

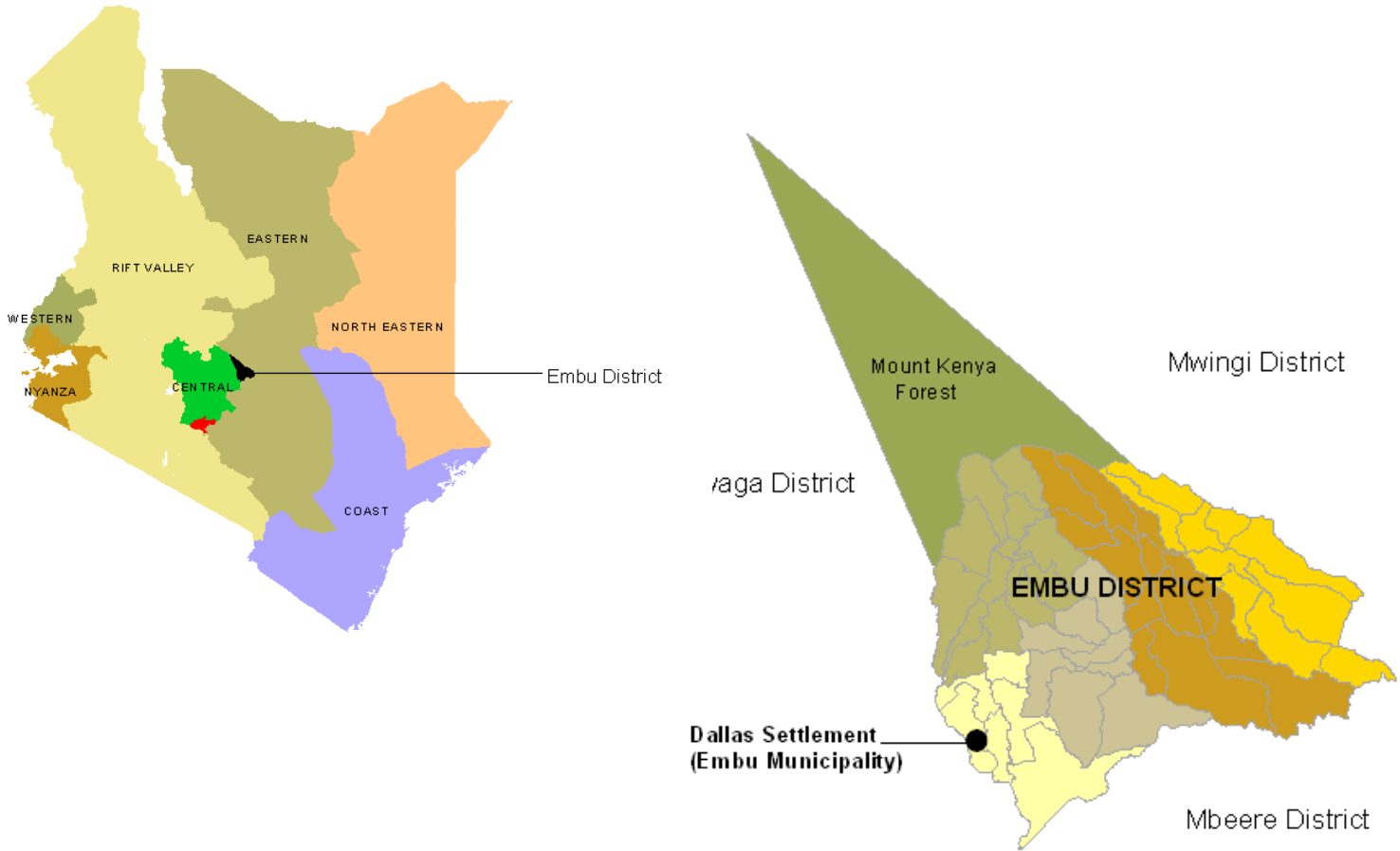
# *Mitigating the Effects of Climate Change at Local Levels*

*The Dallas Integrated Basic Urban Services Project (DI-BUS),  
Embu Municipal Council, Kenya*



*Umande Trust and the Dallas Community Organization*  
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# Mitigating Effects of Climate Change at Local Level



Project Area (National and Local Context)

## Mitigating Effects of Climate Change at Local Level

- Develop strategies to address basic urban services and environmental challenges with community;
- Form and strengthen self help groups, and develop community-managed savings & micro credit structures;
- Work with the community to identify challenges, assess and select alternative solutions to basic urban services and climate change
- Release the capacity of youth and women groups in appropriate building technologies
- Document the experiences and lessons learnt to capture good practices in urban basic services and climate change

## Mitigating Effects of Climate Change at Local Level

- The Municipal Council of Embu
- The Dallas Community Organization
- The Dallas Women and Youth Initiative.
- The Universities of Nairobi and Kenyatta,
- Central Government (esp. the Ministries of Gender, Sports, Culture and Social Services, Housing and Provincial Administration)
- Equity Bank
- Embu Water and Sanitation Company (EWASCO),
- Kenya Agricultural Research Institute (KARI),
- National Environment Management Authority (NEMA),
- Water Resources Management Authority (WARMA)
- Umande Trust

# Mitigating Effects of Climate Change at Local Level

DI-BUS - great potential to instigate innovative solutions to mitigate the impacts of climate change

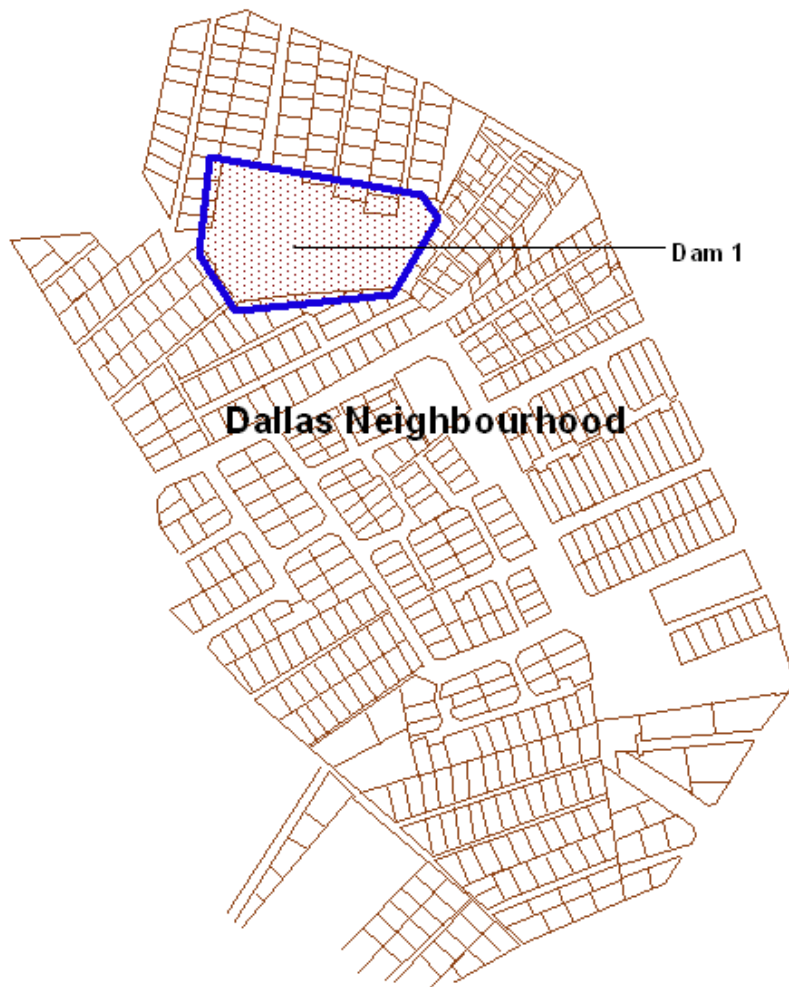
How do we ensure urban communities sustain initiatives to address urban services and climate change?

## [To-date] Promising Patterns:

- Coalition of community-based groups (youth, women & men)
- Promoting local democracy and good governance
- Daily savings and access to micro-credit
- Active partnership with Embu Municipal Council and political leaders
- Developing monitoring systems with community groups and municipal teams



# Mitigating Effects of Climate Change at Local Level



## Settlement Profile (Dallas )

**Population:** Catchment area population 10,000, Dallas settlement approx. 2000 persons (Average 12 persons per plot)

**Access to Water:** 60% have access to tap water within plot, while the rest rely on other sources including the nearby Dallas Dam

**Human waste disposal:** 70% use pit latrines, 27% use septic tanks. 9% of toilets built with permanent materials

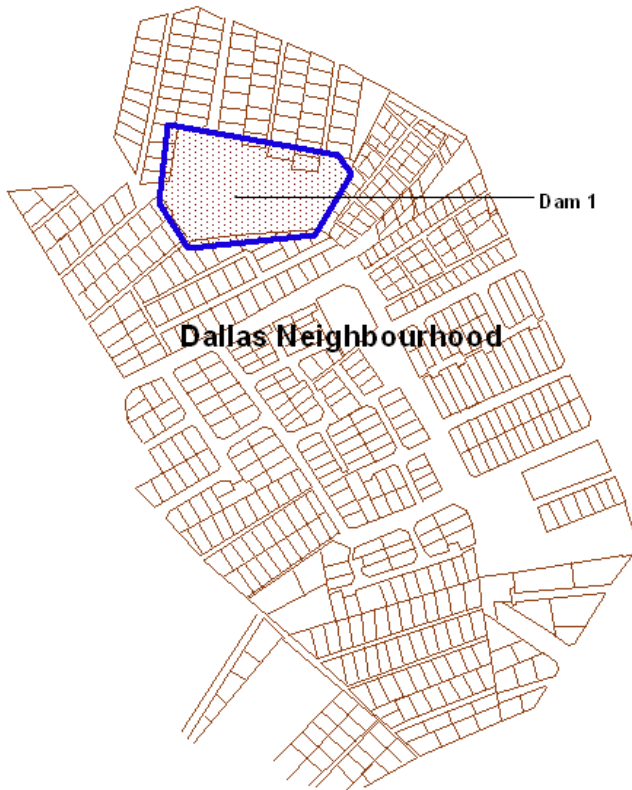
**Land use:** 90% of the plots are utilized for residential

**Built form:** Semi permanent housing approx 55%, Permanent structures 45%

# Mitigating Effects of Climate Change at Local Level



# Mitigating Effects of Climate Change at Local Level



- ### The Dams and Human Settlement
- Periodic flooding & displacement
  - Increased water levels over time
  - Water quality severely compromised
  - Local level concerns
  - Global concerns



Neighbourhood Context

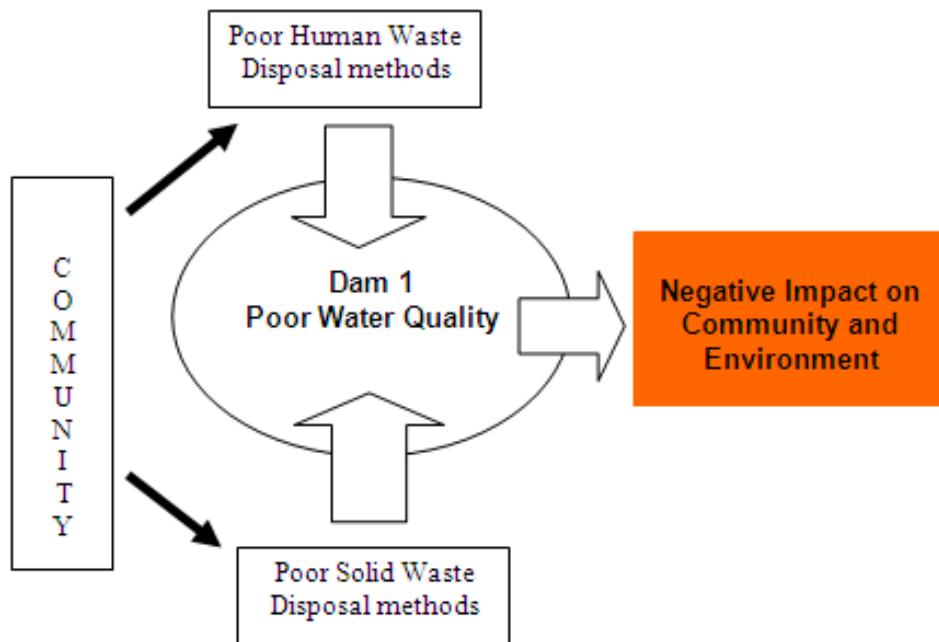
# Mitigating Effects of Climate Change at Local Level

Vulnerability is a function of location, economy, and size



# Mitigating Effects of Climate Change at Local Level

*The Dallas Integrated Basic Urban Services (DI-BUS) Project and Climate Change*



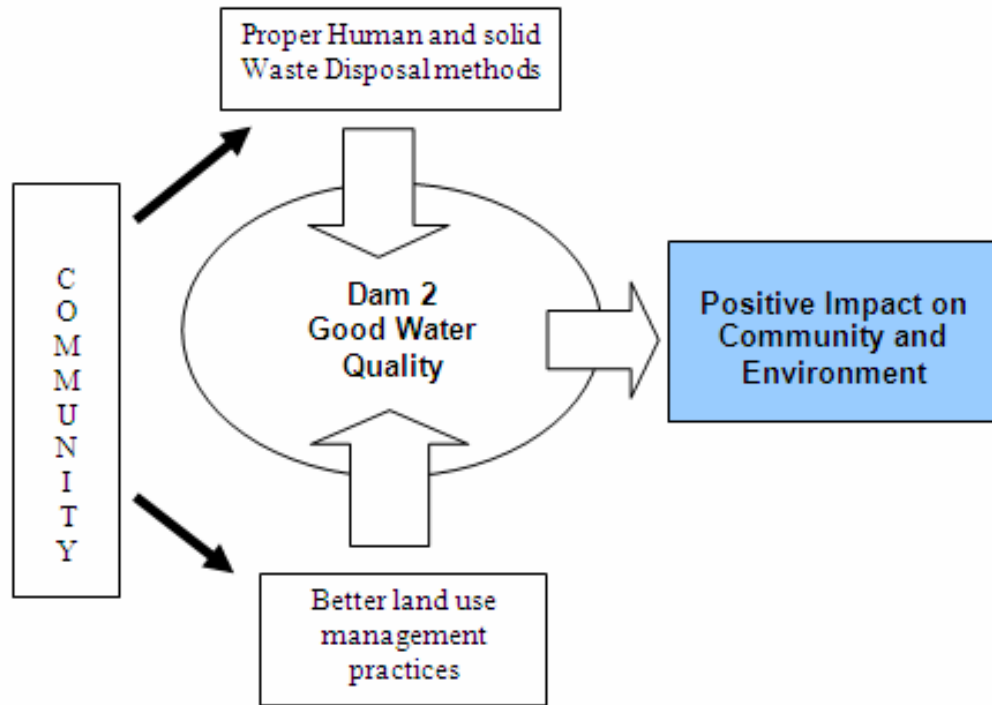
## Scenario 1

Dam formed as a result of increased human settlement in neighbourhood.

Poor water quality due to poor waste (human and solid) management

Community in arms (want dam drained) as a result of poor water quality

# Mitigating Effects of Climate Change at Local Level



## Scenario 2

Community embracing dam as part of planned neighbourhood  
Improving sanitation, wastewater recycling & solid waste management services  
Upstream storm water retention  
Introduce suitable flora & fauna (e.g. giant bamboo)

*Linking Basic Urban Services and effects Climate Change*

# Mitigating Effects of Climate Change at Local Level

Thank You