

An Assessment of the Implementation of Policies and Strategies to Improve Resilience to Climate-Related Disasters in eThekwini Metropolitan Municipality

Presentation on Report Findings and Recommendations

2024/2025

# **Background / Context**

- In April and May 2022, various districts, including eThekwini in KwaZulu-Natal experienced extremely heavy rainfall, leading to flooding.
- The floods led to 448 deaths, displacement, and the destruction of infrastructure all of which cost the city about R75 million in lost revenue.
- Durban has experienced flooding every year since 2016, and it is likely that the excessive rainfall is climate-related due to human activities.
- Vulnerable communities were greatly impacted, especially those living in informal settlements and/or along flood plains.
- Research showed that chronic underinvestment, historical inequalities, structural and systemic issues and inadequate enforcement of city regulations and by-laws exacerbated the impacts of flooding.
- The PCC and other organisations have identified issues at LG.



### Methodology



- The aim was to undertake a review of recommendations made in reports for eThekwini to improve its adaptation and resilience measures and readiness to respond to climate-related disasters and assess if these recommendations have been or are in the process of being implemented.
- Literature showed that the study would have to be extended beyond the recommendations to include strategies in place in the city and whether these strategies were being implemented.
- Interviews were conducted with 12 respondents, including climate change and disaster management representatives within the city.
- Additional interviews with CSOs, academia and national government.
- The findings were sent to all respondents, Mayor's office, KZNCoGTA,
   KZNDHS, NCoGTA and NDHS and additional stakeholders.



### PRESIDENTIAL CLIMATE COMMISSION

# Findings: Policy & Implementation

- No specific gaps in policy but severe lack of adherence and enforcement of policies, by-laws, land-use and spatial plans and environmental and geological conditions – noted across all departments.
- Lack of enforcement of building regulations, including changes and expansion to formal and informal structures.
- There is currently an adherence rate of just over 76% with DCCS provisions, but a lack of climate mainstreaming into all local departments.
- The DRRM plan is in implementation stage, the DM unit is engaging other units on the requirements of the plan.
- The DM plan is at level two, which is concerning, given the extent of time since the promulgation of the Disaster Management Act, the size of the eThekwini Municipality and the frequency of flooding and other climate-related events that impact the city.



### PRES

# Findings: Socioeconomic & Housing Context

- eThekwini battles with socioeconomic challenges inequality, unemployment.
- Housing and apartheid spatial planning still exists with a large number of informal settlements (over one-third of residents in the city).
- There has been little or no progress in informal settlement upgrading and there is a substantial housing backlog.
- Relocation efforts are unsustainable if not done with engagement with communities and if the relocation site is some distance from the city and economic opportunities residents return to original informal settlement.
- Informal settlements complicate planning, heightens impacts of disasters and stymies disaster recovery.
- This is exacerbated by the lack of basic services in settlements
- The disaster management department also conducts zonal risk assessments but there may be a gap in the dissemination of information to communities.
- There is a no comprehensive monitoring and evaluation system.



### PRESIDENTIAL CLIMATE COMMISSION

### Findings: Disaster Response and Recovery

- Mandate: risk reduction, preparedness, response and recovery, which is impacted by systemic issues.
- It runs the JOC coordination before, during and after disasters, the deployment of resources and post-disaster recovery and relocation of communities affected by disasters, after which several governments departments assist.
- In the short term, the disaster management department is immediately responsible for the provision of basic services (relocation sites chosen by DHS).
- Challenges identified by DM: lack of gender-sensitive relocation sites, "not in my backyard" syndrome, staff are overworked, slow response from other departments.
- Other stakeholders view the DM department as unresponsive, set in their ways, lacking in accountability, poor at alignment and coordination, defensive and untrustworthy.



# Findings: Constraints & Political Challenges



- City is severely hamstrung by a lack of financial resources and a lack of capacity.
- The national budget for DM has declined which impacts all spheres of government (APPs are not being adequately funded).
- Emergency DM funding often arrives too late and the city is forced to spend it in a short space of time.
- Bureaucracy hinders progress within the city, particularly within supply chain management, procurement, performance management and budget allocation.
- High staff turnover in the city.
- Agreements made at a technocratic level are not supported or implemented at a political level – clear disjoint between policy requirements and political ambitions.
   This is particularly clear in the environmental space.
- There is a clear lack of support from provincial government and in turn, national government.



### PRESIDENTIAL CLIMATE COMMISSION

### Findings: Adaptation & Resilience

- Significant investment in nature-based solutions in eThekwini.
- D'MOSS delivers significant ecosystem services at limited cost, especially for poor communities, but only about 7% is formally protected and managed.
- eThekwini also employs additional ecological adaptation resilience measures including the wetland rehabilitation programme, and alien vegetation removal.
- Smart infrastructure design: which may allow buildings or infrastructure to survive floods includes: attenuation measures, debris walls, gabion walls or protection, road reinforcement, drainage improvements, canal widening & redesigned bridges.
- Engineers emphasised the need for a combination of engineering and ecological solutions.
- Need for geotechnical assessments to identify underlying issues and implement appropriate solutions.



# **Findings: Early Warning Systems**



- Informal settlements and unplanned development pose a significant challenge to the work of both the climate change and disaster management.
- Quarry Road West informal settlement system is linked to the city's forecast early warning system (CBFEWS).
- The city worked closely with the community to develop a system of linkages with key community members that alert the community to flood warnings.
- Zero fatalities from drowning during the April 2022 floods.
- Plans to extend and replicate this system are underway (requires resources and common messaging).
- Work underway for early warning systems for dam flooding (Shongweni Dam).



### **Recommendations (1)**



- National and provincial government has a role to play in addressing many systemic
  issues in local government.
- Local government must consider the economic costs of not conserving, employing nature-based solutions or adhering to regulations and by-laws.
- Incorporating climate projections into infrastructure design and urban policy is critical, but a combination is needed.
- Future reforms must address entrenched inequalities in the city and ensure that vulnerable communities are not sidelined.
- Coordination across governance levels and international partnerships can unlock benefits.
- The city must begin planning for a reimagined future.



# Recommendations (2)



- This requires quicker and more effective action on informal settlement upgrading and relocations.
- Improved and sustained engagement with key stakeholders and communities is desperately needed.
- A strong M&E system is required within the city to improve transparency, accountability and learning.
- Monitoring of KZN COGTA's report on a situational analysis, gaps and interventions is required.
- There may be a need to build good relations with media houses to improve communication during disaster response and recovery phase.
- Lessons learned in eThekwini can potentially be used in other similar cities.



# Thank you!

# A KwaZulu-Natal Tragedy

11 - 13 April 2022, KwaZulu-Natal was hit by heavy rainfall which initiated severe flooding and mudslides causing the death of 448 people, displacing more than 40 000 people and destroying more than 12 000 homes. Critical infrastructure was severely damaged including health centres, schools and roads and Umdloti faced unprecedented devastation. In our village, 43 homes, roads, water, electricity and sewer resources were swept away because of the floods - on 18 April, the President of South Africa declared a National State of Disaster

This beautiful whale seat lookout has been constructed in remembrance of this tragedy

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