

Title of the project:

Integration of Urban Resilience Decision Support Framework into INACCT Resilience

Name of lead organisation:

ICLEI Africa

In collaboration with UKZN

## 1. Background: – 250 words

The design for resilience in African cities requires proactive participatory planning and an evidence-based approach through the co-production of knowledge with the most affected communities. This proposed work builds on the Designing Inclusive African Coastal Cities' Resilience (INACCT Resilience) project, leveraging recent cases in South Africa and Mozambique to contribute to the evolving body of knowledge informing proactive resilience municipal planning. The focus will be on understanding inclusive and equitable disaster risk, resilience, and response in the context of informal settlements in Durban/eThekweni, South Africa, and Beira, Mozambique, with an aim to capacitate inclusive and scalable climate-resilient coastal municipal planning. The research will specifically integrate the Urban Resilience Decision Support Framework and enhance gender, equality, and social inclusion (GESI) considerations throughout each stage. The intended beneficiaries of this research include city dwellers, particularly those in informal settlements, with a specific emphasis on the inclusion of women and equality, as well as municipal stakeholders.

## 2. Domain of action: - 300 words

For women and all gender and marginalised groups to have a say in decision-making across all aspects of political, economic, social, and cultural domains, there is an urgent need to expedite the implementation of policies, establish institutional frameworks, and create opportunities for marginalised women. The proposed research cuts across several domains of action but the core lens is the Governance, planning and institutional capacity domain.

Communities are calling for mobilisation and community led action amongst themselves as they tackle the climate crisis (Hallowes and Munnik, 2019). This will require the development of effective social compacts and coalition building where inter-related issues of consensus and contestation are constantly interacting and shifting one another in building resilience. To shift consensus and contestation in the direction of greater ambition, inclusion and implementation requires advancements in the knowledge base and the processes run to generate and use the knowledge. The participation of social partners depends on their knowledge, capacities and interests, as well as process design and improving the access and infrastructure for participation. In further enhancing the framework, the research will consider how coalitions (and the necessary level of trust) can

be built from the ground up, from communities, and led by community members, with support from municipalities and other stakeholders. Governance, planning and institutional capacities are central to this. The research team has well established relationships with local communities and local governments in both Durban and Beira and play a key intermediary role in bringing these actors together and applying and testing the framework.

### 3. Preliminary context analysis: - 1000 words

In Durban (eThekweni Municipality), South Africa, communities residing in informal settlements are frequently exposed to environmental risks, stemming from deficient or limited municipal planning and service provision. Additionally, their vulnerability is exacerbated by their locations in flood-prone areas—resulting from historical resettlement during the apartheid era, segregated areas policies, or due to poverty, inequality, housing backlogs, and marginalization from more desirable regions. The eThekweni Municipal Area (EMA) accommodates 3.7 million people, encompassing an urban core, peri-urban areas, and a rural periphery. Durban grapples with elevated levels of poverty and inequality, with 26% of its population residing in informal settlements and an unemployment rate of 20.6% (Sutherland et al., 2018).

The municipality has faced numerous challenges over the past six years, including droughts in 2016/2017, floods in 2019, the COVID-19 pandemic (since 2020), social unrest in July 2021, and severe floods in 2022. While the municipality possesses a relatively robust understanding of how risks manifest at the ground level, it lacks comprehensive oversight at the city scale regarding potential risks and the interplay of risk drivers across different geographies and time frames.

Following floods and landslides in April 2019, a case study investigated the factors influencing the vulnerability and adaptation experiences of black African women in informal settlements in eThekweni. The research revealed that various forms of discrimination and limited access, based on gender, race, and poverty, intersect to shape and compound vulnerability and resilience to climate hazards. Notably, the study highlighted the adverse effects of gender-blind hazard responses, such as non-segregated refuge centers, which exposed women and girls to violence and assault. However, it also emphasized how women's inherent or imposed responsibility for their family's welfare prompted proactive adaptive strategies (Udo and Naidu, 2022).

During the latest floods, damaged health infrastructure disrupted women's access to sexual reproductive health services, exacerbating challenges related to HIV/STI testing, family planning, and pre- and antenatal care. Additionally, the floods increased the risk of harmful coping strategies for women and girls, including engaging in sex work and early or forced marriage (ukuthwala) (Chinyavanhu, 2022). The destruction of schools and community displacement further heightened concerns about lost learning and increased school dropouts, a trend already exacerbated by the recent COVID-19 pandemic.

Despite being more exposed and sensitive to climate hazards, residents of informal settlements demonstrate resilience and adaptability, developing innovative approaches in collaboration with various stakeholders to plan for and respond to natural hazards. Scholars like Sutherland (2020), Williams et al. (2019), and RADAR (2018) argue that

partnerships, collaboration, and co-production of knowledge and responses between the state and citizens can enhance municipal service delivery and strengthen state-citizen relations, fostering local adaptive responses to recurrent climate risks. Intermediaries, such as universities, non-profit organizations (NPOs), and non-governmental organizations (NGOs), play a crucial role in building new governance platforms and relationships to adapt to climate change and reduce risk (Sutherland et al., 2019).

The design for resilience in African cities requires proactive participatory planning and an evidence-based approach through the co-production of knowledge with the most affected communities. This proposed work builds on the Designing Inclusive African Coastal Cities' Resilience (INACCT Resilience) project, leveraging recent cases in South Africa and Mozambique to contribute to the evolving body of knowledge informing proactive resilience municipal planning. The focus will be on understanding inclusive and equitable disaster risk, resilience, and response in the context of informal settlements in Durban/eThekweni, South Africa, and Beira, Mozambique, with an aim to capacitate inclusive and scalable climate-resilient coastal municipal planning. The research will specifically integrate the Urban Resilience Decision Support Framework and enhance gender, equality, and social inclusion (GESI) considerations throughout each stage. The intended beneficiaries of this research include city dwellers, particularly those in informal settlements, with a specific emphasis on the inclusion of women and equality, as well as municipal stakeholders.

INACCTs current work on constructing a comprehensive baseline profile of the eThekweni Municipality will be expanded to encompass additional critical aspects, including key gender, social, economic, cultural, institutional, and hazard characteristics or metrics as necessary, aligned with Component 1 of the ARA framework: understanding the context.

### Understanding the governance context: working with formal and informal institutions (Component 1-3 and cross cutting)

Governance is critical to disaster risk reduction as it determines which institutions (formal and informal) and actors have the power, legitimacy and resources to exercise agency, and ultimately shape the outcomes of climate adaptation. The inclusion of both state and non-state actors, who through the process of governing, steer disaster risk reduction practices, drawing on the norms and principles, legislation, policy and established and innovative practices within society, is essential in developing equitable climate adaptation responses and disaster risk reduction strategies (Daly et al., 2017; Prakash et al., 2019). Governance of environmental risk in the global south is shifting from a top-down state centred approach that has been reactive and focused on disaster risk management, with limited involvement of citizens, to an approach which is more participatory, inclusive and proactive (Sutherland, 2020). This approach, which is transformative and participatory, draws on the knowledge and skills of multiple actors, including affected communities and academia, and focuses on risk reduction and equitable climate adaptation (Sutherland, 2020). Disaster risk reduction now focuses on structural relations and vulnerability using a political economy and political ecology lens, to understand the spatiality, social, economic, environmental and governance

factors shaping the outcomes of a risk event (Sutherland, 2020; Culwick, 2019; Ziervogel et al., 2017; Pharoah, 2016).

Although more exposed and sensitive to climate hazards, informal settlement residents are resilient and adaptive, developing innovative approaches in partnership with other actors to plan for and respond to natural hazards. Sutherland (2020); Williams et al., (2019) and RADAR (2018) argue that partnerships, collaboration and the co-production of knowledge and response between the state and citizens for climate adaptation can improve municipal service delivery and strengthen state-citizens relations and local adaptive responses to recurrent climate risks. The role of intermediaries, such as universities, NPOs and NGOs, is essential too, in building new governance platforms and relationships to adapt to climate change and reduce risk (Sutherland et al., 2019).

This research contributes to gaps in knowledge on the governance arrangements, actors and socio-technical-ecological interventions required to adapt to and reduce the impact of climate change in informal settlement settings which are complex, dynamic, and highly unequal, but which also offer opportunities for innovation, experimentation and transformation (Sutherland, 2020; Williams et al., 2019; Fraser et al., 2017). Van Niekerk (2015) argues that many African countries are leaders in community-based disaster risk reduction and climate adaptation at the local scale due to the presence of strong and committed civil society actors and the inclusion of ecosystem based adaptation approaches in their response strategies (Martel et al, 2022; Roberts et al., 2012).

#### 4. Data collection plan to inform full context analysis: - 500 words

Udo and Naidu (2022), Sutherland (2020) and Williams et al., (2018; 2019) emphasise how varying dimensions of vulnerability (i.e. where communities are situated, and social, racial and economic identities) should be taken into consideration when developing and implementing municipal planning. In order to shift paradigms from a focus on sector and infrastructural development and fortification, towards thematic (resilience) and population-oriented planning, a deeper understanding is required of the intersectional vulnerability of communities and how cities are best placed to respond to that sensitivity. This will ensure planning addresses both the vulnerability of the built environment (physical vulnerability) as well as social aspects.

Given their situatedness, dynamic urban governance, and recent focal experiences with climate change, Durban and Beira are living laboratories for climate change adaptation for African cities. By using these sites to understand the factors influencing the continuity, effectiveness, and sustainability of during- and post-event community and municipal responses and measures in coastal cities, this research can contribute towards the body of knowledge, resources and tools for supporting replicable and scalable, gender-responsive

resilience planning in African coastal cities through participatory, co-created learning and capacity strengthening processes.

#### 5. Co-production goals/strategy: - 300 words

The project team will collaborate extensively with the residents and leaders of Quarry Road Informal Settlement, empowering them to take the lead in co-creating the decision support framework application within the community. Additionally, efforts will be directed towards customizing the framework to address GESI issues more effectively. A comparable approach is envisioned for the smaller scale Beira work. It is important to note that the planned scaling to Beira will be a longer term process and budget dependent. However, participation of Beira lead researchers in the eThekweni component lays a strong foundation for this. For women to have a say in decision-making across all aspects of political, economic, social, and cultural domains, there is an urgent need to expedite the implementation of policies, establish institutional frameworks, and create opportunities for marginalised women. This goes beyond policy formulation. Additionally, it is crucial to actively engage men in activities related to gender equality. This engagement is essential to shift the mindset and attitudes of men who continue to hold onto traditional notions of male dominance. Particular attention will be paid to inclusivity at each stage of the framework implementation, relating to gender considerations and marginalised groups, with specific focus on power imbalances. Developing specific strategies to address these power imbalances is essential in establishing differentiated and truly inclusive processes that not only allow the participation of diverse knowledge and insights but demonstrably value them. This is a core consideration for extending the current framework and for testing out in the specific contexts of Durban and ultimately Beira, to a smaller extent.

Communities are calling for mobilisation and community led action amongst themselves as they tackle the climate crisis (Hallowes and Munnik, 2019). This will require the development of effective social compacts and coalition building where inter-related issues of consensus and contestation are constantly interacting and shifting one another in building resilience.

To shift consensus and contestation in the direction of greater ambition, inclusion and implementation requires advancements in the knowledge base and the processes run to generate and use the knowledge. The participation of social partners depends on their knowledge, capacities and interests, as well as process design and improving the access and infrastructure for participation. In further enhancing the framework, the research will consider how social compacts (and the necessary level of trust) can be built from the ground up, from communities, and led by community members, with support from municipalities and other stakeholders.

Overall, the co-production intervention seeks to influence:

- Behavioural change
- Brokering agreements
- Empowerment

Which could be a catalyst for longer term system reform.

## 6. Gender equality and social inclusion - GESI goal – 200 words

In strengthening the GESI component of the ARA Framework, each of the engagements outlined in the report will specifically address the gender dimensions of climate change impacts and resilience. Topics such as the differentiated impact on women, their roles and knowledge, and the need for gender-inclusive strategies will be considered. Furthermore, for each participatory engagement, equitable participation of women and men in the participatory process will be facilitated, ensuring that women and men are equally represented in the working groups, providing capacity-building and sensitization to gender considerations in resilience building and ensuring that the voices of women are heard and taken into account. Gender-sensitive facilitation is aimed at ensuring that people of all genders are able to participate meaningfully in learning and decision-making processes. Context specific considerations in terms of gender norms and disparities are key. Engagements will begin with discussions on the local context and climate-related challenges faced by the community. The need to recognise and value local knowledge will be strongly emphasised and community representatives will be encouraged to share their experiences and observations through storytelling and testimonials, including from women who have experienced climate-related challenges. This can help create empathy and understanding among participants. The importance of gender-disaggregated data related to climate change impacts and disaster risks in the local context (i.e. statistics through graphics and maps) will also be emphasised and discussed with the aim of supporting further collection and recording of such data.

## 7. Co-production modalities and methods: - 500 words

The research deploys all three co-production modalities, to varying degrees:

- Producing knowledge and evidence
- Establishing dialogue and collaboration platforms

- Experiential learning and pilot testing.
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Using transdisciplinary research methods, we need to learn better, collectively, about how to integrate technical and scientific responses to climate change with community-based adaptations and practices on the ground.

There are various approaches and methodologies that can be used in supporting community-based climate adaptation and risk reduction, which will be explored through this framework. Considerations is the use of community-led forecast early warning systems and their effectiveness in saving lives.

The research uses a transdisciplinary approach, emphasising co-learning and co-design of inclusive solutions from multi stakeholder processes, integrating multiple types of knowledge and evidence from a range of perspectives. Participatory methodologies are used, including innovative approaches such as photovoice, arts based methodologies (using playdough modelling as a form of expression of experiences), Learning Labs, and knowledge-sharing events. Additional methods in supporting context analysis and other aspects of the framework include desktop review, complemented by key stakeholder interviews and consultations that focus on inclusivity and gender-sensitivity.

**8. Impact monitoring - 400 words**

Stage	Description	Timeline <sup>1</sup>	Output
Ex ante context analysis (links to component 1)	This aligns seamlessly with our ongoing research endeavors, currently in progress, aimed at constructing a comprehensive baseline profile of the eThekweni Municipality. This initiative will be expanded to encompass additional critical aspects, including key social, economic, cultural, institutional, and hazard characteristics or metrics	Present to May 2024	Draft Context Analysis Report

<sup>1</sup> Please note that timelines are subject to change based on finalisation of plans and confirmation with IIED.

	as necessary.		
Community led context analysis with gender sensitive approach (links to all components)	Government Workshop (1-day session) for validating, improving, correcting, and enhancing the ex-ante context analysis, with a specific focus on institutional elements.	March- June/July2024 (workshop and LL1 hosted in same week)	Final Context Analysis Report
	The plan involves organizing four community-led focus groups to populate and ground-truth the framework within the local context. This process includes a community-led mapping exercise aimed at identifying and defining risks, as well as mapping responses, both in spatial and socio-ecological terms. Following these focus groups, a community planning meeting will be convened to document the outcomes. The objective is to generate a contextualized ARA (Adaptation, Resilience, and Assessment) Framework, which will then be presented and discussed at the government workshop. <i>This integrated approach ensures that the framework not only reflects the community's insights and experiences but also aligns effectively with local conditions and priorities.</i>		
	Conducting Learning Lab 1, a comprehensive 2-day workshop, will serve as a platform for validating, improving, correcting, and enhancing the ex-ante context analysis. This workshop will feature a meticulous examination of the 'co-creation processes,' with a particular focus on the Gender,		

	<p>Equality, and Social Inclusion (GESI) lens. The insights gained from this workshop, along with those from Learning Lab 2, will be integrated into the analysis phase for the development of the Risk and Resilience Report. These collaborative events contribute essential perspectives and experiences that enrich the overall understanding and formulation of the report.</p>		
<p>Risk and resilience analysis (component 3 and cross cutting)</p>	<p>Learning Lab 2, a dedicated 2-day workshop, will be instrumental in identifying the key risks confronted by the community. Additionally, the workshop aims to generate a comprehensive long list of potential options for enhancing resilience. Furthermore, it will focus on devising specific interventions aimed at mitigating the identified risks. This collaborative and in-depth session will contribute substantively to the overall understanding of the community's challenges and facilitate the development of targeted strategies to bolster resilience against various risks.</p>	<p>July-September 2024</p>	<p>Risk and Resilience Report 2024</p>
<p>Validation and uptake (intervention)</p>	<p>Analyse and validate outcomes</p>	<p>September 2024</p>	<p>Proposed recommendations for developing local urban resilience plans aligned with Gender, Equality, and Social Inclusion (GESI) considerations within the [community] and critical review of application of the ARA framework for supporting further</p>

			uptake.
	Workshop/Learning Lab in Beira involving diverse stakeholders to facilitate the expansion and implementation of the project in Beira.	October 2024	Report and facilitation of local uptake
	Leverage pathways for uptake of project outcomes	Late 2024-2025 (remainder of INACCT project)	<p>Integration into the outcomes and impact of the INACCT project involves several key components, including:</p> <ul style="list-style-type: none"> <li>• Research for Impact Plan: A strategic plan outlining how research outcomes will be utilized to achieve tangible and meaningful impacts in the targeted communities.</li> <li>• Risk and Resilience Profiles for eThekwini: Comprehensive profiles detailing the specific risks and resilience factors within the eThekwini Municipality, providing a foundation for informed decision-making and incorporation into existing and new resilience related policies and</li> </ul>

			<p>practice from community to municipal scales.</p> <ul style="list-style-type: none"><li>• Summary Report of Continuity, Effectiveness, and Sustainability: A consolidated report assessing the continuity, effectiveness, and sustainability of both during- and post-event community and municipal responses and measures that will be co-developed with community members and local municipal officials for supporting uptake and mainstreaming.</li><li>• Policy Inputs (Briefs, Drafts, Recommendations, etc.): Contributions to policy development through the creation of briefs, drafts, and recommendations, influencing decision-making at the governmental level.</li></ul>
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			<ul style="list-style-type: none"><li>• Community Materials (Infographics, Awareness Raising, etc.): Development and dissemination of materials such as infographics and awareness campaigns aimed at informing and engaging the community.</li><li>• Gender-Responsive Coastal Cities Resilience Planning Framework: The establishment of a framework specifically tailored to address gender considerations in the planning and implementation of coastal cities' resilience strategies.</li></ul> <p>This comprehensive approach ensures a multifaceted and impactful integration of the project into the broader goals and objectives of the INACCT initiative.</p>
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## 8. Outputs – 300 words

Please see Table 1 which provides an overview of outputs for each stage of the research process.

## 9. Gantt Chart

Please provide a detail Gantt Chart of your activities and outputs as described in previous sections. Include dates for consortium meeting, activities, and outputs.

## 10. Risks to the implementation of the plan – 200 words

Risks for this proposed research centre around two core issues: limited timeframe for impact and uptake, and stakeholder buy-in/support for uptake. Uptake of project outcomes into policy and practice often has significant time lags and it is unlikely that the full extent of this will manifest during the project time period. However, the project will clearly demonstrate policy openings and lay the foundations for the pathways to uptake.

Regarding challenges or barriers to stakeholder buy in – this applies to all stakeholders from local communities to municipal organisations. However, the research team has very well-established relations and trust in both eThekweni and Durban for enabling and supporting uptake in the short and long term, through building on these important foundations.