R-Cities
Frontline Speaker Series No.15
“Climate Resilient Urban Sanitation”
Lusaka Case Study
9th September 2021
LUSAKA, ZAMBIA: The Background

- Population, 2018 - 2.69 million
- Population in LIC - 70%
- Peri-urban areas - informal
- Sewer Network - 10-14% (420km)
- Unsafe Sanitation – 83%
- Mandate lies with LWSC
Lusaka’s Hydrogeology
Climate Resilient Urban Sanitation: Lusaka City Action and Adaptation
**Climate Modelling**

- **Historic Trends:** Extreme Temp & Precipitation
- **Future Trends:** Increased Temp & Reduction in Precipitation with more intensity/ extreme floods??

![Graph showing climate trends](image-url)
CLIMATE STRESSES & IMPACTS

- Reduced flows -> blockages
- Excess WWF -> pipe bursts

No water to flush my toilet

Excess WWF
- Reduced treatment
- Environmental pollution
CLIMATE STRESSES & IMPACTS

My Latrine of Full Again 😞

Collapse/overflow => env. contamination

The sanitation chain.
ACTION & ADAPTATION

• Dev. of Climate Change/ Variability Adaptation Plans
  1. Climate Change/ variability projections
  2. Hydrological modelling
  3. Building adaptive capacity and resilient for sanitation systems

• Design of Sanitation infrastructure adapted to climate stresses
  1. 5,500 improved/ climate resilient HH toilets constructed in three LICs
  2. Climate resilient Sewer network rehabilitation and expansion
  3. Construction of 2 new climate resilient STPs

• Delineation of Groundwater Protection Zones for Well fields
  1. Comprehensive hydrogeological explorations (new & old well fields)
  2. Improve quality and quantity of water supply in Lusaka city
Lusaka Sanitation Program

‘Building healthy families together’
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THANK YOU