# CLIMATE CHANGE AND POVERTY: Experiences in Eastern Tanzania, Morogoro Region.











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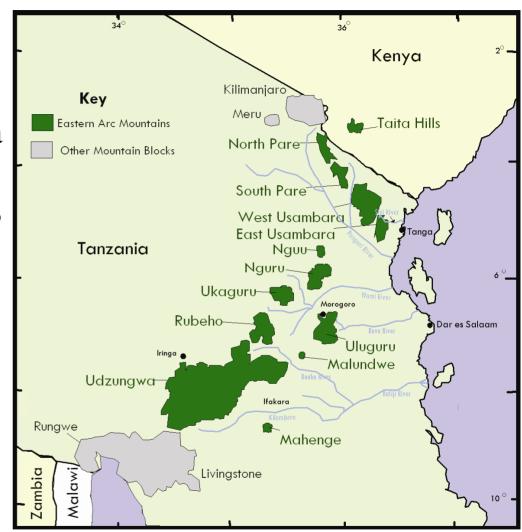
### **INTRODUCTION:**

Climate change is already occurring. It is having a disproportionate effect on the lives of poor people.

- Location of case study
  - □ Place
  - People
- Climate change impacts:
  - □ More extreme weather
  - Less predictable seasons
- Climate change outcomes:
  - □ Livelihoods productivity & food security
  - Water availability
  - Displacement
  - Conflict

#### **PLACE**

- South Nguru Mountains Landscape, Morogoro Region, Eastern Tanzania
- Characterized by miombo woodlands at lower elevations, and tropical montane forests at higher elevations
- Moderate bi-modal rainfall (1200mm-500mm)



#### **PEOPLE**

- Predominantly farm-based livelihoods
  - Subsistence farming, rice farming, and expanding cultivation of sugarcane
- Increasing number of pastoralists
  - Resident pastoralists practice some cultivation
  - Influx of other pastoralists fleeing drought conditions
- Limited opportunities for offfarm incomes are almost entirely natural-resource based (e.g. charcoaling)





# CLIMATE CHANGE IMPACTS: local people's assessment



### **CLIMATE CHANGE IMPACTS:**

#### Less predictable seasons

The timing of rains has changed during the past 2 decades.

'Most of us have been taken completely unaware by this years rains. The major problem now is that we do not know for how long will these rains continue' (an elder, Kanga village).

## **CLIMATE CHANGE IMPACTS:**

#### More extreme weather

There are more frequent flood and droughts (i.e. inter-annual variability).



#### RISING TEMPERATURES

 Temperatures seem to be rising – both in terms of averages and extremes.

'When we were much younger we had less hot conditions than now' (2 elders, Kanga village.)



#### Livelihoods productivity & food security

- Changes in weather are reducing productivity – especially in the last decade.
- Crop harvest are declining due to poor conditions
- Crop failure is more common
- Loss of livestock due to limited pasture
- Food rationing
- flooding
  - 'If the rains continue like (flooding) this till December, there will be acute food shortages in our village' (an elder, Kanga village)



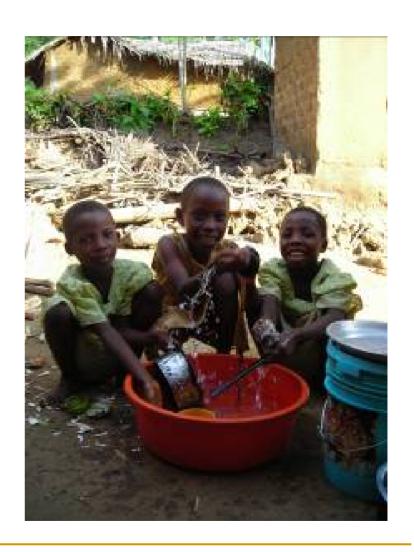


#### Water availability

 A decade of increasingly common and acute water shortages (streams drying up)

#### Implications for:

- Health
- Productivity (irrigation and livestock)
- Women's work load



## **Displacement**

 Influx of migrant pastoralists and farmers fleeing droughts in other parts of the country



## **Conflict**

- Farmer-pastoralist conflicts
- Farmer-wildlife conflicts



## **CONCLUSION**

- Importance of early warning systems
- Need for adaptation (versus coping) mechanisms
- Importance of action at multiple levels:
  - Household
  - Community
  - Local government
  - Central government
  - International