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Integrated Flood Risk Governance in Countries of Global South and North. A comparative study of Lagos and North Rhine-Westphalia

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Global Flood Risk Update



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- Flooding is one of the most common and severe hazards disrupting people's lives and livelihoods around the world
- 1.47 billion people globally are directly exposed to the risk of intense flooding— over a third of them, almost 600 million, are poor.
- In 2020, approximately 34.2 million people worldwide were impacted by flooding, including being injured or losing their homes
- Floods in the eastern KwaZulu-Natal province of South Africa killed 489 people, destroyed 4,000 houses and displaced about 40,000 residents in April this year

Integrated Flood Risk Governance in Countries of Global South and North



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- Increasing flood risk has heightened scholarly inquiry to the development of flood risk governance
- Flood risk governance is an inclusive approach that involves multi-level, collaborative and diversified of resources and discourses
- Good governance in flood risk management provides understanding of the mechanisms through which policies, actors, levels, and sectors can be integrated
- The study assessed the nature of integration that exists between different policy instruments, actors, institutions and sectors in the implementation of flood risk management in countries of global south and north



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Case Study (Lagos and North Rhine Westphalia)

- Lagos is a coastal city situated in the Southwest geo-political zone of Nigeria
- About 26 million population and hub of commercial activities in Nigeria
- Around 70 percent of Lagosians live in poor, often illegal, settlements, such as the renowned slum of Makoko, in or near low-lying areas.
- Maplecroft's Climate Change Vulnerability Index (CCVI) identified Lagos as one of the ten cities with "high risk" from climate change globally
- One of the most significant impacts/effects of climate change in Lagos is flood

Case Study Cont'd



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North Rhine Westphalia

The German federal state North Rhine-Westphalia is situated in the western part of the country bordering the Netherlands

River floods are re-occurring, with smaller floods being seasonal and quite common

NRW has experienced several large-scale flood events, for example, 1993, 1995 and 2021

Research Questions



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- What does the flood risk management process look like in Nigeria and Germany, and how are they compared to each other?
- Who are the actors in flood risk governance? What determines their interests, how are these interests articulated, negotiated and/or recognized?
- What are the policy instruments for flood risk governance?
- How integrated are these policy instruments and institutions involved in flood risk governance in the case studies?

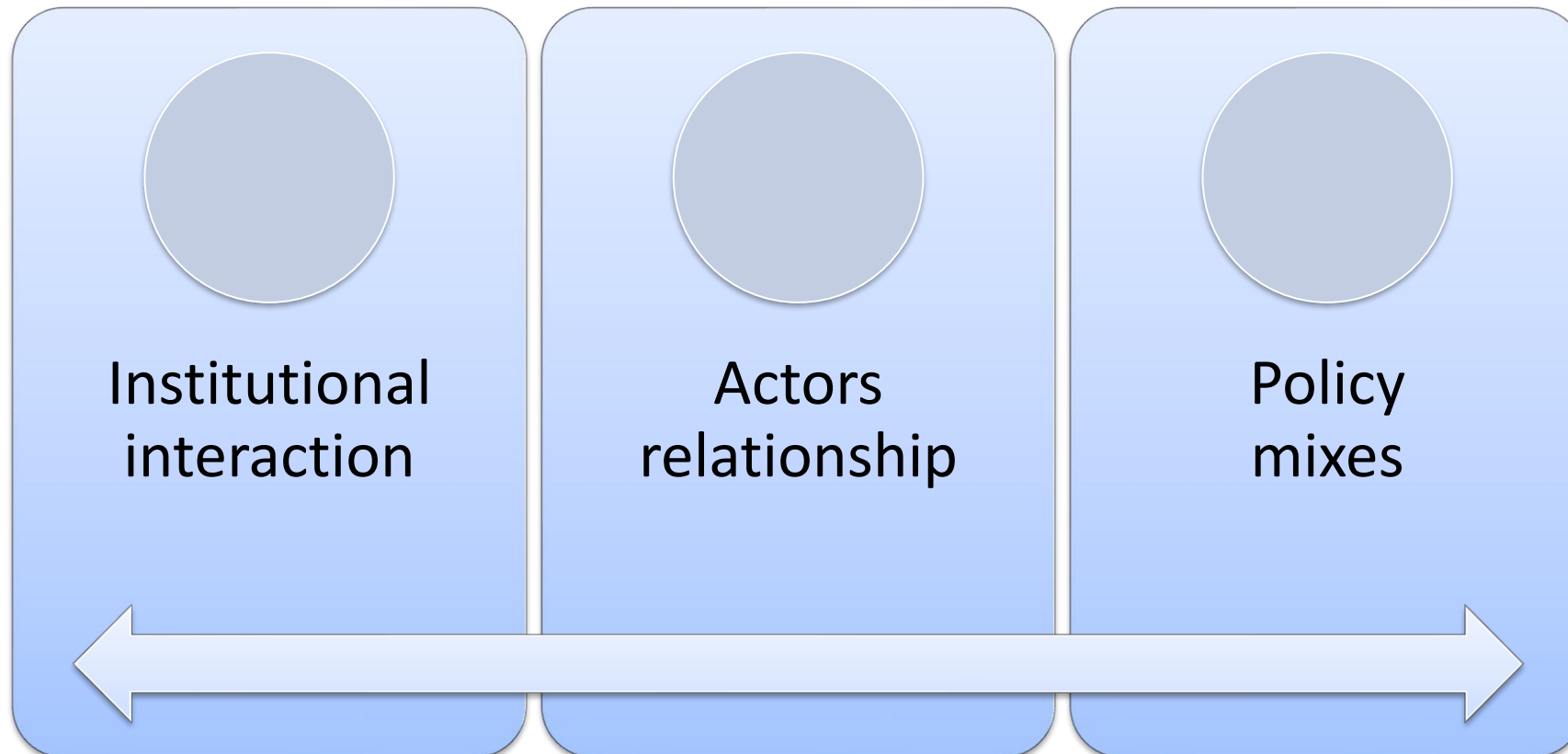
Conceptual Framework



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This framework explores and extracts useful insights from the concept of integrative environmental governance and nexus governance



Conceptual Framework Cont'd



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Concept	Indicators
Institutional interaction	Effectiveness of conflict resolution mechanism
	Effectiveness of accountability provision
	Extent of centralization tendency within the laws
	Institutional flexibility (revised and updated)
	Provision for cross-city/border cooperation if basins exceed city borders
	Legal scope for private sector participation
	Impact of private sector promotion policy
	Availability of joint or overarching plans
Actors relationship	Public-private partnerships
	Flexibility in roles and responsibilities
	Intensity of communication
	Involvement of marginalized voices
	Social differentiation amongst participants
	Availability of funding mechanisms

Conceptual Framework Cont'd

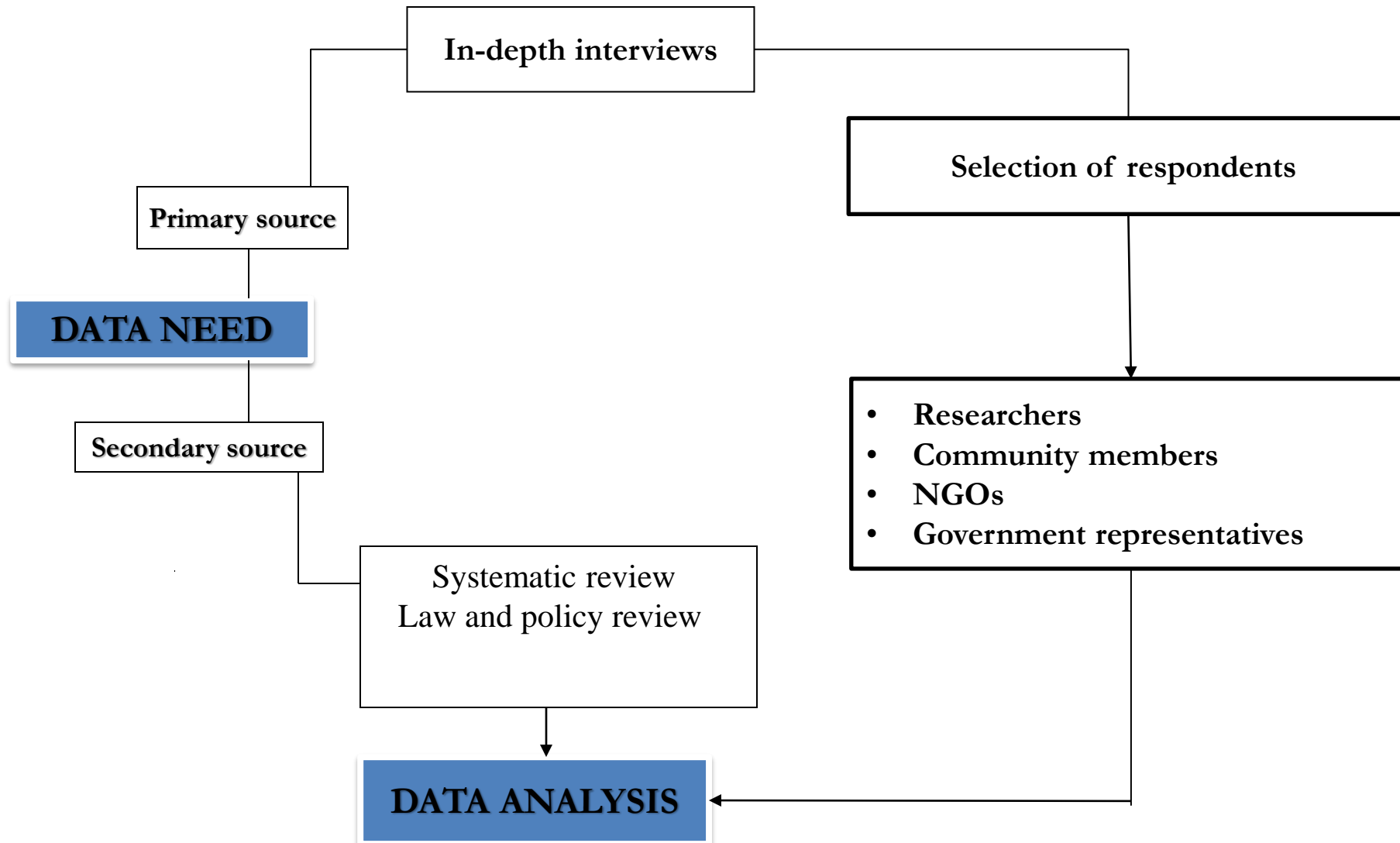


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Concept	Indicators
Policy mixes	Alignment of policy strategies
	Alignment of instruments
	Characteristics (Consistency and coherence)

Methods



Flood risk management process in NRW

- FRM in NRW are governed by National and European Union laws and policies
- Four major institutions are relevant to institutions for the flood management in North Rhine Westphalia: National Water Act (NWA) of 2009; Federal Nature Conservation Act (NCA) of 2009, Rhine 2020 and Rhine 2040
- Every independent city in NRW implements its own flood protection measures and produce flood hazard and flood risk maps

Key findings



Concept	Indicators	Degree of integration
Institutional interaction	Effectiveness of conflict resolution mechanism	(+/-)
	Effectiveness of accountability provision	(+)
	Extent of centralization tendency within the laws	(+)
	Institutional flexibility (revised and updated)	(+/-)
	Provision for cross-city/border cooperation if basins exceed city borders	(+)
	Legal scope for private sector participation	(+/-)
	Impact of private sector promotion policy	(+)

Key findings



Concept	Indicators	Degree of integration
Actors relationship	Public-private partnerships	(+/_)
	Flexibility in roles and responsibilities	(-)
	Intensity of communication	(+/-)
	Involvement of marginalized voices	(-)
	Social differentiation amongst participants	(-)
	Availability of funding mechanisms	(+)
Policy mixes	Alignment of policy strategies	(+)
	Alignment of instruments	(+)
	Characteristics (Consistency and coherence)	(+)

Key Findings



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Flood risk management in Lagos

- FRM in Lagos is coordinated at the state level by Ministry of Environment and Water Resources and other ministries
- Flood management is divided into structural and non-structural measures such as dredging and maintenance of rivers and implementation of policies
- Flood management in Lagos are governed by laws and policies implemented at the state level

Key findings



Concept	Indicators	Degree of integration
Institutional interaction	Effectiveness of conflict resolution mechanism	(-)
	Effectiveness of accountability provision	(+)
	Extent of centralization tendency within the laws	(+)
	Institutional flexibility (revised and updated)	(-)
	Provision for cross-city/border cooperation if basins exceed city borders	(+)
	Legal scope for private sector participation	(+/-)
	Impact of private sector promotion policy	(+)

Key findings



Concept	Indicators	Degree of integration
Actors relationship	Public-private partnerships	(-)
	Flexibility in roles and responsibilities	(-)
	Intensity of communication	(+/-)
	Involvement of marginalized voices	(-)
	Social differentiation amongst participants	(-)
	Availability of funding mechanisms	(-)
Policy mixes	Alignment of policy strategies	(+)
	Alignment of instruments	(+)
	Characteristics (Consistency and coherence)	(+)

Key Lessons



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- Strong and linking relationship between different flood risk management (FRM) laws and policies in the case study
- Weak bridging and linking relationships exist among various actors in flood risk management due to lack of communication, funding, flexibility and inclusiveness
- Inclusiveness, trust with stakeholders are key in strengthening collaborative mechanism.