Possible futures for Urban East Africa under a changing climate

The impacts of climate change will vary across the region according to a range of local factors. Which of these impacts could be felt in your community in these three different climates?

**Possible Futures**

- **FUTURE 1** Much wetter, large increase in heavy rainfall and hotter
- **FUTURE 2** Increase in extreme rainfall and hotter
- **FUTURE 3** Much hotter and drier with more erratic rainy seasons

**Intensity of Impact**

- Low
- Medium
- High

- **Unpaved roads become impassable**
- **High turbidity in water courses increases cost of water treatment and maintenance of drainage**
- **Increase in frequency, duration, extent and depth of flood events. Greater waterlogging of ground.**
- **More flash floods**
- **Critical drainage culverts, bridges, roads and other transport links damaged or destroyed**
- **Increase in damage to property and loss of life (drowning)**
- **Some urban areas become untenable. Particularly those close to/in wetlands, flood plains and other water bodies**
- **Increase in exposure to water- and excreta-related diseases**
- **Increase in respiratory diseases, allergies and dust nuisance**
- **Increase in frequency and duration of interruptions to business and educational activities and damage to assets**
- **Drainage systems overwhelmed and harder to maintain**
- **Warmer climate sees improvements in wastewater and faecal sludge treatment efficiencies**
- **Increase in disruptions to water and sanitation services caused by power failures**
- **Potential to use alternative power sources (solar) for urban services**
- **Water harvesting and other mitigations become harder to manage**
- **Higher costs to produce water supply coupled with increased demand**
- **Increase in exposure to water- and excreta-related diseases**
- **Decline in hygiene conditions due to reduced/ more expensive water supplies**
- **Some infrastructure needs to be abandoned**
- **Increased land available for housing developments**
- **Water-based sanitation systems become increasingly dysfunctional**
- **Decline in vegetation and shade cover, increased temperatures and heat stress**
- **Better market for products of sanitation (water, nutrients, fuel)**
- **Warmer climate sees improvements in wastewater and faecal sludge treatment efficiencies**
- **Increased land available for housing developments**

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