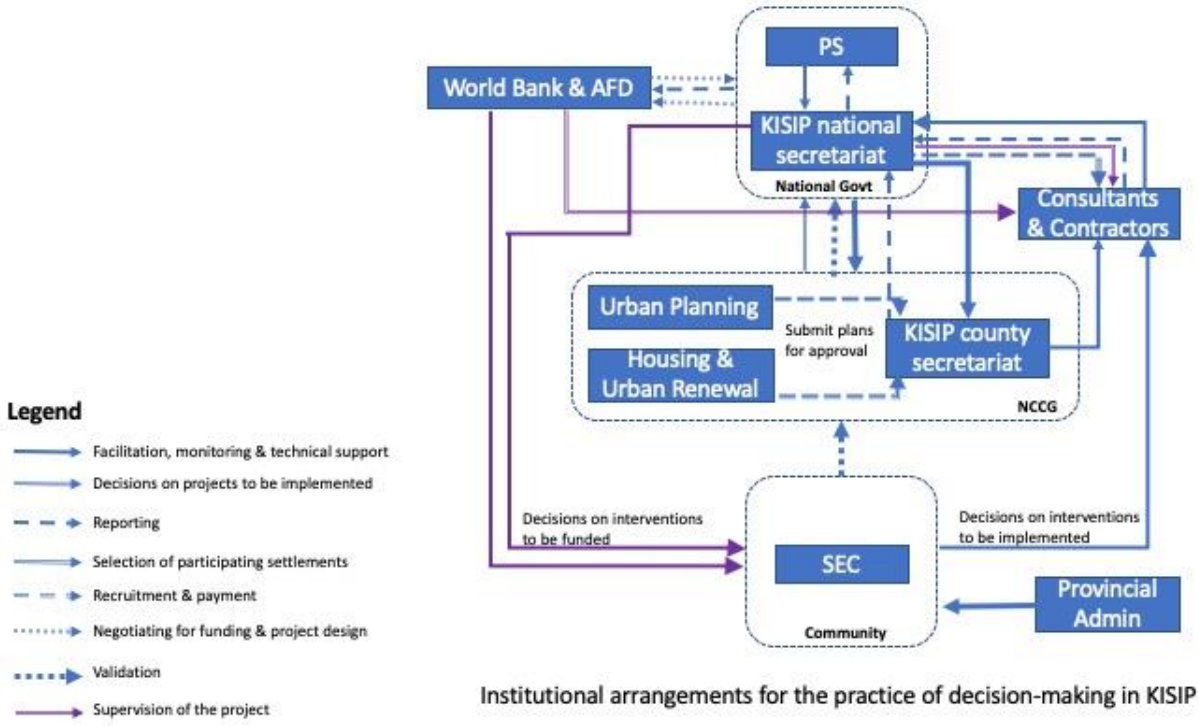

Figure 27: De Facto Decision-Making Pathways in KISIP I

Evidence indicates that the structural arrangements of KISIP systematically constrained the agency of NCCG in pro-poor urban development decision-making and implementation. The decision-making process, as articulated in the dominant Figure 25, highlights NCCG's limited role in KISIP's decision-making and implementation. RP26 corroborates this, debating that:

> *"… it is the settlement and the people who decide that they want XYZ. Not the county government. On the other hand, it is the national government and the World Bank that decide which projects to fund (...). Somehow the county government becomes a conduit for channeling proposals from the settlements to the national government and the World Bank, and for channeling resources from the World Bank and the national government back to the settlements. So, in terms of decision-making, they (the county government) become powerless. They are just there to serve a transfer function from the beneficiary to the funders and from the funders to the beneficiaries. They do not necessarily occupy a space which says they are vetting the projects or increasing or reducing the money. That is not their role."* ~ RP26

7.4 Relationships of Distrust

Distrust is observed between KISIP national secretariat and NCCG's department of urban planning; city-level policy actors assigned to KISIP and those not; as well as between SEC and community members. This distrust shaped how the project was received and perceived by different city-level policy actors, influencing coordination, collaboration, and ownership of the project at the city level.

The study takes these normative arguments and recasts them to argue that organisational (dis)trust fluctuates as part of a perpetual dyad. The behaviour of actors in project-bound decision-making spaces directly shapes, and is shaped by, the actions of actors in everyday decision-making spaces. Distrust, in this framing, is not simply a background condition but a structural feature of how fragmented governance plays out in practice.

Importantly, this distrust is not solely a reflection of the multi-donor development bank (MDB) consultancy network, although this is a significant contributing factor. Rather, it is the product of a more complex interplay between externally driven, technically oriented, hierarchical project modalities and local shadow systems, entrenched patterns of elite capture, and fragmented decision-making structures. The MDB consultancy model, which often sidelines local institutions in favour of centrally managed, expert-led, and output-focused approaches, interacts with these local governance dynamics in ways that erode trust, blur lines of accountability, and amplify perceptions of exclusion and marginalisation.

City-level policy actors repeatedly referred to KISIP as many different things but not as a Nairobi City County Government (NCCG) project. Descriptions such as *"a top-down model"* (RP19), *"a project conceived elsewhere"* (RP20), *"a top-down project which has no proper public participation. Simply a shortcut"* (RP21), *"a gift box from the World Bank to the government of Kenya… owned by the national government … the county government is co-opted to support public participation"* (RP28), *"a program running on its own, not integrated into day-to-day activities and lacking policy support"* (RP27b), *"a project coordinated centrally and designed to reinforce status quo… focused on technical challenges and providing technical solutions"* (Ibid), *"a world bank project"* (RP25), *"both a top-down and bottom-up project"* (RP24), *"a standalone project in the grand scheme of things"* (RP28), *" joint national government and World*

Bank project" (Ibid), and *"a project for the rich"* (RP21 & RP24), all reflect the deep-seated skepticism and alienation among city-level stakeholders. On the other hand, national-level policy actors framed KISIP more positively as *"a successful participatory model where communities decide what priority interventions they need"* (RP22), *and "a bottom-up model of slum upgrading"* (RP23), suggesting a dissonance in perceptions that mirrors the governance distance between national and local levels.

These conflicting narratives about the project are best understood as outcomes of embedded distrust, exacerbated by structural asymmetries between actors. They reveal how project-based forms of governance interact with the politics of everyday urban development decision-making, as well as the interactions between national and city-level public sector policy actors. The result is a fragmented governance landscape in which cooperative relationships between actors are minimal, and project implementation becomes isolated from broader planning systems. This aligns with Jones (2019), who argues that distrust alters how actors interpret the actions and motivations of others, often reinforcing pre-existing suspicions and undermining opportunities for collaboration. Where there is room for less favourable interpretation, people often adopt the interpretations that most fit their views of the other's trustworthiness, further entrenching institutional fragmentation and weakening collective capacity to deliver equitable urban transformation.

7.4.1 Distrust Between National and County-Level Public Sector Actors

Interviews reveal relationships of distrust between the NCCG's Department of Urban Planning and the KISIP national secretariat. Interviewed national government policy actors agree that KISIP I was hierarchical, and that the national government played a significant role in its implementation. According to national-level policy actors, this was because of both inadequate human capacity and the fact that the project was designed in the old constitutional dispensation under a centralised system of governance. See sub-section 7.3.1 for more discussion on this. Nonetheless, interviewed NCCG policy actors read mischief into the hierarchical structure of KISIP. They argue that their national-level counterparts view them in contempt and as incompetent and corrupt folk with no capacity and trustworthiness to implement donor-led projects. Pushing back against the perceived labelling, RP29 argued:

> *“You cannot tell me that we are incapable of handling donor-funded projects that we do not have experience, that city hall is corrupt… we are equally qualified and equally capable! I worked in the Ministry of Public Works before moving to Nairobi City Council...They cannot say we do not have experience!”* ~ RP29

Contradicting claims regarding the roles of NCCG in KISIP further reveal entrenched distrust between national and city-level public-sector policy actors. National-level policy actors assert that NCCG was the executor of KISIP I in Nairobi (RP22, RP23 & RP26) and that the county government was responsible for selecting settlements, working alongside consultants, supervising them, and endorsing project outputs. City-level policy actors dispute this assertion, indicating that while NCCG was invited to nominate urban poor settlements for KISIP, final decisions were made elsewhere. After submission to the KISIP national secretariat, the nominated settlements underwent additional short-listing, a process over which city-level policy actors had no influence. Consequently, beneficiary settlements were frequently altered. This undermined the agency of NCCG in upgrading urban poor settlements. As RP27b explains:

> “*The impression we got is that the decisions which were supposedly ours to make were going through other processes outside City Hall. When we have decided on the settlements that we want to do, we do an assessment and send it to KISIP national secretariat. You find that even me, who is the lead person at City Hall, cannot confidently brief the Governor on the choice of the settlements”* ~ RP27b.

Distrust between national and city-level policy actors is also evident in the ownership and control of project-related data, as well as in the limited access granted to NCCG policy actors. Interviews revealed that the KISIP national secretariat maintained unilateral control over project data. Outputs, including reports and land titling data produced by consultants, were submitted exclusively to the KISIP national secretariat, with city-level actors receiving copies only if they were provided by the national secretariat. As RP24 noted:

> *"Consultants are contracted by KISIP national. The consultant submits the report to KISIP National and retains a copy. The county only receives*

> *the initial copy approved at the plan approval stage, but not the final report unless provided by KISIP national"* ~ RP24

This is partly linked to the recruitment process and reporting lines. Since consultants were contracted by the national government, they were accountable solely to the contracting authority, the KISIP national secretariat. This reaffirms the view that decision-making and implementation power in KISIP resided primarily with national-level policy actors. Furthermore, it aligns with the perspective that the county government primarily serves as an intermediary between beneficiaries and funders.

Response to distrust is manifest in how city-level policy actors receive and perceive the project. Interviews reveal that KISIP was not well-received and embraced at City Hall and was widely viewed as an externally owned project. Findings are consistent with the argument by Simon (2020) that if distrust is based on suspicion of ill will, the outcome will manifest in resentment, and if it is based on pessimism about competence, then it will manifest in vexation. Such demonstrated distrust towards the competency of NCCG urban planning policy actors creates tensions and limits cooperative relations. This study concurs with D'Cruz (2020) that distrust sends a signal that the distrusted party is incompetent, malevolent or lacking integrity. This wounds the distrusted party, disempowering them. Reflections by RP27b below put this into perspective:

> *"Why there has to be tension on this is because it is my function and resources follow functions. You have taken my functions; my resources and you are also putting restrictions on my engagement in that function to the extent that the project is dealing with the function. You are basically limiting my agency."* ~ RP27b

A closer look at why, exactly, structural relations assign limited agency to NCCG regarding KISIP suggests distrust between national and city-level public-sector policy actors. NCCG policy actors postulate that project-bound decision-making spaces are created to concentrate development finance at the national level. RP27a put this into perspective, arguing that: "*the national government has not come to terms with the reality that county governments can do procurements*." RP27b adds to this debate, arguing that *"civil servants in the national government have become used to controlling huge donor funds with poor accountability mechanisms yet they are the same ones*

expected to advise any new Cabinet Secretary on devolution". This raises a fundamental question on compliance with the embedded institutional frameworks and accountability as decisions are made outside of the established institutional frameworks. Analytically, decision-making and implementation 'bubbles' are an informal practice. They provide cover for extra-legal, extra-constitutional choices which erode constitutionalism, trust and accountability. According to the Constitution of Kenya, County Governments Act, Urban Areas and Cities Act, the county urban development decision-making and implementation is a devolved function (Constitution of Kenya, 2010; County Governments Act, 2012; The Urban Areas and Cities (Amendment) Act, 2019).

7.4.2 Distrust Between Project-Based Actors and Actors in Everyday Practice

Closer scrutiny of the data reveals a deepening sense of distrust between public sector policy actors working in the everyday urban development decision-making space, and their counterparts assigned to KISIP. While this distrust is often attributed to the special treatment afforded to those within the KISIP structure, such as workshop allowances and access to modern equipment and vehicles, it is ultimately symptomatic of broader systemic dynamics. For instance, the KISIP secretariat was equipped with new furniture, laptops, and office resources, while urban planning departments within Nairobi City County Government (NCCG) continued to operate under resource constraints. RP22 defended these arrangements, stating:

> "*It is understood from the beginning that vehicles, computers, laptops, office space and staff with certain professional skills and experience are needed for the project to run*".

This preferential treatment bred distrust, which evolved into jealousy and microaggressions. It also reinforced feelings of exclusion and marginalization. As RP23 shared, it was commonplace to hear such comments as "n*ow what are these people doing? They do not even understand what they are doing. Why are they even funded?"*.

These tensions cannot be understood solely as a reaction to the MDB consultancy network or project-level disparities. Rather, they emerge from the interaction between

this externally driven, technocratic project modality and entrenched shadow systems, informal norms and practices that shape urban governance and the capture of key planning functions. Outsourcing of planning services and decision-making power to consultants occurred at the expense of NCCG urban planning policy actors, who were often left out of critical decision-making processes. This contributes to the limited agency of NCCG. As RP28 stated:

> *"Whatever we do as a county government, we fit into the national government's development plan which is aligned to the President's manifesto. KISIP supports the implementation of the national government agenda. We only feed to it."*

This dynamic rendered the NCCG's agency symbolic at best, with professional planners demoted to peripheral functions such as handling complaints, enforcement, and approvals. Core planning functions were taken over by consultants, starving public sector policy actors of resources to implement normative programmes, their plans and policy priorities. The erosion of agency was further underscored by RP20, who lamented:

> "W*e can do the work even better than the consultants. Most of us here are qualified and have Master' degrees and above. Most of the people consulting on these projects are not any better than us. They are just better facilitated to do the work.* ~ RP20

This sentiment speaks to the frustration of being structurally excluded from decision-making, despite possessing the technical competence to lead.

Nairobi is not new to the undermining of practice and professionalism. Historical accounts indicate that from as early as the 1970s, the marginalisation of professionals, internal corruption, and interference from the central government have undermined long-term spatial development efforts in the city (Ogot & Ogot, 2020; Werlin, 2006). City Hall experienced significant governance failures, with council members increasingly engaging in corrupt practices, prioritising contracts, jobs, and tenders over professional urban management (Ogot & Ogot, 2020; Werlin, 2006). These practices led to the attrition of qualified technical staff, diminished morale, and a deterioration in

service quality. This is discussed in greater depth in section 5.2.1.3. Together, these dynamics have contributed to the erosion of technical capacity and relationships of trust. Over time, this institutional sidelining and persistent fragmentation created a climate of resignation.

Cumulatively, distrust erodes the morale and the operational capacity of the NCCG urban planning department to reduce risks for the urban poor. Policy actors in the department adopted a laissez-faire posture, becoming more seen and less heard. They distanced themselves from the very processes that could enable risk reduction for the urban poor. In this environment, accountability waned, and a culture of indifference took root. Distrust also reinforced gatekeeping behaviours, limiting cooperative relations. It provided a foothold for parallelism and reinforced the multiple, disconnected visions in Nairobi's pro-poor urban development decision-making and action space, enabling fragmented, project-driven approaches that were disconnected from the city's broader urban development vision. For instance, KISIP I operated in isolation from the Nairobi Integrated Urban Development Master Plan (NIUPLAN), and even policy actors leading the development of the city's 2023 land use policy struggled to articulate how the policy is linked to KISIP and vice versa. This disconnect further hampered oversight of consultants and led to inconsistent policy frameworks, weakening the city's capacity to pursue integrated, risk-aware urban transformation. The absence of accountability perpetuates a risk culture as policy actors become indifferent towards equitable access to public goods, inclusivity in decision-making, quality of risk-reducing infrastructure and services, and risks of maladaptation.

In sum, distrust is not merely a by-product of the contemporary development interventions and associated institutional logics and arrangements such as the MDB's consultancy model, but the outcome of its interaction with historical governance failures, embedded institutional logics, entrenched shadow systems, and continued multi-level capture of decision-making and implementation space. Together, these forces undermine institutional trust and constrain efforts to address systemic risks and promote equitable and inclusive urban futures.

7.5 Institutional Pluralism: Incongruent Logics, Power Asymmetries and Agency

The previous section discusses how relationships of distrust reinforce existing power asymmetries. This section discusses the phenomenon of institutional pluralism. Kraaz & Block (2008) and Yu (2013) define institutional pluralism as the co-existence of multiple institutional logics or institutional spheres, generating contestations, competitions, multiple identities, mythologies and ways of getting things done. They argue that it arises when actors seeking legitimacy are confronted by multiple institutional spheres with competing demands (ibid).

Findings attribute institutional pluralism to multiple, competing institutional logics within NCCG policy and administrative context. Institutional logics are understood herein as *'systems of cultural elements (values, beliefs, and normative expectations) by which people, groups, and organizations make sense of and evaluate their everyday activities and organize those activities in time and space'* (Haveman & Gualtieri, 2017). Organisational forms and managerial practices are manifestations of institutional logics. Evidence suggests that KISIP was shaped by a hybrid of market and decentralisation logics (Bresser-Pereira, 2004; Kruse et al., 2020; Mzenzi & Gaspar, 2022). KISIP I was manifest of hegemonic, technocentric, interventionist approaches to urban poor development, focusing on the immediate, celebrated outcomes and driven by pragmatism. This is primarily because it focused on the material: developing Part Development Plans (PDPs); providing tenure security and risk-reducing infrastructure and services (Mangira, 2021; Muraguri, 2011; Repcon Associates, 2014). On the other hand, NCCG is structured by bureaucratic and devolutionary logics (Bresser-Pereira, 2004). It works within set institutional frameworks and places emphasis on regularised and predictable processes and procedures.

KISIP's market and decentralisation logics were incongruent with the slower, hard-to-see, process-oriented, behind-the-scenes approaches to urban poor development, grounded in long-term social transformation, local knowledge, and political empowerment. These normative processes are necessary to address the underlying social, political, and economic processes that create disaster risk and vulnerability. While it is an effective means for delivering immediate, tangible results such as risk-reducing infrastructure and tenure security, the design of KISIP I was not compatible with the more gradual, systemic changes needed to address the root causes of risks

such as inequality, social exclusion, corruption and elite capture. These are synonymous with everyday decision-making spaces. Illustrating this incongruence of logics, RP21b observes that:

> "*KISIP comes and it doesn't recognise anything that is existing on the ground, including ongoing processes, stakeholders and how their ideas and strategies fit in the existing processes and strategies.*"

RP24 extends this argument, adding that "c*onsultants do not dig out the root causes, they cut the stem at the middle, hoping that new buds would sprout*". These logics blinded KISIP to the more complex, hard-to-see socio-political and power dynamics that reproduce uneven geographies of floods and water stress.

Evidence indicates that conflicting institutional logics hindered the integration of KISIP into the Nairobi City County Government's urban planning policies, programmes, and projects. The project had its decision-making structure, budget and reporting line independent of the rest of NCCG's urban planning department. This was articulated by RP27a, who postulated that "*KISIP still operates parallel to the day-to-day decision-making. It still runs on its own. It has its own structure, its own systems and mechanisms of running."* RP25 reaffirmed this claim, arguing that:

> "*KISIP is a parallel process with no link to existing policies and plans, and ongoing interventions. There is no relationship between what is happening within the county and KISIP itself... The county is busy doing their own thing on one hand and doing KISIP on the other*." ~ RP25

These two quotations, by and large, represent the viewpoints of consultants, civil society and city-level public sector policy actors.

Evidence links institutional pluralism to decentralisation logics on the part of national-level public-sector policy actors, and limited power and agency among city-level public-sector policy actors to push back. RP27b put this into perspective, arguing that

> *"This hierarchical control effectively meant that even if we wanted to mainstream the project into everyday urban development decision-making, it was not possible because most of the decisions were not being made at our level."*

According to the analysis, everyday decision-making space is subservient to project-bound spaces of decision-making and implementation. This is attributed to the limited power of city-level policy actors vis-à-vis the fiscal power of national-level public sector policy actors and the influence of consultants.

Another finding is that there were no requirements compelling actors in the two policy sites to work together. Integration of the two decision-making and action sites was at the discretion of consultants and depended on the agency of the KISIP county coordinator and NCCG urban planning staff assigned to the project. RP27a puts it as follows: "*How close KISIP comes to interacting with everyday urban development decision-making depends on who is appointed to be the coordinator of the project*". Weighing into this debate, RP24 highlighted the importance of personal agency. She argued: "*If you get a KISIP coordinator who is empowered, who knows, then it strengthens the process, but if you get someone who doesn't know, then he/she would be okay with anything you do*."

The preceding discussion demonstrates how multiple, competing institutional logics, power asymmetries, and personal agency interact to reproduce institutional pluralism. These findings affirm Kraats's (2009) argument that pluralistic institutional environments can create persistent internal tensions within an individual organisation due to competing logics and incentives. In this context, the urban planning department may end up divided in terms of mobilising shared visions and resources for the implementation of pro-poor urban development projects.

7.6 Informal Practices: Creating Room for Manoeuvre

The extent to which the national government can be involved in urban development decision-making and implementation is a topic that generates a lot of debate. Formally, urban governance is a devolved function and falls under the mandate of county governments (County Governments Act, 2012; GoK, 2016b; The Urban Areas and Cities (Amendment) Act, 2019). With this comes the responsibility for reducing disaster risks and building disaster resilience for the urban poor. From the preceding sections, however, it is evident that national-level bricoleurs used project-bound decision-making and action space to usurp devolved power for urban development decision-making and implementation. Evidence reveals that the World Bank and the national government set the rules of the game, including setting the criteria for selecting

participating settlements. This links this back to the way the project was initiated and who negotiated it. The negotiations set the stage for KISIP to be exempt from filtering through the normal institutional framework, by-passing established formal institutions.

KISIP is a typical informal practice (Brown, 2015b; Pernegger, 2021) deployed in the shadow systems by national-level policy actors to manoeuvre through the urban development messy middle (Mehta, et al., 2001; Mehta, et al., 1999), enabling delivery of risk-reducing infrastructure and services to urban poor settlements. It provided an opportunity to subvert institutionalised barriers of a system that consistently fails to deliver. It aided experimentation, helped frame problems, created space for debating and addressing emergent risks, and institutionalised public participation in city visioning and implementation. In doing so, however, it created new types of challenges, power asymmetries and reinforced distrust between national and city-level public sector policy actors. The arrangement effectively relegated NCCG's urban planning department to a conduit for channeling decisions from the community to the national level policy actors and vice versa, systematically destroying the county government's agency over pro-poor urban development decision-making and action, and their capacity to break cycles of risk creation. A bittersweet wave of nostalgia enveloped RP27a &RP27b when they reflected on their time at City Hall. RP27b postulated:

> "…*before these things came [project-bound spaces of decision-making and implementation], City Hall used to do all these things. City Engineers used to design and build roads and supervise construction. These are capacities that even the Ministry of Public Works did not have. Forward Planning could do all plans. Policies were made in-house. Now it is impossible to do these things because donors come with consultants. Today, the Forward Planning team would not even get projects because consultants are doing them. Devolution seems to have destroyed that [core functions]"* ~ RP27b.

Findings affirm Pelling *et al*.'s (2008) cautionary view that activity in the shadow systems can aid opacity, clientelism and corruption, impeding accountability and inclusive development decision-making (Pelling, et al., 2008). The evidence from this study extends these insights, showing that such dynamics can also legitimise tokenism and clientelist networks like SEC, enable the capture of city visioning, decision-making

and implementation spaces by powerful actors such as national-level bureaucrats, and limit the agency of less powerful actors like city-level, public-sector policy actors. It can also erode county governments' capacity to break cycles of disaster risk creation as it reinforces short-termist, project-based visioning and restricts financial resources from everyday urban development decision-making spaces. A firm ethical foundation is therefore imperative for trust building, reinforcing the agency of local actors and articulating the shadow and canonical systems.

7.7 Conclusions

This chapter builds on City Visioning, discussed extensively in the preceding chapter (Chapter Six). It concentrates on the localisation of city visions (how top-down city visions are received and enacted). By and large, it agrees with the findings in Chapter Six on the narrowness of project-based visions. It also surfaces the tensions and relationships of distrust characterising the localisation of city visions, and implications for the capacity of city-level policy actors to steer urban development in ways that contribute to breaking cycles of disaster risk creation. Findings herein set the stage for Chapter Eight, which focuses on how transformative practices and localisation enable inclusive materialities and relationships that tackle processes of disaster risk creation.

First, urban development decision-making and implementation spaces for the urban poor in Nairobi are contested spaces among multiple interest groups and policy actors across levels of governance, beset with multiple forms of hybridity, multi-level capture, power asymmetries, selective ‘absence’ of formal rules and regulations and ubiquitous informal practices for getting things done. They are often weaponised by powerful actors with vested interests. Consequently, urban poor urban development remains in the margins of formal urban development planning and implementation. This perpetuates a risk culture. It reinforces existing inequalities and vulnerabilities.

Second, examined through city visioning, localisation and materiality lenses, KISIP I’s visioning embodies neoliberal agendas. It is a typical top-down (received), project-based vision largely influenced by external actors (donors) and national-level policy actors and consultants. While it sought to reduce vulnerability and spatial inequalities, it lacked a comprehensive, foresightful approach that would address the root causes of disaster risk creation. Instead, it prioritises immediate, tangible material outcomes over longer-term systemic change needed to break cycles of disaster risk creation.

The localisation of KISIP entailed adapting externally driven visions, institutional logics, and arrangements to the local context. However, these efforts were limited. KISIP often bypassed actors embedded in everyday urban development decision-making spaces, weakening its integration into longer-term frameworks such as the NIUPLAN, other normative city programmes, and concurrent project-based visions. Its reliance on market logics, particularly those of efficiency and localisation, clashed with the embedded institutional logics governing everyday urban development decision-making spaces. This poor localisation is manifest in its material outcomes, which focused on delivering short-term improvements without fully addressing the root causes of disaster risks or considering future risks. The resulting interventions were often incomplete and poorly integrated with existing or ongoing urban development efforts, raising concerns about their capacity to disrupt entrenched cycles of disaster risk creation. Collectively, these factors combine to affect the overall effectiveness of bespoke spaces of decision-making and action in becoming transformative, long-term urban development decision-making and action spaces.

Third, the construction of bespoke pro-poor urban development decision-making and implementation spaces is a constant process of institutional bricolage. The process involves mixing the messy, the shadow and canonical systems, the familiar and the finite, and the formalised and informal practices of doing things. The arising decision-making and implementation space is marked by distrust among actors with varying degrees of power. It also legitimises selective inclusion where some actors are included while others are not. Distrust is an outcome of more than the consultancy model. It is the outcome of the interaction between the consultancy networks of the multilateral development banks with shadow systems and the capture of decision-making structures. It is all these factors combined. The cumulative impact is a systematic weakening of the capacity of actors in everyday urban development decision-making spaces to break cycles of disaster risk creation. Findings have also shown that, although processes of institutional bricolage are associated with actors at the local level, national and international level policy actors also engage in bricolage practices, agreeing with literature that a certain amount of reshaping or transformation of policy intentions takes place across multiple policy levels (Cleaver and Franks 2005; de Koning, 2011). The World Bank, in this case, represents a global-level bricoleur.

Last, the findings underscore the lasting impact of Nairobi's post-independence governance trajectory on the city's planning capacity and organisational effectiveness. This interacts with contemporary development practices, which frequently rely on consultant-driven models that bypass local expertise, organisational structures and institutional arrangements to reinforce long-standing mistrust between political actors and professionals, further eroding the agency of Nairobi City County Government (NCCG). At the same time, project-bound decision-making spaces, often resourced and shaped by external actors, are redefining the relationships between national and city-level policy actors. These spaces operate under distinct power dynamics and institutional logics, marginalising everyday actors and limiting opportunities for collaboration, which, when they occur, tend to be informal and based on personal relationships. As a result, city-level policy actors face severe constraints in influencing urban development decisions, raising critical questions about the role of international development actors in perpetuating or potentially transforming these unequal governance arrangements and in enabling more inclusive, pro-poor urban development processes.

8.0 Elusiveness of Urban Transformation

8.1 Introduction

This chapter investigates claims of transformative practices in pro-poor urban development decision-making and implementation. Drawing upon a theoretical framework delineating transformative behaviour across key elements of the public sector adaptation lifecycle, namely visioning, planning, institutional frameworks, and materiality (adapted from Scolobig *et al.,* (2023) and tailored to the study), the analysis identifies transformative characteristics within each element of the urban upgrading process.

Focused on the Mukuru Special Planning Area (SPA), a participatory urban upgrading initiative in Nairobi, Kenya, the chapter explores whether Mukuru SPA is transformative as widely claimed (Makau, et al., 2020; Satterthwaite, et al., 2020; Butler, et al., 2018). It unbundles its elements and their transformative characteristics and isolates the elements which may have been transformative but reverted to being incremental. By so doing, it addresses the third research question: *"What transformative practices were brought into pro-poor urban upgrading in Nairobi between 2015 and 2022?"* The case was chosen because it involved an unprecedented cross-sector and inclusive planning and implementation process. It is widely recognized as successful and, in the view of actors, as an innovative and inclusive urban upgrading process. The case opens the question of what is required for transformation to happen including transformative processes such as gaining a voice; transformative outcomes such as material deliverables; transformative institutional frameworks such as a new social contract, and organisational changes such as learning. What is required within these elements and across the elements, and whether they should be temporary or fixed? It also illuminates some of the hidden dynamics of urban poor settlement upgrading in the Nairobi context (Horn et al., 2020; Ouma, 2023).

Furthermore, the chapter builds upon findings from preceding empirical chapters which deepen our understanding of how Nairobi's urbanity arises, how it is enabled and/or constrained by institutions, and the ways in which actors navigate these constraints. The first two empirical chapters discuss how extant institutional arrangements constrain the power and agency of city-level public sector policy actors

and Nairobi residents to shape their urban futures. This chapter on the other hand explores the opportunities to strengthen collective community agency on one hand, and the agency of NCCG over urban development decision-making and implementation. It further offers insights for delivering institutional transformation that's sustainable.

It draws on the perspectives and experiences of community-based actors engaged in the SPA process. Through this lens, the chapter explores how the vision and planning of Mukuru SPA challenge conventional practices, foster effective learning, influence institutional frameworks supporting inclusive pro-poor urban development beyond Mukuru, and promote social justice for the urban poor. This analysis underscores that urban transformation is a multifaceted, enduring, and evolving process. It manifests in physical transformation, but most importantly, sustainable transformation is manifest in institutional change.

While the Mukuru SPA exhibits transformative elements in its vision, planning, and interventions, there are deficiencies in institutional frameworks for the transfer and upscaling of novel practices and guaranteeing their permanency. The findings highlight the agency of the Mukuru community in co-creating shared learning systems, generating ideas, and envisioning urban futures collaboratively. However, the process, although structured, relies heavily on the goodwill of community mobilizers and non-state actors, lacking the sustainability necessary for broader implementation.

Structured into four sections, the chapter introduces the Mukuru Special Planning Area and the concept of Special Planning Areas within Kenya's urban development planning system. Subsequent sections delve into the emergent characteristics of transformative adaptation, reflecting on changing relationships, attitudes, community agency, and implications for breaking cycles of risk creation. The chapter concludes by assessing the extent to which Mukuru SPA embodies transformation and the prospects for widespread transformative change.

8.2 Emergent Characteristics of Transformative Practices

In this section, the study explores the characteristics of transformation evident in visions, the planning process, interventions and institutional frameworks inherent in the Mukuru SPA process.

8.2.1 Transformative Visions

Transformative visions are path-shifting and systemic. They mobilise advocacy coalitions and address root causes or drivers of risks and vulnerabilities. It is important to emphasize, however, that Mukuru SPA's vision emerged from an advocacy process that spanned several years and involved multiple advocacy groups. The Mukuru SPA process was an outcome of a systemic vision to reduce the vulnerability of Mukuru residents through the provision of risk-reducing infrastructure and services including, safe and affordable water, accessible roads (passable all-weather roads), health services (hospitals), safe, legal power, and security of tenure. It also sought to have Mukuru recognized by the government as a human settlement, and dwellers therein as people with a right to the services. It was a first-of-its-kind innovative community-led, collaborative urban poor settlement upgrading at such a scale. It had systemic characteristics. It reconciled competing stakeholder interests and worldviews: (i) fire risk reduction through regularized electricity connections and creation of fire hydrants; development of bespoke standards for road widths and footpaths (ii) provision of clean water at affordable prices; and (iii) enhanced access to sanitation facilities at plot level. Noteworthy, to some great extent, interests and worldviews conflicted, calling for lengthy negotiations among various consortia members.

First, the project adopted a systemic approach, challenging the status quo, which is predominantly sectoral. The SPA process employed an extensive co-production process organized in eight consortia, which mimicked the internal structure of NCCG. This was a shift from the conventional approach to urban upgrading, which emphasizes the provision of risk-reducing infrastructure and an approach which relied heavily on consultants, settlement executive committee members, the chief and village elders to shape the development futures of urban poor settlements, an approach discussed in Chapter 7. It signaled a breakthrough in participatory, integrated urban upgrading and adoption of adaptive planning standards fit for the context. A systemic and integrated vision emerged based on the recognition of the rights of Mukuru residents to access risk-reducing infrastructure and services, including affordable clean water, safe, legal and affordable power (*stima ya token*), changes in infrastructure (roads, drainages and sewer), and access to healthcare. This was explained by RP32, an interviewee living in the settlement. According to her, *"the vision was about improving the living conditions of Mukuru residents through improved*

access to urban basic services". RP33 added to this, arguing: *"we wanted to change the planning, our living conditions… we wanted services just like any other parts of the city, like clean water, public schools, health facilities and roads."*

Second, the Mukuru SPA vision was path-shifting. It challenged the capture of development decision-making and asymmetric power relations that reproduce social vulnerability and the poverty penalty. It further challenged the social contract between the state and the urban poor who used to be on the fringes of urban development planning and decision-making. This was through the recognition of urban poor settlement dwellers as equals to their counterparts in the formalised city, and worthy of inclusion in service delivery. This is explained by RP38 as follows:

> *"We wanted to have Mukuru formalized and have the government recognize the settlement as a human settlement where many people live, and to further appreciate that people living therein live in deplorable conditions. We envisioned it to be a community where development takes place, when the government plans and budgets, they also consider it in County Integrated Development Plan (CIDP) and annual development plans" ~ RP38.*

Further, it was path-shifting in its approach to upgrading urban poor settlements. It was based on integrated planning as opposed to sectoral planning. The process not only sought to enable transformation, but it was also a transformed approach in that it deviated from the norm. It challenged conventional planning standards for roads and sanitation, enabling the development of bespoke standards for roads and sanitation solutions that are fit for context. This was put into perspective by RP40, a member of the housing, infrastructure and commerce consortium who discussed how planning standards were recreated: *"We had about 53 engagements with small groups because we really needed to ensure that we are really getting their opinions."* The outcomes of these extensive negotiations were depicted in a set of three maps depicting *"what the community desired to see, what is conventionally permissible and a spatial representation of the negotiated option"* (*RP40*). The adoption of bespoke standards meant that just about 13 percent of residents would be displaced as opposed to 100 percent being displaced if conventional planning standards were applied (Weru, 2023).

Consortia members emphasised the need to take a more systemic, holistic and governance approach to settlement upgrading. Consequently, the SPA process moved away from the conventional slum upgrading process of housing and infrastructure provision delivery, which were influenced by the chief and village elders. It addressed competing interests and worldviews and questioned conventional values by challenging the assumptions of statutory urban planning practices and governance arrangements. The comprehensive public engagement supporting this transformative vision complemented the seven consortia, which developed sectoral plans. This approach was path-shifting in that it shifted the responsibility for development decision-making from the authorities to a shared responsibility with a stronger emphasis on the agency of residents to shape their development futures, thus creating buy-in and ownership. This was put into perspective by a community mobiliser who discussed that people have now come to understand that development matters are in the hands of the community. He says that *"this SPA process opened people's mindset to the realization that it is we to plan for ourselves, not politicians to plan for us what our priorities are."* ~ RP38. These sentiments were echoed by another community mobiliser who discussed:

> "*SPA taught me about my rights and that my house should not be demolished without being given alternative accommodation. It also taught me that power is with the people. If we decide to come together and agree that we want things like this, we will achieve it. It has also exposed me, and enabled me gain networks. I can be called somewhere. It even made me go outside Kenya. So, it has brought me from far."* ~ RP31

It also shifted the approach of informal settlement upgrading from a one-sector endeavour to a joint effort cutting across the different sectors of NCCG. The different consortia were led by representatives of the various NCCG sectors. It has proven successful in challenging the hegemony of cartelistic networks, structure owners and local administration by ensuring that vulnerable people such as tenants, water users, and power consumers were included in decision-making processes. At the same time, the approach improved inclusivity in development planning and decision-making, in effect distributing power and altering extant asymmetric power relations.

Thirdly, Mukuru SPA shows the importance of advocacy coalitions in agitating for inclusive, innovative urban upgrading processes. Advocacy coalitions were essential in the declaration of Mukuru as a Special Planning Area, and in foregrounding innovative approaches which challenged the status quo. The Muungano alliance rallied the community and 40+ organisations drawn from the civil society, academia and the private sector. This coalition voiced its overarching vision to have the government recognize Mukuru as a human settlement and integrate it into NCCG's development plan, and residents also have access to risk-reducing infrastructure and services like other formal settlements. This aspiration paved the way for the preparation of the Mukuru Physical Development Plan. As noted by one of the respondents interviewed:

> *"This was coming at the backdrop of a long engagement in informal settlements by civil society groups who were persistent in pushing the community to keep fighting for their rights and conditions that would dignify them as people who lived in informal settlements. It was a culmination of a longstanding effort".* ~ RP38

Indeed, the SPA declaration and the arising Mukuru Integrated Physical Development Plan (MIPDP) would have been exceedingly difficult to realise without this history of organizing, protest and political and legal advocacy, and the buy-in and the backing of policy and political champions in the then urban planning, housing and urban renewal sector of NCCG (Weru, 2023). These actors were agents of change in bringing forward a new vision for urban upgrading with human rights and inclusivity at the core. This illuminates the importance of committed leadership at the highest level of NCCG to the process, another deficiency of in the vision.

There was a significant shift in the modus operandi of NCCG – from a focus on vertical, experts-led planning process to a more horizontal, community centered process. This transformed approach was brought by advocacy coalitions and policy champions in the NCCG who believed that inclusive urban upgrading could be realized through unconventional approaches. The NCCG, in declaring the three Mukuru informal settlements a Special Planning Area, can be argued to be advocating for a different approach to urban upgrading to tackle the complex challenges experienced in Mukuru. In this process, like other cases, the initial minority voice of the advocacy coalition had

novel ways of framing the problems and addressing them. The seminal work of *Muungano* Alliance and partners on unlocking the poverty penalty and upscaling respect for rights for people in informal settlements (RP40) provides a case in point. They even mobilised their resources to realise their aspirations. It is, however, noteworthy that NCCG did not contribute financial resources to the Mukuru SPA process.

Lastly, although the Mukuru SPA vision was rooted in achieving recognition of the settlement by the state and reducing vulnerabilities by providing access to risk-reducing infrastructure and services, there was no intentional focus on breaking cycles of risk creation, apart from fire risks. Data reveals that fire risk was mostly covered, unlike water stress and flooding. Multiple respondents expressed their opposition to detrimental anthropogenic practices, including the construction of structures on top of drainage channels, poor disposal of solid waste, back-filling of riverbanks to put up new structures and the use of '*sambaza*' electricity. These, in part, catalysed the vision of Mukuru SPA. Deployed DRR actions were conceived as urban planning best practices with natural overlaps to resilience. Disaster risk was considered narrowly through an environmental lens, and often overlapped with climate change. However, it was evident that the root causes of flooding and water stress were not given a premium in the Mukuru SPA process. In the words of a member of one of the consortia:

> *"... There were no conversations on DRR, there was nothing substantive about climate change apart from generic wording and statements. Perhaps they were being hinted at with the conceptualization of the consortia, but in terms of the intentionality that we are looking towards reducing risks, it wasn't there."* ~ RP 40

In conclusion, multiple characteristics of transformative visions are evident in the Mukuru SPA process. Findings reveal that this vision was a result of long negotiations preceded by protracted agitation by residents and advocacy coalitions and groundbreaking research. Mukuru's vision for recognition by the government was in the making for over two decades. The vision strengthened the agency of the community as it enabled residents to shape their development futures, empowering them to negotiate with elected leaders. It was fundamentally about addressing social vulnerabilities and the root causes of the poverty penalty. It was however blind to DRR.

As such, it missed an opportunity for direct targeting of floods and water stress. Why such a transformative process omitted environmental hazards remains a big question.

8.2.2 Transformative Planning

Core characteristics of transformative planning are inclusivity, equity, co-production and open data (Scolobig et al., 2023). This study adds another characteristic: restructuring. In the Mukuru SPA, considerations for inclusivity, co-production, equity and restructuring of relationships (relationships of trust and power relations) were foundational to the planning process. There was no emphasis on open data systems in the process. This is discussed in later in the section.

An unprecedented, comprehensive process of community mobilizing was initiated by the Muungano alliance. It was based on *nyumba kumi* (ten households) structure. In the structure, ten households make a cell, which has a plot representative. A cluster is made of 100 households and 800 households make a segment. There were 80 reps in each segment, sharing information with the community members. This was the primary communication structure of the SPA. RP34, one of the mobilisers explained that: *"Any information we would get, the chairman would go and gather all the ten cell reps, passing the information to them. The moment he/she passes this information; they would reach the households."* One of the successes of the planning process was the use of community mobilisers to engage the wider community. It was based on word of mouth. According to the data, more than half of all the Mukuru residents had been engaged at the end of the two-year planning period. The use of community mobilisers ensured that a diverse range of participants were invited to the decision-making table, as discussed by one of the community mobilisers who argued that *"If they were to use the chief and village elders, probably they would have interacted with the wrong people. We ensured that the right people were invited and that they listened and participated."* ~ RP31

The data also revealed the fundamental contribution of Rouben FM, a community radio in the settlement, in communication, outreach to and engagement of residents. Rouben FM hosted talk shows that allowed the community to engage with decision makers in a different way. It convened individuals who sought elective seats and had them sign the Mukuru manifesto. This is indicative of how community-led action can

help citizens wrestle back their agency from powerful actors. As discussed by one of the community mobilisers:

> "*I thank God we have Rouben FM. Rouben FM hosted discussions on the SPA until people got curious about what the SPA is all about. They popularized it so much so that everyone who was seeking elective seats signed the Mukuru manifesto. The manifesto contained all our demands and priorities as a community, including roads, hospitals, water etc".* ~ RP34

The SPA planning process gave vulnerable people such as tenants, water users, power consumers a voice in the decision-making processes. It allowed them to challenge the hegemony of 'informal service providers,' the chief, village elders and structure owners, and to shape their settlement futures. It orchestrated a restructuring of power relations and fostered relationships of trust between public sectors actors and the community. Evidence suggests that since the Mukuru SPA started, NCCG has become more engaged in the affairs of the settlement. As argued by RP33, *"Before, informal settlement dwellers were not involved in anything. Today, they are involved by the county government."* In the health sector for instance, Community Health Volunteers are now recognized by the county government. He put it this way: *"Since God created the earth, it is only the other day during the administration of NMS that they signed an agreement with community health volunteers to be paid."* ~ RP33. This is a shift from the status quo where NCCG was absent from the settlement. As posited by community mobilisers:

> *"It is the first time that I am seeing the county government here. Since I arrived here many years ago, I had never seen the county government inviting savings groups for training on record keeping, business, loans and connecting the groups to banks. This is something that has started happening. I was among the people who went for training last week."* ~ RP33

This new relationship is further illustrated by RP 36 as follows:

> *"Ward admin office has been involved in community issues, especially with youth groups. (…). In February, they pushed us to get permits from*

government. Before this, young people obtaining a permit was impossible. (...) But they assisted us to formalize things. And like I said earlier, in two months, they are going to build for us two waste collection points." ~RP36

A novel integrated planning process convening residents and experts drawn from the academia, Civil Society Organizations, grassroots groups, and the government was carried out to co-produce the draft Mukuru Integrated Development Plan which proved pivotal to unlocking the poverty penalty in the informal settlement. The process of decision-making, transparency and leadership style spread power among the different consortia. The committed leadership of Muungano alliance was pivotal to the success of the process and oversaw the coordination of the different activities. Its importance to the success of the Mukuru SPA planning process was noted by several respondents:

"Consortia helped a lot. (…) when it came to thematic issues such as education, they would call education experts to come and speak with us. We as the community would also give our views. When it came to sanitation, they invited fresh life…who introduced toilets". ~ RP31

Equity emerged variously as a consideration in the Mukuru SPA process. The distribution of risk-reducing infrastructure and services such as sewerage, roads, public hospitals, drainages, water and public lighting across the settlement, to a previously unserved community chained by poverty penalty increased equity. An important narrative which underpinned the entire process was recognition of the settlement by the government as a formal settlement and the rights of residents to have access to risk reducing infrastructure and services. This shaped the trajectory of Mukuru right from the start. It was highlighted that recognition would ensure that the settlement and the arising Integrated Development Plan (IDP) would be integrated into the NCCG's everyday development planning and decision-making, guaranteeing the settlement of access to urban basic services, privileges enjoyed by people in the surrounding formally recognized settlements. Some of the outcomes of recognition by the government were highlighted by several community members:

"Now we are listened to when we go to City Hall. This is because the settlement is recognized (…) It is not like it was before… We now see

the county government coming here a lot. Not that they come to collect taxes, no, it's about service provision. Whenever we complain about things like water, health, they come and listen to us." ~ RP30

There was no evidence of open data systems in the Mukuru SPA process, and this was perhaps less relevant given the fear of the data getting in wrong hands and being used by cartelistic and clientelist networks to further entrench asymmetric power relations that reinforce existing inequalities and poverty penalty. The data were shared selectively among community mobilisers. According to RP32, *"it was accessible to many select people cutting across the different stakeholder groups including structure owners, tenants and other stakeholders."* The selective sharing of data was supported by all respondents. According to them, not everyone would want to use the data for the benefit of the community.

The study finds evidence that there were indeed transformative practices in the planning process. It confirms the hypothesis that Mukuru SPA had transformative characteristics and affirms the claim of Scolobig *et al.* (2023) that transformation is not a one-off system change but a complex, nuanced and gradual process.

8.2.3 Transformative Materialities

The materialities implemented because of the Mukuru SPA process include sewerage lines, simplified sewer systems, roads, drainages, toilets, water kiosks, public lighting, schools, hospitals and boreholes. These material interventions meet three of the characteristics of transformative materialities, namely long-term sustainability, transferability, and future-orientation. They, however, failed to meet two characteristics namely scalability and fidelity to the vision and process. Data reveals that most of these material interventions were implemented in Mukuru kwa Rouben. Kwa Rouben was a natural selection for initial implementation since the SPA was most embraced therein compared to the other two settlements: Viwandani and kwa Njenga. Evidence suggests that Kwa Rouben residents are more involved in their settlement, and they eagerly paved the way for the realisation of the materialities, as reflected in stakeholders' interviews:

"Mobilisation started here in Viwandani but it was embraced by many people in Kwa Rouben. (...) I can say that during the 2-year timeline, kwa

Rouben was leading on everything including on mapping and enumeration. We had some contestations but we managed without escalation, unlike in other settlements. During implementation, everyone was called and asked where they would like the implementation of the interventions to start. Most people did not welcome the idea of being the first ones for fear of the unknown. That was where we had our luck." ~ RP33

Mukuru kwa Rouben interventions are considered future-oriented since they successfully turned an impoverished, impenetrable settlement with no access to risk-reducing infrastructure and services into an envied success story with, inter alia, access roads, public sewerage system, accessible, free toilets at plot level, and clean, affordable water. Sustainability was not at the core of the planning and implementation, however, with its focus on reducing social vulnerability and improving environmental health, the Mukuru SPA fulfilled the social dimensions of sustainability. It has improved the quality of life for residents and yielded multiple benefits to the community, as reflected in one of the interviews:

"Now there are roads one can use to go to the market. There is no mud. (…) Right now, incidents of cholera have reduced. Vegetables are washed using clean water. Even if one is carrying the water in a jerry can, it is free. Clean water from water kiosks is available free of charge. It improved hygiene, created employment opportunities and improved living standards". ~ RP32

While the provision of risk-reducing infrastructure and services, and formal recognition of the settlement by the government were the core focus of the Mukuru SPA, there are elements of social dimensions of sustainability. Provision of affordable clean water, toilet facilities, access roads and sewerage are undoubtedly a sustainability and future orientation endeavour. Further, there is increased awareness for structure owners to build toilets within their plots. The following interview excerpt highlights some of the outcomes of these material interventions:

"Before, we feared that our children would get infections due to poor sanitation but now it is clean. (…) The school has a field where our children can play safely without the fear of being knocked by motorbikes. On the

hospital, we can now take pride. We can now deliver our babies close. We do not have to go to Pumwani or Mama Lucy. Once the hospital is open, we will feel safe as women." ~ RP37

Noteworthy, maintenance, a core element of long-term sustainability, remains a key challenge and was missing from both the planning and implementation of the Mukuru SPA material interventions. Maintenance was not discussed substantively during the planning phase. Emergent is that formalization of the SPA plan and its integration into the county government's everyday development planning and decision-making was the principal sustainability strategy. The lack of concrete guidance on maintenance creates an opportunity space for the re-emergence of cartelistic networks. As reported by one community member: *"Cartels are re-emerging, and they are trying to take us back. It is my request that the government comes back again and provides guidance on the way forward"* ~ RP34. There are also good practices arising from the same context. Newly constructed hospitals have boards democratically elected by the community to oversight their operations, ensuring that they provide long-term benefits. This is explained below:

"For all the years, we've never seen a committee elected by the community. We would just hear that there is a committee and people have been appointed. But this time around, we are seeing a change, because it was announced, and people were given a chance to elect leaders who they want to steer the hospital. At least we are seeing changes." ~ RP32

There was evidence of transferability as part of the process. This entails nonlinear, often illegible horizontal travel of sensitization, of the concept and of desire to have the Mukuru experience. It is a horizontal, peer-based spread where lessons, practices and innovations travel from one locale to others. It builds new discourses and bases on power in society. Successes, lessons and outcomes of an organized, collaborative, community-led and government-supported integrated approach to urban upgrading were transferred from kwa Rouben to other participating settlements and beyond. One respondent describes the SPA as "*a project bringing development in the settlement for the betterment of the residents.*" He argues: *"If someone asks me about Mukuru SPA, I would refer them to have a look at Mukuru kwa Rouben."* ~ RP36.

Data reveals that the horizontal peer-based spread beyond the participating settlements. The chief of Imara Daima, for instance, adopted the Mukuru SPA process to implement *nyumba kumi (ten houses)*, a new government policy for community policing. This was put into perspective by RP34 who debated that: "*When we were collecting data, the chief was one of us. He used the same model to organize nyumba kumi, to identify his nyumba kumi reps. He also used the same process to gather information"*. The declaration of new SPAs by the defunct Nairobi Metropolitan Services is yet another illustration. Mukuru has received many visitors from other settlements, counties and countries to benchmark on why and how they did the SPA process, and the manifesto. Residents of Kibera and Mathare also went to learn from the Mukuru SPA model. The scale of the transferability was put into perspective by RP30 as follows:

> *"After Mukuru was declared an SPA and we were engaged in the process, we received so many visitors from other counties, and across and beyond Africa coming to benchmark how and why Mukuru was declared an SPA.*" ~ RP30

Transformative materialities have a catalytic effect. Within Mukuru, outcomes after the implementation of material interventions in kwa Rouben helped realise buy-in across other settlements that did not trust that the government would deliver material interventions, as reflected in stakeholder interviews.

Lastly, transformative materialities maintain fidelity to the vision and the process. However, the implementation of the material interventions fell short of this. The implementation approach was top-down. It disregarded the collaborative planning process and bespoke standards that had been negotiated upstream (in the visioning and planning phases). This top-down approach to implementing the interventions compromised the quality of the interventions because it overlooked the negotiated, bespoke standards. It cast a cloud over the collaborative planning process and the institutional, social, and emotional experience inherent in the process, injuring relationships of trust that had been built through the process. It leaves more to be desired: What if the vision of the President had been rebuilding democratic, transparent structures for decision-making and implementation at the city level? I submit that had the plan and the associated novel institutional arrangements been

respected by the Nairobi Metropolitan Services during the implementation of the interventions, there would have been better outcomes. It would have held the planning process which would have respected and legitimized the institutional arrangements and the people, and there would have been a transformative experience with the people.

8.2.4 Transformative Institutional Frameworks

Transformative institutional frameworks promote multi-scale and cross-sector polycentric arrangements; promote social justice; and have the capacity to promote deliberate shifts which trigger cascading impacts across structures beyond the proponent organizations' purview.

Mukuru SPA exhibits the emergence of transformative institutional frameworks in the form of polycentric arrangements, participatory processes, new norms and standards, and new relationships, all of which proved crucial for the visioning, planning and implementation of the Mukuru Integrated Development Plan (IDP). Particularly critical were polycentric arrangements through the consortia that cut across NCCG sectors to include informal settlement upgrading beyond housing and infrastructure improvement. The consortia were categorized under the following themes: Education, Youth and Culture; Environment and Natural Resources; Housing, Infrastructure and Commerce; Land and Institutional Arrangements; Finance; Water, Sanitation and Energy. The multi-scale and cross-sectoral collaboration, a key component of polycentric governance, broke administrative silos typical of urban poor settlement upgrading projects. They had membership drawn from over 40 organisations including grassroot groups, the academia, civil society, utility companies, and the county government. The consortia were mirrored against the seven NCCG sectors and was led by NCCG policy actors from line sectors, as revealed by different respondents:

> *"Each consortium was led by a government partner. We were not planning by ourselves. After doing our first document, writing down our priorities, they would be taken to the county government for review. They would then provide feedback. They were there to guide us on what to do and how to do it. Actors from the ministry of health, KPLC, would physically come and engage with us…"* ~ RP34.

The mirroring against the NCCG internal structure was to link the process and actions to the everyday planning and decision-making of the various sectors of the county government. This is discussed elsewhere by Akiba Mashinani Trust (2020) and ICS centre (2020). Such a broad-based transdisciplinary and cross-sector collaboration was unprecedented for urban poor settlement upgrading in Kenya. The governance arrangements, and the active involvement of civil society actors in spearheading the process catalyzed the SPA process.

The Mukuru SPA vision became part of a much broader agenda that brought together policy actors across sectors, administrative silos and jurisdictions. It led to the development of the Mukuru manifesto, a first of its kind in Kenya for the community to claim their agency over development decision-making. Mukuru SPA shaped political discourse in Mukuru during the last general elections. The community engaged individuals seeking elective offices through the manifesto. The three Members of the County Assembly representing the three settlements signed the manifesto as well as the siting women representative, the sitting senator as well as the sitting governor. The level of community organizing challenged the sitting governor. It influenced him to link the peoples manifesto to his campaign manifesto. Reflecting on this, RP38 reported that the governor tweeted: "*I have not seen such an organized community as the Mukuru community. These people have organized themselves; they do not want us to do it our way. They want us to do it their way."* The Mukuru SPA process triggered a mindset shift, creating an opportunity to challenge extant power relations, as reported by one of the community mobilisers:

> *"Mukuru SPA also changed people's mindsets such that during the last elections campaign period, people formulated the Mukuru Peoples Manifesto (…). When campaign period comes, politicians often come and promise us heaven (….) They come and tell us what they want to do for us. We came together in Mukuru, with opinion leaders and actors implementing initiatives in the community. We also gathered views from the community. (…) There were barazas where people gave their views on their priorities as a community. We then organized a community townhall for the leaders to come and listen to the community."* ~ RP30

An equally unprecedented innovation parallel to the consortia were community fora. Community fora were modelled around multi-tier units of participation categorised into cells and clusters, ensuring that as many households as possible participated in the visioning of Mukuru settlement futures. Community fora were a critical decision-making system. They enabled local buy-in, trust-building and creating a transparent system for decision-making. These were facilitated by community mobilisers who were picked from the community and trained. Community mobilisers built relationships with local administration and elected officials, keeping them informed on the progress of the SPA planning process. They were also responsible for conflict resolution and clearing up any misunderstandings with community members.

The process intentionally focused on addressing unfair structural relations and social injustices. However, these considerations were not brought forth in the implementation of the interventions as the process was hijacked. The implementation was led by Nairobi Metropolitan Services, an innovative and well-resourced outfit established by the then President Kenyatta to spearhead the 'restoration of Nairobi's lost glory'. The NMS was situated within the Presidency and the implementation of interventions was sanctioned by the President. This suggests that for transformation to happen, committed leadership willing to put in resources is imperative.

The process was fundamentally about power redistribution and strengthening the agency of residents to shape their urban futures. The implemented risk-reducing infrastructure and services became accessible to a previously unserved community. Access to toilets and clean, affordable water reduced social vulnerability. Moreover, the creation of clusters, cells and segments for community involvement in the SPA process represents a non-institutionalized innovation to give the tenants, water users, and power consumers a voice in visioning their settlement futures, where they would otherwise not have been included in decision-making processes or even thought about. As explained by RP32:

> *"The financially endowed were not influencing where water points would be placed. Through public participation, they were not given precedence. Now even the ordinary citizen has a voice to say what he wants. Water points were located at a central place. Everything was being addressed*

through consortiums. Nothing was being discussed outside of this framework". ~ RP32

To date, the declaration of Mukuru informal settlement as a Special Planning Area remains remarkable. However, there is limited evidence of commitment to a broader uptake of Mukuru participatory planning approach and institutional arrangements beyond the Mukuru experiment. There are no NCCG-led shifts in the practice of urban poor upgrading beyond the declaration of new SPAs to trigger a paradigm shift within the urban poor upgrading policy and implementation space or even within the NCCG structures. For example, the consortia remain a unique institutional arrangement with no visible cascading impacts on formal urban planning, practices, policy and legislation or even the housing drive led by the national government. Evidence suggests that there are deficiencies inherent in replicating or upscaling innovative practices. Further, the process and the arising plan are not yet anchored in policy. The arising Mukuru Integrated Physical Development Plan remains a draft. It is yet to be validated by the community, approved by the County Assembly, and adopted by the Nairobi City County Government as provided for by law. As noted by RP40, lack of finalization and approval of the plan notwithstanding, it was still used to guide the implementation of the interventions:

"These interventions were allegedly based on the draft Mukuru Integrated Development Plan that had been prepared. Even though it was still a draft, even though it had not been approved, some of those interventions were based on it". ~ RP40

In the absence of a plan duly approved by the Nairobi County Assembly and adopted by NCCG, scalability is not guaranteed. There is no basis to compel NCCG to integrate future interventions in the county government's integrated development plan. As such, implementation of interventions remains clientelist.

The ad hoc, polycentric arrangements are the most noteworthy transformation-enabling governance frameworks in the context of Mukuru SPA process. They mobilized voices, action, and human and financial resources that enabled and sustained the Mukuru SPA process. However, these cross-scale and multi-sector innovations central to realizing the full range of urban upgrading benefits arising from the Mukuru SPA spaces have not been adequately integrated into normative urban

policies and practices. As such, they lack permanency, as reflected in stakeholder interviews:

> "*The relationship between the community, the actors who worked on the plan and the NCCG was never truly defined, neither on paper or in a conversation that we fully support this plan and we are going to implement it. There was never a complete buy in."* ~ RP40

8.3 Conclusions

This chapter has explored the conceptual framing of transformation from the perspective of a real-world experience regarding pro-poor urban upgrading in an African city context. While the scope was limited to elucidating community perspectives in the Mukuru SPA process, the analytical framework provides a basis for critical discussion of how the transformation of Mukuru SPA approach can be assessed. Several key conclusions can be drawn from this analysis.

First, the Mukuru SPA process had transformative characteristics. However, its ability to sustain transformative change was significantly undermined by systemic constraints. The visioning and planning phases introduced a new model of inclusive and systemic urban upgrading. Power was redistributed, community voices were central, and institutional arrangements broke with tradition through polycentric structures. However, the implementation phase saw a reversion to incrementalism. Community-designed standards were disregarded, participation was sidelined, and traditional clientelist actors re-entered the scene. This partial reversion underscores the notion that transformation is not a binary state but a continuum, vulnerable to reversal without sustained commitment to inclusive planning, institutional anchoring, and long-term sustainability measures. Table 10 presents a mix of the elements of the Mukuru SPA process, which were transformative and those that were not transformative (might have been transformative before but have reverted to being incremental) and their character.

The analytical framework surfaced the strengths and deficiencies of the Mukuru SPA process and outcomes. It revealed, for instance, that innovative, inclusive, co-creation processes and novel polycentric institutional arrangements can emerge from a blended bottom-up and top-down process. Community voices were, however, not

brought into the implementation of material interventions. The omission of the community mobilisers from the implementation of the material interventions, and the weak focus on maintenance post-construction, remains a weak link and an opportunity for the cartelistic networks to regroup and even for new ones to emerge.

Further, there is a transformative institutional process and a physical transformation, but the two do not sit well together. While a top-down approach was good at delivering transformative materialities, it was not very good at upholding and nurturing local leadership models.

Table 10: Transformative Characteristics of Mukuru SPA. Source: Field data 2024

#	Framework elements	Characteristics	Met/ Not met	Character
1	Transformative vision	Systemic	✓	The Consortia model is an integrated concept that entails comprehensive shifts in urban upgrading, permeating administrative silos to produce an integrated vision beyond infrastructure and housing provision.
		Path shifting	✓	The recognition of inadequacies of conventional statutory planning approaches and presentation of an alternative pathway to inclusive urban upgrading as well as the recognition of the settlement.
		Mobilizes advocacy coalitions	✓	The SPA process strongly advocated for by civil society organisations, grassroots groups, advocacy groups (Researchers) and NCCG policy champions.
		Addresses root causes and or drivers	✓	Root causes of social vulnerability were addressed by dealing with the lack of recognition of the settlement, and lack of formal access to risk-reducing infrastructure and services. It, however,

				failed to tackle the root causes of flooding and water stress.
2	Transformative planning	Inclusive	✓	The planning process gave the often-forgotten vulnerable people a say in their settlement futures.
		Restructuring	✓	Redistribution of power among residents, challenging extant asymmetric power relations and fostering relationships of trust between duty bearers and the community.
		Co-production	✓	The draft Mukuru Integrated Physical Development Plan, and bespoke standards therein was negotiated by different actors including the community, academia, civil society and NCCG technical experts.
		Equitable	✓	Fair distribution of risk-reducing infrastructure and services across a previously unserved community.
		Based on open data systems	✗	Data collected during the research and used in the planning process was never made available to all stakeholders. It is held by a select few for a good reason.
3	Transformative interventions	Transferability	✓	Multiple organisations use the model and framework developed in the Mukuru SPA process. (Viz. Imara Daima chief, adopting the *nyumba kumi* model and Mathare SPA research collective borrowing the consortium model).
		Fidelity to vision & planning process	✗	The implementation of interventions failed to uphold the planning process, disregarded the bespoke standards, strangled the governance arrangements, destroyed trust and agency built through the process.

		Sustainable in the long term	✗	Governance and maintenance strategies to guarantee benefits in the long term were not well considered. As such, cartelist networks accused of benefitting from poverty penalty are re-emerging. The lack of long-term sustainability threatens the gains.
		Future-oriented	✓	Risk-reducing infrastructure and services implemented provide multiple long-term outcomes (e.g., health and wellbeing, accessibility and affordability, and economic opportunities).
		Catalytic	✓	Outcomes of interventions in kwa Rouben eliciting interest among community members and causing buy-in across other two participating settlements
4	Transformative institutional frameworks	Polycentric	✓	Establishment of multi-sectoral and multi-scale governance structures like the consortia and the community fora (e.g Nyumba Kumi, democratic committees for hospitals and Mukuru Manifesto committee) that will continue to deliver benefits beyond the intervention.
		Address unfair structural relations	✓	Dismantling of extant power imbalances, for instance, the community shaping its own priorities as opposed to politicians setting the development agenda for them.
		Scalability	✗	Ratification of the plan by the county assembly, anchoring of the plan and the process in county policy, and integration in everyday planning and decision-making is pending. The plan is

				still a draft. In addition, there have been no legislations or policies to anchor the process and novelties.

Second, the four elements can be applied collectively or independently to achieve transformation. Visioning, planning, and institutional frameworks, for example, can each independently drive transformation. Each element represents a decision-making and action space where transformative outcomes can emerge. Notably, some of these action spaces are interdependent, with certain elements serving as prerequisites for transformative change in others. For instance, visioning and planning are essential foundations for transformative materialities, though the reverse is not necessarily true. While transformative institutional frameworks are not required for the initial implementation of transformative materialities, they are crucial for scaling transformation. This challenges Scolobig *et al*.'s (2023) argument that these action spaces are fully independent. On the flip side, empirical evidence supports the idea that transformation can occur in one element without being present in others. Transformative action at the local level may not shift the bigger picture away from incremental change. Similarly, incremental government policy development could yield locally transformative outcomes. In Mukuru, for example, visioning and planning exhibited transformative practices, and while materialities themselves were transformative, their implementation could be viewed as incremental. Noteworthy, this does not imply the absence of transformation in the material interventions, nor does it mean that Mukuru SPA was therefore not transformative. This is to say that transformation is not a zero-sum outcome but a combination (not the sum) of the framework elements. In line with Scolobig *et al*. (2023), this study contends that most coherent and purposeful transformative outcomes will likely involve at least one cycle of visioning, planning, intervention, and institutional frameworks, including organisational learning through monitoring, evaluation, and feedback into policy.

Third, the case places greater emphasis on the role of top-down politics in enabling transformation. The empirical evidence demonstrates that there was a deliberate decision to pursue material outcomes, with a delivery mechanism, namely the Nairobi Metropolitan Services, put in place. While the NMS had moments and opportunities to uphold the fidelity and visions of the Mukuru SPA process, it ultimately disregarded them. This effectively suppressed the evolving institutional transformation,

undermining the agency of both NCCG and the community. Although the top-down approach was effective in delivering infrastructure, it was ill-equipped to sustain institutional transformations or uphold participatory governance. This asymmetry shows how transformative material outcomes can coexist with institutional regression, leading to an uneven transformation. Nonetheless, it also highlights the potential convergence between community-led planning processes and top-down power can converge to realize truly transformative outcomes that are sustainable and long-term. It also surfaces the temporal nature of transformation, illustrating that transformation is not a static end in itself but a complex, winding journey involving setbacks, that can revert a transformative process to being incremental.

Fourth, there is little evidence of commitment to scale up the Mukuru SPA approach, for instance, through replication, dedicated budget, and staff, and enabling and more permanent institutional arrangements. Indeed, the analysis reveals that strong political will, committed policy champions, sustained advocacy, genuine community involvement throughout the entire lifecycle of the process from visioning, planning and implementation is decisive for assuring permanency, and real and long-term transformation.

Last, learning hasn't necessarily happened, especially on the part of the government. A lot more is needed for the government to decipher the process and innovative institutional frameworks (including polycentric arrangements) discussed in the sub-section 8.2.4, which enabled the Mukuru experience. New settlements were declared Special Planning Areas by the defunct Nairobi Metropolitan Services. However, the government went back to the old way of urban upgrading, inviting expressions of interest from consultants to lead the process, as in KISIP discussed in Chapter 7. The same is observed in the implementation of the interventions. The NMS backtracked to working with traditional, clientelist actors in complete disregard of the polycentric governance arrangements. This lack of clear mechanisms for institutional learning or feedback loops limits adaptive capacity and long-term sustainability.

In sum, the SPA process was transformative in vision, planning, and institutional intent, creating a model of inclusive pro-poor urban upgrading that temporarily disrupted Nairobi's dominant development paradigm. However, its implementation phase diluted the transformative potential, reverting to incremental and conventional practices that

sidelined community actors and governance innovations. This illustrates the temporal and fragile nature of transformation and reinforces the idea that transformation is not a binary state but a continuum, susceptible to reversals if not institutionally anchored and politically sustained.

The transformative dimensions of the Mukuru SPA were largely enabled through bricolaged institutional arrangements, which fostered co-creation, polycentric governance, and responsiveness to community priorities. However, the regression to incrementalism reflects the inherent limitations of institutional bricolage when its outcomes are not anchored in policy frameworks or formalised through legislation and long-term governance structures. The case illustrates that while bricolage can catalyse transformation, sustaining it requires more than innovation. It necessitates institutional continuity, political commitment, and mechanisms for organisational learning and memory. These insights raise important questions for future research: a). What is it that delivers sustainable transformation? b). How can strong, committed leadership / top-down politics enable real transformation? c). What would be the physical and institutional transformations if the top-down political bureaucracy, coming with power and means of delivery, were interested in learning about the Mukuru SPA before intervening?

9.0 Conclusions

9.1 Introduction

This research set out to investigate how relationships between institutions and actors contribute to disaster risk creation in Nairobi and considers implications for advancing foresightful, risk-sensitive and inclusive pro-poor urban development. It has examined how disaster risk is actively produced through urban development decision-making processes in contexts of institutional complexity and messiness. This is important because too often, risk is approached from a hazard or vulnerability first perspective, and the enabling environment is secondary. However, to deliver transformational outcomes, it is imperative to study and make changes in the enabling environment as a mechanism for breaking cycles of risk creation. Given the heterogeneity and qualitative diversity of Nairobi's urbanism, findings were expected to be pluralistic. However, the researcher was struck by the degree to which certain dynamics such as power asymmetries, vested interests and the capture of decision-making structures were entrenched, perpetuating processes of disaster risk creation. From the outset, neoliberal interests are evident in Nairobi's urban development policy. However, these interests often overlook local peculiarities and needs. This research highlights these under-studied aspects and how they interact to privilege some while marginalising others. It surfaces how institutional arrangements, power asymmetries, extractive relationships, distrust, and informal practices shape outcomes.

In many cases, constructing pro-poor urban development decision-making and action spaces has resulted in hybrid governance arrangements. By shifting power and responsibility to non-state actors, urban development practices are believed to result in more sustainable, resilient and inclusive cities and communities for all. However, these reforms have not always materialised as designed. They have inadvertently created grey areas for corruption to thrive, and have exacerbated inequalities, reinforced existing vulnerabilities and power asymmetries, and entrenched the capture of city visioning and implementation, further eroding the capacity of the Nairobi City County Government (NCCG) to break cycles of disaster risk creation. This incongruence between how things are designed and how they happen led to three important considerations that have shaped this thesis. First, urbanism and urbanisation are products of relationships between actors with vested interests, varied

levels of power and institutions, where actors tinker with existing institutions to make bespoke institutional arrangements with adverse consequences for the less powerful actors. Second, the construction of pro-poor urban development decision-making and implementation spaces often reinforces existing power asymmetries, further entrenching processes of disaster risk creation. Third, an enabling environment for inclusive, pro-poor urban development can be a mechanism for breaking cycles of risk creation, opening opportunities for inclusive resilience and large-scale urban transformation.

These social processes can generate different outcomes for disaster risk. Breaking cycles of disaster risk creation (BCDRC) requires a better understanding of the social processes that produce the risks (Pelling, 2003; Wisner *et al.,* 2003; Tierney, 2014). There is a scarce understanding of how these social processes contribute to processes of disaster risk creation, the changing nature of risk and the capacity to break cycles of risk creation. The limited understanding holds especially true in Nairobi's urban development decision-making and policy debate spaces where powerful actors predominantly shape city visions and materialities, constraining the agency of less powerful actors to negotiate alternative urban, risk, resilient and adaptation futures. This research demonstrates the hegemony of international actors, the private sector and politicians in shaping Nairobi's city visions and attendant urban riskscapes. To a considerable extent, global capital actors (including international development actors and consultants) and national-level policy actors are responsible for entrenching neoliberal agendas in everyday urban development decision-making spaces, constraining the agency of city-level actors to vision alternative futures.

This final chapter is divided into two main sections: Conclusions and Reflections. It first addresses the three research questions and then reflects on processes of disaster risk creation and implications for inclusive, foresightful, risk-sensitive pro-poor urban development. Finally, it revisits the theoretical framework and reflects on the research methodology.

9.2 Discussion

9.2.1 City Visioning

This study has highlighted the emerging notion that there are explicit, hidden and neglected agendas underlying city visioning and materiality, each with a spectrum of intentionality in their risk-creating implications. Various concepts such as resilience, sustainability and climate action are deployed to represent city visions. These visions are constructed by unequally powerful actors in the city and beyond, and countered by subordinate actors to shape urbanity. Where local peculiarities, including diversity, mandates, knowledges, needs and institutional arrangements are not acknowledged, debates over city visioning will undermine the potential for integrated, foresightful urban governance illustrated in Figure 2. As argued by Borie *et al.,* (2019), consensus may be built on false foundations, which may undermine trust between urban actors. On the other hand, when city visions are negotiated and contested through inclusive processes, they can reveal tensions and better align with local needs and institutional frameworks, shaping urban realities.

The links between city visioning, localisation and materiality are fundamentally about how future aspirations are translated into the physical realities that shape urbanity. Visioning is a strategic and discursive process. Localisation is the adaptation of city visions to the unique socio-cultural and risk contexts through negotiations and processes of institutional bricolage. Materiality is the expression of city visions in physical elements. Weak linkages between city visioning and materiality are linked to gaps in the localisation of city visions.

9.2.2 Revisiting Theory

This section situates the theory of institutional bricolage within the broader context of institutional theories on change. Key questions arise regarding power dynamics, the exercise of agency in institutional bricolage processes, and how institutional bricolage manifests across various levels.

9.2.2.1 Contextual Bricolage Practices of Actors

Processes of institutional bricolage involve three possible practices: Aggregation, Articulation and Alteration of both bureaucratic and embedded institutions. This sub-

section emphasizes that these practices arise specifically from the actors' particular settings or constraints, for example, national, city and community-level policy actors, shaping the way they assemble resources and generate bespoke solutions to their unique urban challenges. These are discussed in greater detail hereunder.

i. Aggregation

Aggregation involves the combination of new or received institutions (including city visions) with embedded institutions and social characteristics in a creative fusion to develop bespoke institutions that are fit for purpose and sensitive to context.

As previously discussed, this study reinterprets the understanding of embedded institutions to encompass established practices, procedures, normative city visions, and existing constitutional, legal, regulatory, and policy frameworks. It views social characteristics as including culture, routines, traditions, social norms, belief systems, local knowledge, needs, and previous experiences that have influenced choices and behaviour over time.

The study demonstrates that aggregation transcends institutional pluralism by co-producing acceptable ways of operating. It supports the argument put forth by De Koning (2013) that the process of aggregation creates a balanced situation where both formal and informal institutions coexist harmoniously. Furthermore, this study expands on this debate, contending that aggregation also leads to a scenario in which received institutional arrangements and city visions are aware of, sensitive to, and responsive to existing institutional logics, normative city visions, and established practices, and are neither oblivious to nor dismissive of them.

The introduction and implementation of KISIP I to Nairobi’s urban development decision-making and implementation scene fall short of fitting the above description of aggregation. KISIP I was designed by national government bureaucrats, consultants and the World Bank, who made major decisions which shaped the form of the project and the arising de facto practice of urban development decision-making and implementation. The county government was engaged only at the implementation stage, effectively sidelining its role in urban development decision-making within beneficiary settlements. This shift transferred significant decision-making and implementation authority to the national government and external consultants. Such an approach offends the embedded institutional logic established by the constitutional

order post-2010, including the Urban Areas and Cities Act of 2011 (revised in 2019), County Government Act of 2012 and the Physical and Land Use Planning Act of 2019, as well as the established urban planning procedures that affirm the county government's central role in urban development decision-making and implementation.

Findings suggest that from the city looking up, Nairobi's received city visions are akin to institutional transplants directly or indirectly imposed by powerful bricoleurs and not localised. They thus fail to reconcile the logic of everyday and project-bound spaces of decision-making, and received and locally embedded visions. The understanding of institutional transplant herein follows the definition put forward by de Jong (2013). It is understood as the transfer of policy concepts and institutions (*for example, project-bound decision-making and implementation spaces like KISIP and received city visions like the Nairobi Climate Action Plan, Eastlands Urban Renewal Plan*) to a recipient institutional context (like *NCCG urban planning department's normative functions, policies, programs and practices*) from other policy models promoted by 'outsiders' (*for example, the World Bank, AFD, UK Government, national government bureaucrats and consultants*), and are subsequently implemented by outsiders in the recipient institutional context. It involves mindless copy-pasting of policies, ideas, programs, projects, institutions, institutional arrangements and practices.

The study draws parallels with the argument made by de Jong (2013) that in such cases, the environment in which the transplant happens is largely disregarded and local fit is ignored. The study extends this argument, debating that similarly, the agency of local policy actors and the interplay with extant institutional frameworks, policy instruments and projects is not taken into consideration, thus leading to tensions, relationships of distrust, and institutional pluralism (Kraatz & Block, 2008) and exclusionary urban development policy and planning practices. It thus reinforces inequalities, asymmetric power relations and processes of disaster risk creation. The lack of creativity, flexibility, sensitivity and critical attitude with which received city visions and institutional arrangements received, such as KISIP and Eastlands Urban Renewal, are applied to Nairobi's urban development decision-making processes is decisive in the relationships between actors involved in everyday urban development and those operating within isolated, 'bubble' decision-making spaces. This also manifests in fragmented urban form and disconnected materialities.

ii. Alteration

Alteration is the adaptation of institutions, tailoring them to their specific needs. According to de Koning and Cleaver (2012), this can range from making small changes to complete reinterpretations and outright rejection of institutions or some of their elements.

KISIP can be viewed as a room for manoeuvre crafted by powerful bricoleurs at the national level to enable them to gain power and control over pro-poor development decision-making and implementation. The findings indicate that this process involves circumventing formal systems through shadow systems and informal practices. They reveal that national government actors, acting as bricoleurs, are exploiting institutional ambiguities to normalize the national government's appropriation of devolved functions. The material outcomes serve to legitimize the disregard for established institutional frameworks, which assign urban development decision-making and implementation responsibilities to county governments. Consequently, informal practices become the norm while bureaucratic procedures become the exception.

The analysis found evidence that national-level public sector policy actors had more power compared to city-level public sector policy actors in the urban planning department. The SDHUD bureaucrats had sweeping powers since they were the ones who designed and negotiated the project. This enabled them to establish control over authoritative resources such as budget, recruitment of consultants and contractors, and selection of interventions to be implemented as well as the budgetary allocation for each intervention. The late integration of NCCG in KISIP gave it a peripheral place in the project, leading to City Hall's limited agency when engaging with project decision-making structures. This systemically embedded unfair structural relations and limited the NCCG urban planning department's role to nominating urban poor settlements, participating in meetings and facilitating the approval of arising plans. In addition, low fiscal power of the urban planning department limited its ability to push back against national government hegemony. These combinations further complicated the ability of NCCG urban planning department to participate in institutional bricolage to localize KISIP. These findings are consistent with the claim by de Koning and Cleaver (2012) that bricolage is shaped by power dynamics and that individual bricoleurs can exercise different levels of influence over the formation and functioning of institutions based on the kind of resources they control.

iii. Articulation

Articulation in this study is interpreted as asserting formal responsibility for urban development decision-making to push back against received city visions and institutional arrangements. The chapter argues that NCCG's urban planning department asserting its formal mandate and responsibility for urban development decision-making and implementation at the city level is a form of articulation. Findings revealed that NCCG mounted a pushback against national government hegemony over pro-poor urban development decision-making and implementation action and sought to reclaim its agency. Evidence also suggests a pushback against received institutional arrangements. Outright protest by former NCCG senior policy actors against the hegemony of the KISIP national secretariat, as well as silent revolt and resentment towards the project by policy actors in everyday urban development decision-making, provides a case in point. These results align with the claim made by de Koning and Cleaver (2012) that when identities are strong, articulation practices are quite visible. Evidence demonstrates that this holds true for Nairobi. The city's decision-making identity is formed by the caliber of professional staff, the city's capital status and the county government status.

Other studies have found that throughout history, the governance of Nairobi has been contested by national and sub-national authorities. National government bricoleurs have always wanted to control the urban governance of Nairobi. This had previously resulted in the national government taking over the management of the capital through the Nairobi City Commission (1983 - 1992) and recently through the Nairobi Metropolitan Services (2020 - 2022). This always resulted in practices of articulation where the city leadership reclaimed its agency over urban governance. NCCG pushing back against asymmetrical power relations in the context of KISIP provides a case in point. Findings demonstrate how the leadership of NCCG's department of urban planning engineered a shift in power relations with both the World Bank and the SDHUD. Senior NCCG policy actors advised the then-governor on the need for the World Bank to deal with NCCG directly. City Hall exercising its power and agency over urban development decision-making birthed a relationship of trust and reciprocity with the World Bank. In turn, the World Bank established a direct relationship with NCCG leadership, providing a platform to engage, ask questions, and discuss areas of

concern and reforms. NCCG urban planning leadership had a clear idea of the 'right way of doing things' which was incongruent with the institutional logic of KISIP.

9.2.2.2 Institutional Bricolage as an Expression of Agency

Agency is understood as actors' capacity to act independently and make choices, often in the context of their social environment. Institutional bricolage reveals another view of agency. It presents it as the ability to creatively combine institutional elements to navigate institutional complexities and institutional inertia to respond to emergent and longstanding challenges. In the context of city visioning, institutional bricolage is useful for localizing received city visions. Actors negotiate and draw upon institutional bricolage to adapt received city visions to the peculiarities of the institutional context, shaping how visions are received and/or enacted at the local level. This adaptation is influenced by actors' agency and institutional dynamics such as existing governance arrangements, power relations, and policy and regulatory frameworks. Actors may resist or accept certain visions or aspects of the visions leading to adjustments or total rejection. Incongruences between city visions and localization are manifest in the materialities.

Policy actors at different levels draw on bricolage to modify institutional arrangements to solve the urban poor challenges amidst constrained environments. In this way, institutional bricolage becomes a practical expression of agency, allowing actors to creatively address extant and emergent challenges and innovate within the constraints of their socio-economic and institutional environments. This view suggests the potential for agency to be exercised in ways that transform institutional arrangements, practices and relationships from within, using the very elements that might otherwise constrain it. However, this may also be prone to abuse as it operates within shadow systems where accountability systems may be skewed and intentionally muted.

9.2.2.3 Institutional Bricolage at Different Levels

Processes of institutional bricolage occur across scales including the local scale (community level), meso-scale (city governance level) and large scale (national governance level). It has different expressions at these various levels. Each level involves unique actors who sometimes overlap across levels, resources, challenges

and strategies. These particularities shape how institutional bricolage is practiced and manifest.

At the local level, institutional bricolage predominantly involves negotiations and contestations between socially embedded institutions and received institutions . Many scholars have written about institutional bricolage at the local level as involving local communities' creative response to everyday challenges such as natural resource management (De Koning, 2014; De Koning & Cleaver, 2012; Karambiri et al., 2020; Koning, 2011) and filling institutional voids to meet local needs (Funder & Marani, 2015; Ingram et al., 2015). Institutional bricolage at the local level strongly emphasizes the agency and creativity of local actors and bottom-up, community-led initiatives that reflect the blend of local knowledge and conventional wisdom to develop bespoke arrangements fit for purposes and sensitive to context. At the local level, institutional bricolage may be triggered by a mix of factors including community pressure for inclusion in the city and provision of risk-reducing infrastructure and services, clamour for recognition of rights, agitation to address common threats such as eviction and urban risks like fires and intermittent floods, clamour for a different social contract, civil society pressure for better governance and agitation for a shift in political economy to address root causes of social vulnerability.

The Mukuru Special Planning Area (SPA) represents a significant case of institutional bricolage in practice at the local level, wherein actors strategically assembled, adapted, and recombined both formal and informal institutions to address the challenges of pro-poor urban development. The transformative elements of the SPA such as its inclusive visioning processes, co-produced planning frameworks, and novel polycentric governance structures, were not entirely new constructs but rather emerged through the creative adaptation of pre-existing institutions, norms, and actor relationships. This reflects the essence of institutional bricolage, which enables contextually grounded, flexible responses to complex urban challenges by drawing on available institutional repertoires (Cleaver, 2012). However, the SPA's shift from transformation to incrementalism underscores the inherent fragility of institutional bricolage arrangements when they are not anchored within formalised or canonical systems. While the planning and visioning phases embodied a bottom-up, inclusive, and systemic orientation, the implementation phase saw a reassertion of conventional top-down bureaucratic logics, particularly through the role of the Nairobi Metropolitan

Services (NMS), which marginalized local actors and disregarded co-produced governance standards. This discontinuity illustrates how institutional bricolage, while enabling transformative change in the short term, may be vulnerable to erosion or reversal in the absence of institutionalization, scaling, and sustained political support.

The case of Mukuru thus highlights a critical tension within institutional bricolage: its capacity to foster innovation and transformation is counterbalanced by its susceptibility to institutional inertia and elite capture. Without mechanisms to embed bricolaged arrangements into enduring policy, legal, and financial frameworks, their transformative potential remains contingent and temporal. In this regard, the Mukuru SPA reveals the need for strategies that not only enable bricolage but also stabilize and mainstream its outcomes to ensure continuity, legitimacy, and long-term impact in urban governance and development.

At the mesoscale (including the city level), institutional bricolage is distinct due to the complex, multifaceted nature of urban environments, the unique challenges and opportunities they present, and the array of actors with diverse and competing interests. At this level, institutional bricolage processes may be triggered by different factors including changes in city laws, for instance, regularization of unauthorized development and neighbourhood initiatives laws, political commitment, community pressure for specific services and donor requirements. This study finds that it manifests in tensions, contestations and negotiations between mostly embedded institutions and received ones, and through urban policy innovation and cross-sector collaboration. It is constrained by the structuring effect of higher-level policies and local-level processes (Manara & Pani, 2023). Bricoleurs at the city level draw resources from a mix of public and private capital and expertise, lending them power over urban development agendas. It involves balancing diverse vested interests and navigating complex power dynamics. It is difficult to steer and is often prone to capture. Powerful bricoleurs can steer urban development towards institutional arrangements that advance their interests. This can create institutional arrangements and visions which reproduce long-standing inequalities, reinforce asymmetric power relations, entrench the capture of decision-making structures and channels, and create uneven development patterns.

At the national government level, tinkering with institutions may be triggered by vagueness and opaqueness in the institutional framework arising from multiple overlapping and conflicting urban governance institutions, distrust and tensions between national and city-level policy actors, demand by funders, the rise of target culture and pragmatism. Policy actors can adjust institutional arrangements and practices to align political manifestos with public policy and delivery mechanisms. Public sector policy actors at the national level can engage in processes of institutional bricolage to navigate new and complex institutional landscapes, combining formal institutions and informal practices to get things done.

Understanding institutional bricolage at different levels and how actors therein navigate institutional complexities, negotiate, resist and break through is useful for understanding African urbanism. It can help understand how top-down institutional arrangements or visions land at the city level. This view finds support in Khan (2021) argument that understanding intersectionality of bricolage processes at different levels can help understand how reformist agendas get translated into practice and shape outcomes (Khan, 2021).

9.2.3 Reflections on Methodology

This research adopted a social constructivist ontological stance and interpretivist epistemological disposition. These stances led to an understanding that reality, including city visions, materialities, urbanity, riskscapes and vulnerabilities, are multiple, co-existing and shaped by social processes, ideological dispositions, vested interests and unequal power relations. By and large, these stances led this research to conclude that the institutional-actor relationships underlying Nairobi's city visioning produce differential materialities, with differential implications for disaster risk creation and a weakened capacity for breaking cycles of risk creation.

The stances and the interest in different analytical objects (power relations, trust/distrust, agency and transformative practices) presented methodological challenges. How was information so deeply embedded in everyday practice going to be obtained? What was the entry point for interviews? How would trust with the respondents be built so they do not hold back information? How was the researcher going to capture diverse voices for a holistic understanding of meanings and interpretations of realities? Was the focus too wide and the study consequently vague?

How was the researcher going to organize arising thoughts in one master narrative? How was the study going to discern processes of institutional bricolage? These questions quickly became important to the research process and the study sought to resolve them by developing a bespoke research design which offered the flexibility to interrogate different analytical objects. Unlike de Koning (2011), who faced to some extent similar methodological challenges and overcame them by shifting her focus from institutions and actors to practices of institutional bricolage, this study sought to sharpen the focus on the decision-making and implementation spaces, focusing on how social relationships (of trust, agency and power) influence city visions, localization and materialities. A focus on city visioning, localization and materialities helped cover most of the challenges named above.

This PhD journey has profoundly transformed the researcher both as a scholar and a practitioner. It has illuminated the vastness of knowledge and underscored how much remains to be learned, even for someone already embedded in a specific field of practice and empirical context. More importantly, it has reshaped the researcher's professional orientation toward a more foresightful and integrated approach to urban development decision-making and implementation. The researcher has developed a deeper interest in the often-overlooked aspects of practice, the unspoken norms, everyday arrangements, and social relationships that shape how things get done. As a result, there is a growing reluctance to take things at face value. This shift is influencing how the researcher understands his role not only as an academic, but also as an urban development practitioner within the United Nations system and as a public intellectual in Kenyan governance space. It has changed the way he engages with colleagues, designs and assesses projects and programmes, and relates to scientific knowledge, and the scientific community. The journey has also significantly enhanced the researcher's writing and analytical capabilities.

9.3 Conclusions

To summarise the empirical chapters and thus findings of the study, this section reflects on the influence of institutional-actor relationships on the enabling environment for inclusive pro-poor urban development in Nairobi, it answers the research questions and discusses the implications of institutional-actor relationships on risks in urban poor settlements.

9.3.1 Answering Research Questions

Based on the review of the literature and theory, the analytical questions put forward in Chapter 1 were refined and restated in section 3.7 as follows:

1. Who has the power to set the urban development policy agenda in Nairobi**?**
    c) Who sets the vision and agenda for pro-poor urban development and especially the participatory part within it?

    d) What are the consequences of the above for the generation of vulnerability, exposure and capacity for risk reduction for the urban poor?

2. How are pro-poor urban development decision-making and implementation spaces in Nairobi produced?
    b) How are institutional innovations reshaping relationships and the urban development decision-making space in Nairobi?
3. What transformative practices were brought into pro-poor urban upgrading in Nairobi between 2015 and 2022?

9.3.1.1 Who Has the Power to Set the Urban Development Policy Agenda in Nairobi?

This question explored whose voices and interests are strongest in the kind of urbanity arising in Nairobi. In answering the question, the study broke down the question into two segments. The first part sought to investigate who sets the vision and agenda for pro-poor urban development, especially the participatory part within it. The second part of the question explored the consequences of the actors setting the agenda for the generation of vulnerability, exposure and capacity for breaking cycles of risk creation. The findings, outlined in-depth in Chapter 7, highlights the emerging notion that there are explicit, hidden and neglected agendas underlying city visioning and materiality, each with a spectrum of intentionality in their risk-creating implications.

First, city visioning is shaped by complex power dynamics and driven by actors with varying degrees of power. Powerful foreign actors and neoliberal agendas dominate city visioning, prioritizing competitiveness, short-term economic gains, efficiency and sustainability, often at the expense of inclusivity, equity and the needs and priorities of the general populace, especially the urban poor. As a result, local actors are unable to exercise their agency and participate in shaping their urban futures.

Second, decision-makers exhibit a myopic bias towards the value created or lost within the five-year electoral cycle. This short-termism means little insight into how urban development decisions create or perpetuate risk and vulnerabilities. There is a lack of incentives and political will to pursue long-term, integrated, and risk-aware development that benefits all.

The most important finding from answering this research question is that there are links between city visioning, localization and arising materialities. In cases where there is incongruence between city visions and localization, the effect will manifest in the materialities. Links between city visioning, localization of visions and materiality are fundamentally about how future aspirations are translated into the physical realities that shape urbanity. Visioning is a strategic and discursive process. Materiality is the expression of city visions in physical elements. Whereas localization is the adaptation of city visions to the unique socio-cultural and risk contexts through negotiations and processes of institutional bricolage.

9.3.1.2 How are Pro-Poor Urban Development Decision-Making Spaces in Nairobi Produced?

This question discussed how international discourses and neoliberal agendas are received and enacted or not. It also considered implications for agency and capacity to break cycles of risk creation. The findings, discussed in great depth in Chapter 7, build on the findings of the preceding chapter on City Visioning. It approached the question through the lens of localisation. As stated earlier, it agrees with the findings in Chapter Six on the narrowness of project-based visions.

Findings suggest that power imbalances and incongruent institutional logics reinforce institutional pluralism in Nairobi's urban governance. The hierarchical control exerted by national-level policy actors over city-level actors limits the latter's agency, highlighting ongoing tensions between central and devolved governance arrangements. Additionally, findings reveal that international actors are enablers and partakers in the institutional bricolage process. They provide financial resources that enable tinkering with extant institutional arrangements to create bespoke ones. Importantly, the study finds that these bespoke spaces of decision-making and implementation tend to weaken the capacity to break cycles of disaster risk creation and enable the capture of functions by more powerful bricoleurs. Findings further

reveal that KISIP was poorly integrated into the city's institutional environment. This poor localisation is manifest in its materialities, which are focused on delivering short-term improvements without fully addressing the root causes of disaster risks nor considering future risks, raising concerns about the ability of these interventions to break cycles of DRC. These factors combine to affect the overall effectiveness of bespoke spaces of decision-making and action in becoming transformative, long-term urban development decision-making and action spaces.

The institutional bricolage lens highlights the importance of informal practices and decision-making strategies in navigating urban development's 'messy' middle, especially amid persistent urban poor housing crises. However, it also reveals the dangers inherent in shadow systems and informal practices.

9.3.1.3 What Transformative Practices Were Brought into Urban Upgrading in Nairobi Between 2015 and 2022?

Building on the findings of research questions one and two, which focused on city visioning and the localization of received visions, this question explored how these processes enable inclusive, transformative materialities. It examined the conceptual framing of transformation through a real-world case of pro-poor urban upgrading in Africa, with a focus on linking city visioning, materiality, and localization. Visioning is a strategic and discursive process, localization involves adapting visions to socio-cultural and risk contexts via institutional bricolage and materiality refers to the physical manifestation of visions.

Processes of institutional bricolage shape the way city visioning and attendant discourses and institutional arrangements trickle through layers of urban governance to shape the urbanity arising in Nairobi. As demonstrated by the Mukuru SPA, they also shape how community-level actors push back against top-down hegemony, reclaiming their agency over city visioning and shaping alternative urban futures. These pressures are exerted towards city-level policy actors and have vast implications for the agency of NCCG to shepherd city visioning in ways that break cycles of disaster risk creation. Whether this pressure is harnessed to break cycles of disaster risk creation depends on socio-economic pathways, city visioning, foresight,

power relations, localisation of city visions, institutional arrangements, development actions, and most importantly, top-down politics.

The study confirmed that the Mukuru SPA process has transformative characteristics but also revealed that some elements, once transformative, had reverted to incremental changes. The findings updated the characteristics of transformative planning to include restructuring, scalability, transferability, fidelity to vision and process, and catalytic materialities. These updates emphasize the linkages between visioning, localization, and materialities, as well as the social shifts required for institutional, physical and social transformation to be realised, such as changes in values, power relations, and agency. However, the study identified a dissonance between transformative institutional processes and physical transformations. While top-down approaches facilitated transformative materialities, they failed to foster local leadership models, revealing a gap in worldviews and implementation paths. Despite gains in creating an enabling environment for inclusive, pro-poor, risk-sensitive urban development, further efforts are needed to ensure sustainable, long-lasting outcomes through policy and scalability in everyday planning and decision-making.

9.3.2 Institutions and Urban Development Decision-Making

Following the analysis of data, this research provides closer interpretations of institutions, distinguishing embedded and received between visions, norms, arrangements and practices. Drawing on North (1990) and Cleaver (2012), institutions are understood as co-produced rules, customs, norms, practices and arrangements, which structure choices, behaviors, and agency, and are continuously reproduced and adapted through everyday interactions.

As indicated in section 3.2.2, institutions are categorized herein broadly into received and embedded institutions. Received institutions are new and externally introduced, whereas embedded institutions are inherent to the local socio-cultural fabric. Both types of institutions can be socialized and normalized, becoming entrenched in everyday practices. However, evidence reveals a dissonance between received institutions and embedded ones. Mirrored against Figure 7, Figure 29 illustrates the differentiation in the various types of institutions. This categorization involves looking at specific institutions shaping the urban development decision-making and

implementation space. While the focus of this study is on the pro-poor urban development decision-making and action space, it can also be used to highlight the institutional arrangements in different spaces.

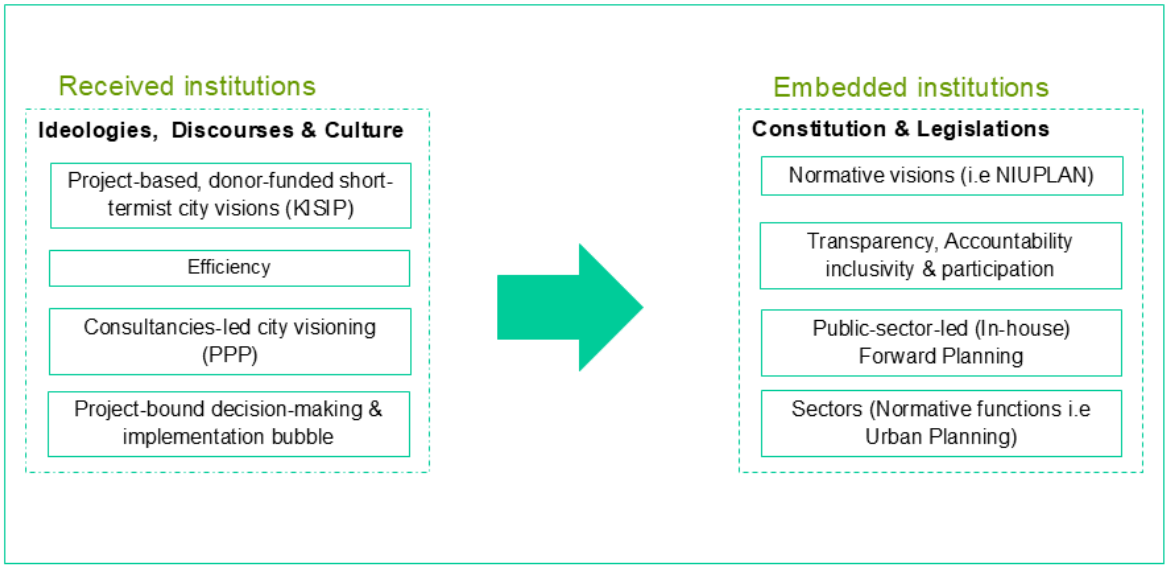

Figure 28: Received institutions vs embedded institutions and their different elements. Illustration was developed based on field data. Source: Researcher, 2024

In Nairobi's urban governance, embedded institutions guiding urban development decision-making and action include a mix of rules, such as the Physical and Land Use Planning Act and the Urban Areas and Cities Act; norms like inclusivity, transparency, and accountability; practices such as planning; and arrangements like sectors and departments with normative functions including, inter alia, Lands, Housing and Urban Planning, and Mobility and Public Works. These institutions are aimed at creating inclusive, sustainable, and resilient urban environments (NUDP, Vision 2030, NUA Kenya). While the responsibility for urban governance formally lies with county governments, the international actors play a significant role in shaping the urban development decision-making and implementation space in Nairobi. This is through received institutions. These include city visions such as Nairobi Climate Action Plan, Vision 2030, the National Urban Development Policy and the Nairobi Metropolitan Strategy; rules like the Environmental Management and Coordination Act, norms like efficiency, practices such as planning consultancies-led visioning, project-bound decision-making and action arrangements like projects like KISIP and public-private partnerships (PPPs).

This research has demonstrated that the construction of pro-poor urban development decision-making and implementation spaces usually implies the introduction of certain external rules, norms, arrangements and practices. These are often underpinned by certain ideologies and discourses and often reflect power asymmetries.

9.3.3 Implications for advancing foresightful, risk-sensitive and inclusive pro-poor urban development

The central question of this research is how relationships between institutions and actors shape disaster risk creation in Nairobi, and what are the implications for advancing foresightful, risk-sensitive and inclusive pro-poor urban development. This question is answered in two parts. The first part presents the processes of disaster risk creation (DRC). This is illustrated in Figure 29. The second part discusses implications for advancing foresightful, risk-sensitive and inclusive pro-poor urban development.

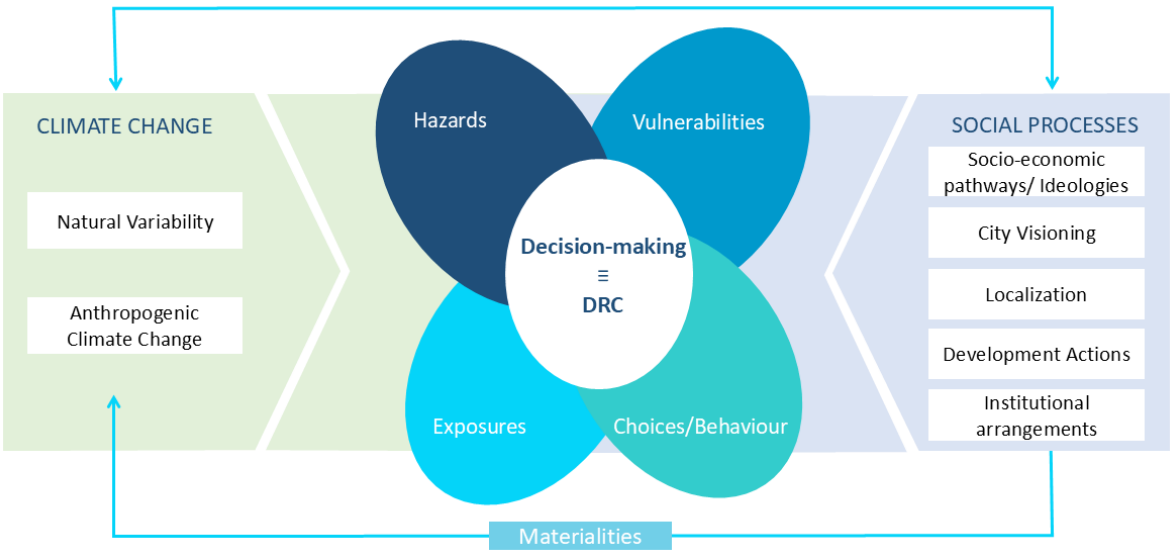

Figure 29: Disaster Risk Creation Framework Adopted from IPCC AR6 and refined to fit context

Social processes, such as city visioning, are not neutral. They are powerful tools that can either deepen or dismantle urban risk landscapes. These elite-driven processes often marginalize the urban poor and exclude local knowledge from shaping urban futures. This systematic marginalization reproduces social inequalities and entrenches disaster risk creation (DRC). Figure 29 illustrates how decision-making processes related to urban development interact with broader climate and social processes to

create disaster risks. It emphasizes the interplay between hazards, vulnerabilities, exposures, and choices/behavior in shaping disaster risks. On the one hand, climate change, including both natural variability and human-induced climate change, compounds hazards both in terms of frequency and intensity. Social processes, including socio-economic development pathways, city visioning, localization and institutional arrangements shape vulnerabilities and exposures through urban development decisions. Urban development decision-making processes, represented at the center, influence disaster risk creation by shaping who is exposed to hazards and how disaster risk is assigned. Poor decision-making or fragmented institutional arrangements can reinforce the processes of DRC. Conversely, inclusive, foresightful urban development processes can enable breaking the cycles of risk creation.

Inclusive, foresightful, and risk-sensitive urban development in Nairobi demands a reconfiguration of the institutional and political relations that currently shape city-making. The study reveals the potential of community-led, institutional bricolage processes to disrupt dominant paradigms, but also highlights the fragility of such gains in the face of power asymmetries and institutional inertia. Beyond technical solutions, the challenge lies in shifting the politics of urban development to centre the voices of the urban poor, confront systemic exclusion, and embed disaster risk, resilience, inclusivity and equity into the very fabric of urban development decision-making. This necessitates long-term commitment, institutional frameworks, and a shared vision that is both inclusive and anticipatory of future risks.

9.3.4 Key Contributions to Knowledge

This study has made several key contributions to knowledge. These learnings are discussed in greater depth below.

First, the study has enhanced understanding of processes of disaster risk creation in the urban Africa context. It has highlighted how powerful foreign actors, neoliberal agendas and a lack of incentives and political will to pursue long-term, integrated, and risk-aware development that benefit all interact to reinforce longstanding inequalities and processes that perpetuate disaster risk creation. Further, it has highlighted the disjuncture between city visioning, localization of visions and arising materialities. The findings demonstrate that transformative visioning and planning alone are insufficient for sustained urban change. Without fidelity in implementation and long-term

governance mechanisms, even the most inclusive and innovative planning processes may result in reversion to path-dependent, incremental development norms. It also surfaces the intricate links across city visioning, localization of visions and arising materialities. These linkages are fundamentally about how future aspirations are translated into the physical realities that shape urbanity. Visioning is a strategic and discursive process. Localization is the adaptation of city visions to the unique socio-cultural and risk contexts through negotiations and processes of institutional bricolage. Whereas, materiality is the expression of city visions in physical elements.

Second, the study has given insights into how urban development decision-making and implementation functions in an institutional bricolage context where there are many different actors, including funders with their own priorities superseding the embedded institutional arrangements. The thesis particularly gives insights into how this process occurs. It has shed light on how project-bound spaces of urban development decision-making and implementation take away the power to vision the city from everyday spaces of decision-making and implementation (and weaken the agency of city-level actors for city visioning), ceding power for city shaping to actors with no formal mandate. It is an imperative for practitioners, policymakers and multinational organisations to understand how these ways of visioning, financing urban development upset the status quo, and instead of strengthening the urban development decision-making and implementation system and the capacity to break cycles of disaster risk creation, it erodes it. Additionally, the study contributes to debates on state-community relations by illustrating the tensions and complementarities between top-down delivery mechanisms and bottom-up institutional innovation. It opens space to theorize how political will, state-led infrastructure investment, and grassroots institutional agency might be aligned to achieve more long-term and scalable urban transformation.

Third, it has extended institutional bricolage to the urban, deepening its application in urban development decision-making and implementation, and urban governance more generally. Institutional bricolage lens surfaces the different locations where processes of disaster risk creation take place. Further, the findings deepen the application of institutional bricolage in the urban by showing how informal, polycentric, and co-created institutional arrangements can enable transformative planning in contexts of institutional voids. However, the case also reveals the limits of institutional

bricolage when such arrangements are not formalized, scaled, or protected from co-optation by conventional governance actors.

Last, the study has provided a nuanced understanding of transformation, conceptualising it as a continuum. The study challenges binary notions of transformation versus incrementalism by demonstrating that transformation is a temporal and fragile continuum. The Mukuru SPA case shows how transformative planning processes can coexist with regressive implementation practices, revealing the risk of reversal when transformation is not institutionally or politically anchored. It has revealed that urban transformation is not a zero-sum outcome nor a static end in itself but a complex, winding journey involving setbacks, that can revert a transformative process to being incremental. Importantly, in transformation, the whole is not necessarily equivalent to the sum of the parts.

9.3.5 Areas for Further Inquiry

i. The 'Big Middle' and Institutional Vagueness

In Nairobi's urban landscape, the 'big middle' occupies a critical yet overlooked position between the serviced and unserviced communities. These communities, comprising households and settlements that inhabit regulatory grey zones between the formal and informal, remain poorly understood. They often lack planning oversight, infrastructure provision, and risk-reducing measures, making them hotspots of risk accumulation. Yet, they remain underexplored in both policy and research. It illustrates a form of institutional invisibility and precarious inclusion, where residents must navigate a fragmented and inconsistent urban governance landscape. To build risk-sensitive pro-poor futures, there is a pressing need to understand and engage with the 'big middle', addressing its material and regulatory ambiguities, invisibility and risk profile.

ii. Intellectual Leadership for Urban Planning

Intellectual leadership emerges as a critical area for further investigation, particularly in the context of Nairobi's urban development decision-making landscape. Although beyond the direct scope of this study, findings suggest that neoliberal governance, outsourcing, and elite capture have significantly eroded the city's capacity for

intellectual leadership, understood as the ability to mobilize, inspire, and shape policy and practice through the generation and application of knowledge and ideas. The increasing reliance on consultants and external expertise, often to the exclusion of in-house institutional knowledge, has hollowed out the state's thought leadership and left urban visioning vulnerable to private and political capture. The rise of policy brokers, including consultants representing state interests, points to a shift in who holds epistemic authority in shaping the city. Further research is needed to examine how intellectual leadership can be reclaimed and institutionalized within the public sector to enable more visionary, accountable, and contextually grounded urban governance.

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Appendices

Appendix 1: An Outline of Publications Analyzed Through Document Analysis

analysis

	Document name	Year of publication	Scale of influence
1	New Urban Agenda	2016	Global
2	Sendai Framework	2015	Global
3	Transforming our world: The 2030 Agenda for Sustainable Development	2015	Global
4	Paris Agreement	2015	Global
5	Disaster Risk Management Bill, 2021	2021	National
6	Law and Policies that Protect the Most Vulnerable Against Climate Related Risks in Kenya	2021	National
7	National Climate Change Learning Response Strategy, 2021 – 2031	2021	National
8	Kenya Country Report on the Implementation of the New Urban Agenda	2021	National
9	Kenya Vision 2030 3rd Medium term plan, 2018 - 2022	2018	National
10	National Climate Change Action Plan, 2018-2022	2018	National
11	Urban Planning for City Leaders: A Handbook for Kenya	2018	National
12	National Land Use Policy	2017	National
13	Kenya's popular version of the New Urban Agenda	2017	National
14	Climate Change Policy, 2016	2016	National
15	Climate Risk Management Framework for Kenya	2016	National
16	National Urban Development Policy	2016	National
17	National Report on Human Settlements and the New Urban Agenda	2016	National
18	National Adaptation Plan, 2015-2030	2015	National
19	Nairobi Climate Action Plan 2020 – 2050	2022	County
20	Eastlands Urban Renewal Plan	2018	County

21	Nairobi Integrated Urban Development Plan (NIUPLAN)	2015	County
22	County Integrated Development Plan (CIDP), 2018 - 2022	2018	County

Appendix 2: Data collection planner - Matrix of research questions and corresponding interviewees

#	Research questions	Target interviewees	What could they yield?
1	Who has the power to set the urban development policy agenda in Nairobi?	- National-level public sector policy actors - Private sector policy actors: consultants - Donors & technical agencies - International Non-Governmental Organisations - Professionals	• Interviews with individuals with formal policy responsibility provided their account of how they understand and deploy the terms risk, risk reduction and adaptation, their approaches and their impact on Nairobi's urban development policy space
2	In what ways does institutional pluralism offer greater opportunities for actors to collaborate and innovate, and to co-create visions of their urban futures?	- Civil Society Organisations - National level public sector policy actors - Consultants - City-level public sector policy actors	• The accounts and experiences reported by city-level policy actors revealed how different actors negotiated their solutions and got their voices heard. It provided data on different actors' versions of, and positions within the construction of KISIP as a bespoke pro-poor decision-making and action space.
3	How has transformative change been brought into pro-poor urban development decision-making in Nairobi from 2015 to 2022?	Community members	• The accounts and experiences reported by community-level actors revealed information on how the Mukuru SPA was implemented, what they hoped for, what the outcomes were and how far the outcomes were from the original ambitions

Appendix 3: Interview Questions

Semi-Structured interview guide

My central research question is: "How does decision-making in pro-poor urban development contribute to risks in urban poor settlements? This is supported by the following sub-questions:

Research Question One

Who has the power to *set the urban development policy agenda in Nairobi**?***

e) Who sets the vision and agenda for pro-poor urban development and especially the participatory part within it? (*Densification, redevelopment and urban upgrading)*

f) What are the consequences of the above for the *generation of vulnerability, exposure and capacity for risk reduction for the urban poor*?

WORKING HYPOTHESES & ARISING QUESTIONS

i. The vision for urban (re)development in Nairobi has been predominantly (re)colonized by capital, the private sector and international actors.
   a. Who is shaping the visioning for urban development in Nairobi? (*Explore funding, policy debate space & institutions*)
   b. How are sustainable urbanisation practices such as PPPs, DRR and adaptation shaping urban (re)development agenda in Nairobi? (*Explore programs, partnerships, policy support, projects, and best practices*)

ii. The intellectual leadership for urban (re)development in Nairobi has been predominantly (re)colonized by the private sector
   a. How does your practice/ organisation interpret mainstreaming of adaptation practices, DRR in urban (re)development, and what role does it play in visioning Nairobi of tomorrow? (*Explore capacity + competency – technical support, consultancies*)
   b. Whose ideas, knowledge and evidence (if at all) count regarding DRR & adaptation in the context of urban (re)development? (*Communities; public officials – planners; foreign experts, local private sector; CSOs, scientists*).

iii. The agenda for public participation in pro-poor urban (re)development in Nairobi is set by shadow networks within and beyond the local government.
   a. How is your organisation setting the agenda or scene for public participation in pro-poor urban redevelopment? (*Explore set conditions – budgets, committees, guidelines on PAPs*)
   b. How useful are personal networks/relationships in getting things done? Have you had to leverage them to get things done? (*Explore informal practices i.e lobbying and trust and reciprocity in relationships*)

Research Question two

In what ways does institutional plurality offer greater opportunities for actors to collaborate and innovate, and to co-create visions of their urban futures with regard to adaptation?

a) How are non-state actors pushing back against extractive capital and challenging dominant discourses over urban development, risk reduction and adaptation agendas?
b) How are institutional innovations reshaping relationships and urban development decision-making space in Nairobi (the messy middle)?

WORKING HYPOTHESES & ARISING QUESTIONS

i. Over-construction of urban development decision-making space creates an 'institutional vagueness,' characterised by multiple layers, overlaps and incompleteness, leading to fragmented urban form.

a. Please describe how you see the city's urban development decision-making and action space? (*Explore the diversity of actors, policies, legislations and multiplicity of plans – KISIP, NMS, NaMSIP*)
b. Why is this decision-making and action space like this? *(Is it a necessary evil or convenient escape? What purpose does it serve?)*
c. How does the multiplicity of actors, overlapping mandates and laws affect the city's urban form?
d. How does the arising urban form contribute to generation of vulnerability, exposure and capacity for risk reduction? (*Explore approach – systemic vs silo; conflicting knowledges, capacities, coordination*)

ii. Institutional pluralism creates an opening for new relationships that facilitate alternative visions, innovations and collective agency, challenging dominant voices.

a. What kind of relationships arise in response to this 'institutional vagueness' described above? (*Explore networks, working groups within and beyond govt; partnerships*.)
b. How do these relationships form and who participates in them? (*Explore convening power, coordination, arrangements – formal or informal; composition, and the role of gate keepers?*)
c. How are the arising relationships and informal practices creating more opportunities for more inclusive and sustainable outcomes? (*Explore openings for learnings, experimentation, innovative methodologies, collaborations, capacities, perceptions, policies + legislations, working groups/ committee, budgets, new understandings of risk, new knowledges*)
d. What risks are inherent in such spaces? (*Explore corruption, cliques forming, gate keeping*); why?

Research Question Three

Semi-Structured interview guide

Research Question Three

How has transformative change been brought into pro-poor urban development decision-making in Nairobi from 2015 to 2022?

a) What parts of the Mukuru SPA decision-making, engagement, implementation and management processes can be described as transformative now, and what parts may have been described as transformative in 2015 but have now reverted to being incremental?
b) How do actions and learnings from Mukuru SPA processes help reframe flooding, fire and water access and the way in which urban risk is approached within urban development policy and planning?

WORKING HYPOTHESES & ARISING QUESTIONS

i. Visioning for Mukuru SPA is a vanguard for breaking cycles of risk creation in an inclusive way.

a) What was the vision of Mukuru SPA? And how does the vision and plan challenge business as usual? (*Explore path-shifting ideas roles and responsibilities of different actors, negotiated developments, relationships between actors i.e KPLC, NCWSC and communities, CSOs and NCCG*)
b) How does the vision address the root causes of vulnerability and exposure to fires, flooding and water stress? (*Explore poverty, affordability, cartels, SWM, room for the river etc*)
c) How did the Mukuru SPA process reconcile competing worldviews and stakeholders' interests? (*Explore mobilization of advocacy coalitions*)
d) How intentional were these processes for DRR – were these conceived as urban planning good practice with incidental contributions to resilience, if so in retrospect have there been missed opportunities ot integrate resilience thinking – or is the natural overlap sufficient for sustainable futures?

ii. The Mukuru SPA planning process has opened space for effective learning in relation to adaptation planning and transformational change.

a) How important was the stakeholders' participation to the Mukuru SPA plan? (*Explore changes in culture, perception, relationships, methodologies, valuing of local data, interests & ideas*). At what point did participation emerge and how did it shape the final product?
b) How was the issue of equity considered in the Mukuru SPA plan? (*Explore access to RRI + services incl. water, toilets, power, access roads, POSs*).
c) How did open data shape Mukuru SPA plan? (*Explore data sharing, availability of open data and ownership of the data*)
d) What communication strategies were deployed in the planning phase and the implementation phase? (*Explore information point, public lectures & presentation, public barazas, info boards, social media*)

iii. Mukuru SPA process has inspired a change of institutional frameworks in support of inclusive pro-poor urban development beyond Mukuru

a. How has Mukuru SPA informed the development of new approaches for upgrading urban poor settlements? (*Explore cascading impacts i.e declaration of new SPAs, new relationships between sectors and actors, new partnerships, governance arrangements, methods & approaches*)
b. How have arising multi-scale and cross-sectorial collaborations contributed to breaking administrative silos? Who initiated the collaborations and who participates in them?
c. How did Mukuru SPA process build local capacity to reduce risks and address emergent challenges? (*Explore hiring of local communities, trainings of & collaborations with community groups*)
d. In your opinion, how has Mukuru SPA process created opportunities to reframe understandings of flood risks, water stress and fires based on practice? Who has created the opportunities and for whom? (*Explore methodologies, collaborations, adaptation planning*)

iv. Interventions arising from the Mukuru SPA processes are promoting social justice for the urban poor in Nairobi

a. What physical interventions can you directly link to the Mukuru SPA process? How do the interventions reduce the likelihood of fires, floods and water stress? (*Explore environmental conservation, flood protection, power connections, roads & water access*)
b. Who is responsible for maintenance of the implemented interventions? (*Explore roles of different actors, sustainability strategy both during planning and implementation*)
c. How is the creation of an enabling environment for wider application of the Mukuru SPA process taking place? How has the SPA process shaped(ing) policy dialogues?
d. What institutional frameworks have been introduced to support widescale uptake of the Mukuru SPA approach beyond Mukuru and Nairobi? (*Legislations, working groups, governance arrangements, adaptation planning*) What barriers have inhibited the same? (*i.e opposition from actors with different approaches, interests*)

Appendix 4: Respondents' Invitation Letter

Date

Ref: Request for interview on urban development decision-making-risk nexus in Nairobi (final)

Dear Sir/Madam (or name),

I am a PhD student in the Institute of Risk and Disaster Reduction at University College London. I am writing to request 1.5 hours of your time to interview you on urban development decision-making in Nairobi. My PhD focuses on understanding how relationships between institutions and actors in urban development contribute to risks in urban poor settlements. The research is approved under ethics ID number: 24187.001. It is funded under the Multi Hazard Urban Disaster Risk Transitions (Tomorrow's Cities) project (www.tomorrowcities.org) and is undertaken under the Nairobi City Risk Hub.

The study aims to find out how decision-making in pro-poor urban development contributes to breaking cycles of risk creation in Nairobi. This interview exercise also intends to explore dominant ideas, debates, and interests that shape the city, the opportunity space arising from multiple actors and legislations as well as the opening for transformative adaptation practices. Targeted respondents include urban development policymakers and decision-makers cutting across international development, national and county government, the private sector, civil society and grassroots actors.

The interview will be based on asking you questions related to your work but primarily focusing on urban development policy and decision-making, climate adaptation actions and how urban development action and inaction contribute to risks in urban poor settlements. Following an in-depth analysis of literature and based on my previous experience working in urban policy in Nairobi, I have identified your organisation & you in particular as a resourceful expert to share your institutional and personal experiences in pro-poor urban development policy, decision-making and action in Nairobi.

Please do let me know via email or telephone if you would be interested in this research, and possibly interview dates and times that would suit you best.

Yours sincerely,

Mark Kuyo Ojal

Appendix 5: Participant Information Sheet

Participant Information Sheet for Interview Respondents

UCL Research Ethics Committee Approval ID Number: **24187.001**

YOU WILL BE GIVEN A COPY OF THIS INFORMATION SHEET

Title of Study: Understanding how relationships between institutions and actors in urban development contribute to risks in urban poor settlements
Department: Institute of Risk and Disaster Reduction
Name and Contact Details of the Researcher(s): Mark Ojal;
Name and Contact Details of the Principal Researcher: Prof. Mark Pelling;

1. **Invitation Paragraph**

   You are being invited to take part in this PhD study. Participation in this study is completely voluntary. Before you decide whether you want to take part, please read this information sheet to understand why the research is being done and what your participation entails. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether you wish to take part.

2. **What is the project's purpose?**

   Urban growth, much of which is anticipated in Sub-Saharan Africa, presents a time-limited opportunity to build widespread transformative adaptation and climate resilience into urban development planning and decision-making, effectively addressing both development and risk issues. In the same context, inclusive urban regeneration decision-making provides scope for reducing vulnerability and disaster risk in tomorrow's cities, especially in urban poor settlements. However, this opportunity window in Sub-Saharan Africa is constrained by limited knowledge; financial and institutional incapacities; and weak governance at the city level to plan and manage rapid urban growth, reduce risk and break cycles of risk accumulation.

This study aims to understand how relationships between institutions and actors involved in urban development contribute to urban risks in urban poor settlements. It seeks to achieve this by unpacking the processes of urban change, especially the ways in which urban development decision-making is negotiated, and how institutions change, interact with organisations, agency and other institutions.

The central question that the research addresses is: "How does decision-making in pro-poor urban development contribute to risks in urban poor settlements? This is supported by the following sub questions:

1. Who has the power to *set the urban development policy agenda in Nairobi**?***
2. In what ways does institutional plurality (multiple overlapping institutions) offer greater opportunities for actors to collaborate and innovate, and to co-create visions of their urban futures regarding adaptation?
3. How far have transformative adaptation practices (*practices aiming to reduce the root causes of vulnerability to climate change in the long-term through a paradigm shift in the way in which things are done, disrupting the status quo, and triggering major shifts in fundamental properties, functions, or interactions within the social, institutional, economic and or social-ecological systems*) been brought into pro-poor urban development decision-making in Nairobi between 2015-2022?

The data collection is anticipated to take place from January 2023 – September 2023.

3. Why have I been chosen?

Your invited because of your knowledge, expertise and experience in urban development policy and decision-making. Respondents that this research targets are urban development policy and decision-making actors cutting across international development, national and county government, the private sector, civil society and grassroots actors.

For this research study, we are seeking make and female participants aged between 18-65 who are actors in Nairobi's urban development decision making and action landscape and are able to participate in 1.5 - 2 hours face to face or remote interview. Noteworthy, people who qualify to be included in the study may

be excluded if they do not have the time or interest to participate in the interviews, or if they have to be paid to participate in the study.

4. Do I have to take part?

Please note that participation is voluntary. You should only take part if you are comfortable to. In case you have any questions and or concerns concerning your participation, please do reach out to either the researcher and/or the principal researcher. Contact details are provided on the first page. If you decide to participate, you will be asked to sign a consent form and you will be given a copy of the form to keep. If you decide to withdraw you will be asked what you wish to happen to the data you have provided up that point. You can decide to withdraw your data anytime up to 30 days after your interview.

5. What will happen to me if I take part?

If you decide to participate, you will be given this information sheet to keep and will be asked to give your consent to the research. This will involve reading and signing a consent form. We will then discuss the interview procedure with you and proceed with the interview. The interview will take approximately 1.5 - 2 hours and will be recorded, subject to your permission. All recordings of data on audio-equipment will be deleted after interview summary is developed. Please note that in the event that you are uncomfortable, you can still end your participation at any time during the interview and to have data/information relating to you withdrawn without giving any reason up to one month after the interview.

6. Will I be recorded and how will the recorded media be used?

You will be recorded subject to your consent. The audio recording of your interview will be used only for analysis. No other use will be made of them without your written permission, and no one outside the project will be allowed access to the original recordings. The recordings will be deleted once transcribed and the transcribed data anonymised.

7. What are the possible disadvantages and risks of taking part?

There is the possibility that the interviewees may raise issues on sensitive or controversial topics that could have implications for their organisations, and themselves from a professional perspective. To counteract this, all interviews and associated transcripts will be anonymised. Please note that if they feel that there are topics that may cause any reputational or professional consequences, you do not have to discuss these areas. Alternatively, these areas can be discussed but will not be included as part of the interview transcript.

To reduce the likelihood of harm occurring, all data will be coded to protect confidentiality and all recordings securely destroyed. Please note that you are free to withdraw from the research at any given stage up to 30 days after the interview, and that all data associated with you will be withdrawn from the study and securely destroyed. In addition, there are no financial benefits related to taking part in the study

8. What are the possible benefits of taking part?

Participating in this research provides an opportunity for professionals, policymakers, and implementers to reflect on their practice and processes and the way in which their actions or inactions, and decisions influence vulnerabilities, exposure and capacities for breaking cycles of risk creation, as well as open spaces for collaborations and innovations to emerge. In addition, it may build pride among practitioners from helping reshape the way in which urban development decision-making is approached and negotiated.

The researcher intends to also produce a policy brief to be shared with policymakers and respondents. It is our hope that this would also spark a healthy debate on urban development decision-making, help rethink the risk-development nexus, as well as influence a paradigm shift in the way in which breaking cycles of risk creation is approached in Nairobi and other secondary cities across Kenya.

9. What if something goes wrong?

If this study has affected you in any way or if you wish to make a complaint about the conduct of the study, you can contact the PhD supervisor below for further advice and information:

Prof. Mark Pelling

Professor of Risk and Disaster Reduction
Institute of Risk and Disaster Reduction
University College London

However, should you feel that your complaint has not been handled to your satisfaction, please contact the Chair of the UCL Research Ethics Committee.

10. Will my taking part in this project be kept confidential?

The interview is strictly confidential and any information you provide will be held securely. All data for analysis will be anonymized. In reporting on the research findings, we will not reveal the names of any participants or any other identifying information. You will not be linked to the data as an individual. Interviews will be treated as confidential, and we will not reveal your institution or role unless you give express permission.

11. Limits to confidentiality

Confidentiality will be respected subject to legal constraints and professional guidelines.

12. What will happen to the results of the research project?

The data collected will be analysed for the purposes of this PhD study and presented within this PhD thesis as well as published in articles. The results are likely to be published in December 2023. You may be able to obtain a copy of the thesis from the UCL library. Please note that you will not be identified in any report or publication.

The anonymised data will be stored in a safe, password protected data bank at UCL and will not be shared with anyone. These might be used for additional or subsequent research. All data will be securely deleted a year after submission of the thesis, based on UCL data retention schedule. I intend to submit my thesis in December 2023.

13. Local Data Protection Privacy Notice

Your data will be processed in accordance with the General Data Protection legislation (GDPR and DPA 2018). All information gathered within the interviews will be held on password-locked safe within University College London. No raw data will be accessed by anyone other than the interviewers; and anonymity of the material will be protected by using coded names. No data will be able to be linked back to any individual taking part in the interview.

Notice:

The controller for this project will be University College London (UCL). The UCL Data Protection Officer provides oversight of UCL activities involving the processing of personal data and can be contacted at data-protection@ucl.ac.uk This 'local' privacy notice sets out the information that applies to this particular study. Further information on how UCL uses participant information can be found in our 'general' privacy notice:

For participants in research studies, follow the link: UCL General Research Participant Privacy Notice | Legal Services - UCL – University College London

The information that is required to be provided to participants under data protection legislation (GDPR and DPA 2018) is provided across both the 'local' and 'general' privacy notices.

The categories of personal data used will be Name and signature.
The lawful basis that will be used to process your personal data is: 'Public task'.

Your personal data will be processed so long as it is required for the research project. If we are able to anonymise or pseudonymise the personal data you provide we will undertake this and will endeavour to minimise the processing of personal data wherever possible.

If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact UCL in the first instance at data-protection@ucl.ac.uk

Thank you for reading this information sheet and for considering to take part in this research study.

Appendix 6: Consent Form

CONSENT FORM FOR ADULT RESPONDENTS IN RESEARCH STUDIES

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Title of Study: Understanding how relationships between institutions and actors in urban development contribute to risks in urban poor settlements

Department: Institute of Risk and Disaster Reduction

Name and Contact Details of the Researcher(s): Mark Ojal

Name and Contact Details of the Principal Researcher: Prof. Mark Pelling

Name and Contact Details of the UCL Data Protection Officer:

This study has been approved by the UCL Research Ethics Committee: Project ID number: 24187/001

Thank you for considering taking part in this research. The person organising the research must explain the project to you before you agree to take part. If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

I confirm that I understand that by ticking/initialling each box below I am consenting to this element of the study. I understand that it will be assumed that unticked/initialled boxes means that I DO NOT consent to that part of the study. I understand that by not giving consent for any one element that I may be deemed ineligible for the study.

1.	*I confirm that I have read and understood the Information Sheet for the above study. I have had an opportunity to consider the information and what will be expected of me. I have also had the opportunity to ask questions which have been answered to my satisfaction, and would like to take part in an individual interview	
2	*I understand that I will be able to withdraw my data up to a month after the interview	
3	*I consent to participate in the study. I understand that my personal information will be used for the purposes explained to me. I understand that according to data protection legislation, 'public task' will be the lawful basis for processing.	
4	**Use of the information for this project only** *I understand that all personal information will remain confidential and that all efforts will be made to ensure I cannot be identified.	

	*I understand that all information will remain anonymous, secure and confidential and that all efforts will be made to ensure I cannot be identified in any publications	
5	*I understand that my information may be subject to review by responsible individuals from the research team for monitoring and audit purposes.	
6	*I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason. I understand that if I decide to withdraw, any information I have provided up to that point will be deleted unless I agree otherwise.	
7	I understand that no promise or guarantee of benefits have been made to encourage me to participate in this study.	
8	I understand that the data will not be made available to any commercial organisations but is solely the responsibility of the researcher undertaking this study.	
9	I understand that the information I have submitted will be published as a report.	
10	I consent to my interview being audio recorded and understand that the recordings will be destroyed 3 months after transcription. **To note**: If you do not want your participation recorded you can still take part in the study.	
11	I am aware of who I should contact if I wish to lodge a complaint.	
12	I hereby confirm that I understand the inclusion criteria as detailed in the Information Sheet and explained to me by the researcher.	
13	I hereby confirm that: (a) I understand the exclusion criteria as detailed in the Information Sheet and explained to me by the researcher.	

If you would like your contact details to be retained so that you can be contacted in the future by UCL researchers who would like to invite you to participate in follow up studies to this project, or in future studies of a similar nature, please tick the appropriate box below.

	Yes, I would be happy to be contacted in this way	
	No, I would not like to be contacted	

_____	_____	_____
Name of participant	Date	Signature
_____	_____	_____
Researcher	Date	Signature

Appendix 7: Description of Respondents

#	Respondent ID	Gender	Description
1	RP1	F	A senior policy actor at a multi-lateral development agency
2	RP2	M	An experienced city-level public sector actor who was previously in a senior policy position in the county government but is now in the consultancy industry
3	RP3	M	A Climate Change specialist providing technical support to NCCG
4	RP4	M	An accomplished architect in private practice and a consultant involved in Nairobi's property development space
5	RP5	M	A Mid-level, public-sector policy actor at the Department of Slum Upgrading at the national level
6	RP6	M	A Climate Change specialist previously provided technical support to NCCG and was in civil society at the time of the interview.
7	RP7	F	A senior urban development specialist in the consultancy industry and providing technical support to the government
8	RP8	F	A policy actor in international development practice working on DRR
9	RP9	M	A senior policy maker in an international development agency working on urban development
10	RP10	M	An accomplished architect in private practice, a consultant and an active advocate for sustainable urban development in Nairobi
11	RP11	F	The respondent is an urban specialist in an INGO in Nairobi working at the intersectionality of urbanism and climate change
12	RP12	F	An accomplished Urban Planner, Consultant and activist who has supported the government in developing various visions, including Vision 2030, now working with an NGO
13	RP13	M	A mid-level policy maker in an international development agency working on urban upgrading
14	RP14	M	An accomplished architect and urban designer in the consultancy industry and actively involved in shaping the cityscape
15	RP15	M	A senior policy actor at the State Department of Physical Planning
16	RP16	F	A DRM expert working in international development at the intersectionality of urban development policy and DRM.
17	RP19	M	Experienced civil society activist involved in KISIP in various capacities right from conceptualisation of the project
18	RP20	M	Mid-level, public-sector policy actor at the city level

19	RP21a	M	Experienced civil society activist who has participated in informal settlements upgrading projects in Kenya for over 20 years
20	RP21b	M	Experienced civil society activist involved in KISIP in various capacities right from conceptualisation of the project
21	RP22	F	Senior national level, public sector policy actor involved in decision-making and implementation of KISIP across the country
22	RP23	F	Senior national level, public sector policy actor involved in decision-making and implementation of KISIP across the country
23	RP24	F	A KISIP consultant who was initially an activist
24	RP25	F	A sociologist who worked in civil society as an activist and is now part of consultants working for KISIP.
25	RP26	M	National-level policy actor who's had multiple roles in KISIP including a program designer, consultant, implementer, and evaluator
26	RP27a	M	Senior-level, public-sector policy actor at the city level
27	RP27b	F	Senior-level, public-sector policy actor at the city level
28	RP28	M	Mid-level, public-sector policy actor at the city level
29	RP29	M	Senior-level, public-sector policy actor at the city level
30	RP30	M	A community mobiliser and a human rights activist active in advocacy, sensitizing people regarding basic services from the public sector. His role in the SPA process was to raise awareness
31	RP31	F	A resident trained by Muungano and a participant in different consortia.
32	RP32	F	A community mobiliser engaged in the SPA right from when the three settlements were declared a Special Planning Area.
33	RP33	M	A Community mobiliser and a resident of Mukuru Kwa Rouben,
34	RP34	F	A community mobiliser and a resident of Kwa Njenga. Started engaging in Mukuru activities before the area was declared an SPA
35	RP35	F	A community member with proximity to the MCA but was not involved in Mukuru SPA activities
36	RP36	M	A resident of Viwandani who became involved in Mukuru SPA at the point of declaration of the settlement as SPA.
37	RP37	F	A resident who started engaging in settlement activities before the area was declared an SPA.
38	RP38	M	A community mobiliser who joined Mukuru process before the declaration of the settlement as SPA
39	RP39	F	A resident who had not participated in the SPA planning process but is involved in the follow-ups through the Mukuru manifesto

40	RP40	F	An urban planner who was involved in the Mukuru SPA planning process through the University of Nairobi
41	RP41	M	An urban planner involved in the Mukuru SPA from a research standpoint documenting the Mukuru process
42	RP42	F	A senior urban development policy actor in international development and has provided support to NCCG and GoK on urban planning
43	RP43	M	A retired senior urban planner at NCCG involved in Forward Planning
44	RP44	M	A retired urban planner at NCCG who headed City Planning

Appendix 8: Tomorrow's Cities Affiliation Letter

AFRICA RESEARCH & IMPACT NETWORK
Transforming Research in Africa
P.O Box 53358-00200, Nairobi, Kenya
Website: www.arin-africa.org
Email: info@arin-africa.org
Tel: +254746130873

31st January 2023

TO WHOM IT MAY CONCERN

Re: Visiting PhD Student

This is to confirm that **Mr. Mark-Faith Kuyo Ojal** is a visiting PhD student and will be based at the Africa Research and Impact Network (ARIN) as part of the Tomorrow's Cities research programme, under the agreement signed between ARIN and the University of Edinburgh. He will be at the Centre from **6/2/2023 to 30/9/2023.**

ARIN is one of the leading international policy research organizations in Africa based in Nairobi, Kenya, working on inter alia issues related to science, development, technological change, and environmental management. ARIN was established to pursue policy-oriented research aimed at enhancing the capacity of African countries and institutions to harness knowledge, science, and technology for sustainable development through high quality research, policy analysis and dialogue and capacity building and outreach. In this regard it is a non-partisan, non-profit, international development policy think tank.

Mark's PhD empirical research is in Nairobi and aims to understand how relationships between institutions and actors involved in urban development contribute to urban risks in urban poor settlements. It seeks to achieve this by unpacking the processes of urban change, especially the ways in which urban development decision-making is negotiated, how institutions change, interact with organisations, agency and other institutions. He will be supervised by Dr Joanes Atela, the Tomorrow's Cities lead for Nairobi.

ARIN will provide him with office space and other necessities to facilitate his research. For more information on this please contact Victoria Chengo, the Tomorrow's Cities Nairobi project manager at ARIN on

Any assistance accorded to Mr. Ojal will be highly appreciated.

Yours Sincerely,

Dr. Joanes Atela (PhD)
Executive Director