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# CLIMATE CHANGE IMPACTS ON URBAN DEVELOPMENT IN AFRICA

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### INTRODUCTORY REMARKS

- The Continent of Africa is undergoing rapid urbanization as people migrate from the rural areas in search of "bright lights" and jobs.
- Overcrowding in oversize urban slums is common.
- Wetlands and river valleys are popular sites for informal sttlements, and they are subject to damage during climate extremes, especially during floods linked to climate change.

## High Temperatures

- Although it is assumed that Africans can tolerate high temperatures, heat waves can lead to deaths in overcrowded cities as happened in paris in the Summer of 2003.
- Extreme high temperatures of 4-5 degrees C above normal can lead to mortalities from heatstroke.
- High temperatures also lead to high energy consumptions for air conditioning.

### WATER WOES

- Many mega-cities in Africa already suffer from acute water shortages during droughts.
  Nairobi broke the record in 2009, and yet the expected temperature extremes associated with climate change are yet to be experienced.
- Water woes are bound to be experienced unless every effort is made to harvest water during high rainfall periods

## POPULATION IMPLICATIONS

- It is a well known fact that high population concentrations are found in coastal cities such as Alexandria at the head of the Nile Delta, and Lagos in Nigeria.
- Overall more than 50 % of urban populations plus rural populations are concentrated in fertile coastal lowlands.
- Sea level rise associated with climate change will lead to out-migration