

RESILIENCE BUILDING INITIATIVES IN DURBAN

Durban faces multiple climate hazards including floods, droughts and temperature increase. Resilience building actions with wide-ranging benefits are crucial to human and environmental wellbeing, such as:

INACCT Resilience

CITY
INFOGRAPHIC
SERIES

Strengthening participatory governance through building partnerships between diverse actor groups.



Building a 'social compact' to connect multiple actors (e.g. state, citizens, research institutions, NGOs, private sector) with climate change knowledge and risks.



Investing in ecological infrastructure through catchment rehabilitation programmes.



Enhancing climate resilient urban planning and design.



Strengthening community-based early warning systems for floods and other climate hazards.



Investing in green and grey infrastructure maintenance.



Investing in collaborative data collection and climate hazard monitoring.



Examples of community-led climate resilience initiatives

In informal settlements, residents innovate with available materials to reduce flooding impacts:

- Sandbags and tyres stabilise steep slopes, reduce soil erosion and slow down the flow of water.
- Carpets and mats cover exposed soil, slowing down water and reducing soil erosion during floods.
- Trees, plants and grasses stabilise soil and protect homes from strong winds and rain
- Piped networks in pathways divert surface water away from homes.
- 'Household structures are built on platforms above ground level to reduce stormwater flowing into houses.



Community engagement supports dialogue on localised climate adaptations.

Examples of Municipal-led climate resilience initiatives

Promoting ecosystem-based adaptation

Durban protects its natural assets (e.g., rivers, forests, wetlands and mangroves) that provide essential services like flood mitigation. The 'Sihlanzimvelo Programme' (part of the Transformative Riverine Management Programme) employs community co-operatives to clear litter and invasive plants from streams. *Enviro-Champs* monitor rivers, report infrastructure and waste dumping issues, and conduct environmental education.

Flood resilient infrastructure

Durban is developing non-sewered, circular economy sanitation solutions to withstand flooding.

COMMUNITIES HAVE A WEALTH OF KNOWLEDGE

"We use sand bags to hold the sand movement during rains, we also use tyres and we put sand inside the tyre to make it stronger and prevent soil erosion. If it rains the water finds the way through sand bags but does not flow fast."

Mphathwenhlwe Xulu
Pholani Informal Settlement



UK International Development

IDRC-CRDI

Caracal

