






# Bekwai Municipal Assembly

As part of the National Adaptation Plan (NAP) process, sub-national governments are developing plans to respond to the impacts of climate change. Bekwai Municipal Assembly is pleased to present an overview of our key vulnerabilities and priority areas for building adaptive capacity and resilience.

## Bekwai's Key Characteristics

|                            |   |
|----------------------------|---|
| <b>Ecological zone</b>     | Semi-deciduous forest   |
| <b>Urban population</b>    | 48,734  |
| <b>Rural population</b>    | 89,233  |
| <b>Economic activities</b> | <ul style="list-style-type: none"> <li>• crop farming – maize, cassava, plantain, cocoyam, cocoa, and palm oil</li> <li>• livestock keeping – poultry, cattle, sheep, and goats</li> <li>• aquaculture</li> </ul> |

## Main Climate Hazards

-  Rainfall variability
-  Forest fires
-  Water scarcity
-  Windstorms
-  Flooding

## Key Climate-Sensitive Sectors

|   |   |
|---|---|
|  <b>Agriculture</b>         | Destruction of staple crops   |
|  <b>Forestry</b>           | Reduced industry in timber, non-timber forest products, ecotourism                    |
|  <b>Health</b>             | Human and animal health   |
|  <b>Infrastructure</b>     | Damage to road networks and public transport, education infrastructure                |
|  <b>Trade and industry</b> | Wholesaling, electronic repairing, telecommunication services, other local businesses |
|  <b>Water resources</b>    | Reduced availability of drinking water, rivers and streams, groundwater system        |

## Established Vulnerabilities

| Sector                               | Exposure | Sensitivity | Adaptive capacity | Climate change vulnerabilities |
|--------------------------------------|----------|-------------|-------------------|--------------------------------|
| Agriculture                          | 0.45     | 0.62        | 0.35              | -0.07                          |
| Water, health, and sanitation        | 0.45     | 0.52        | 0.29              | -0.06                          |
| Forest (biodiversity and ecosystems) | 0.45     | 0.41        | 0.38              | -0.20                          |
| Infrastructure and transportation    | 0.45     | 0.30        | 0.35              | -0.21                          |
| Services, trade, and finance         | 0.45     | 0.23        | 0.33              | -0.23                          |

**Exposure** is the likelihood of being affected by climate hazards.  
**Sensitivity** is the amount that climate hazards affect a population.  
**Adaptive capacity** is the ability of households to anticipate, absorb, and adapt to climate hazards.

Shaded indicates areas of greater concern.

## Suggested Adaptation Options

-  Enhance climate information services
-  Implement modern irrigation systems
-  Develop crop insurance programs
-  Promote rainwater harvesting
-  Implement smart agriculture and conservation practices
-  Enhance climate education and sensitization
-  Promote afforestation and conservation of existing forests