

ADDRESSING CLIMATE / ENVIRONMENTAL CHANGE IN AFRICAN COASTAL CITIES AND THEIR PERI- URBAN HINTERLANDS

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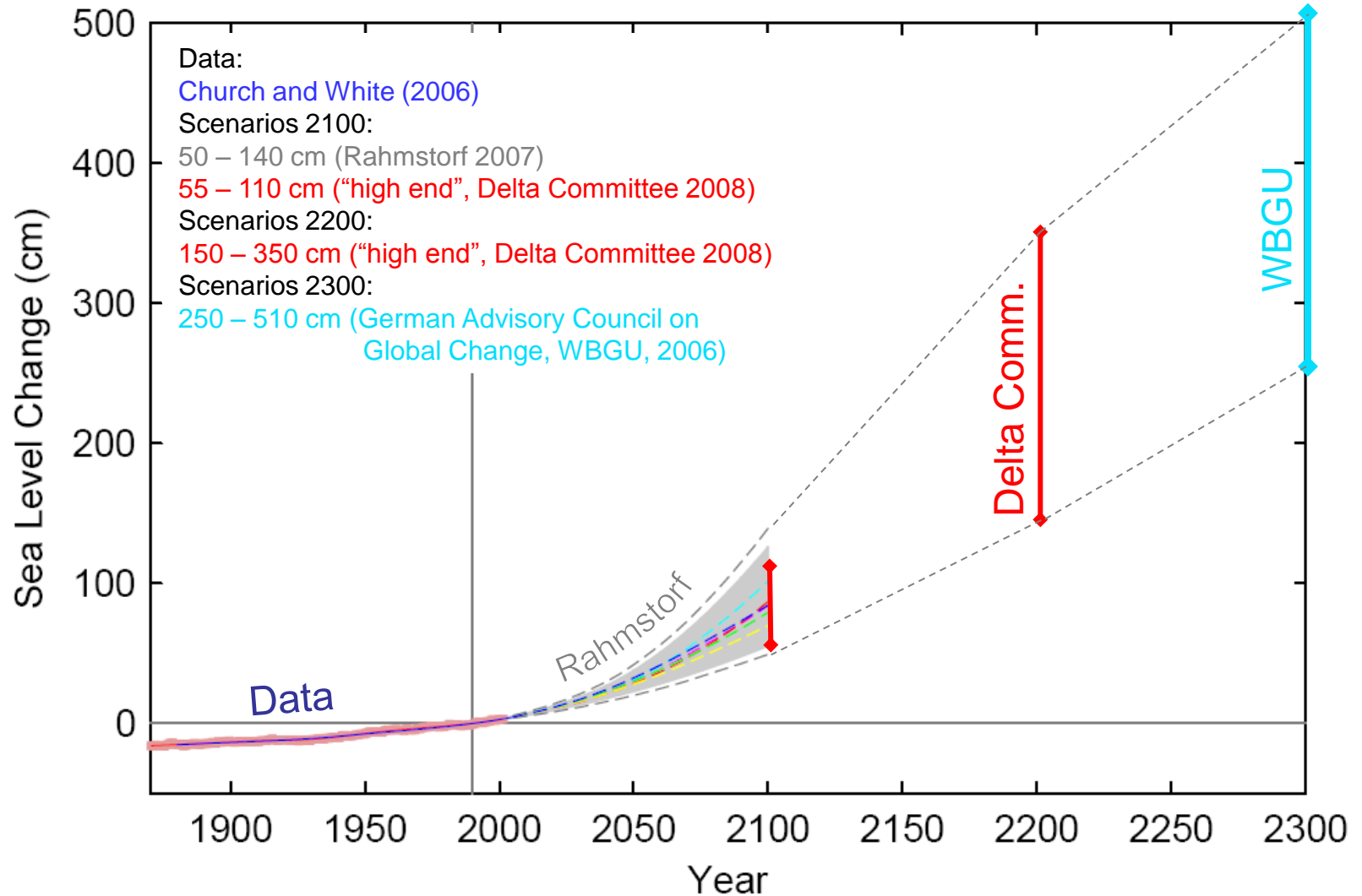
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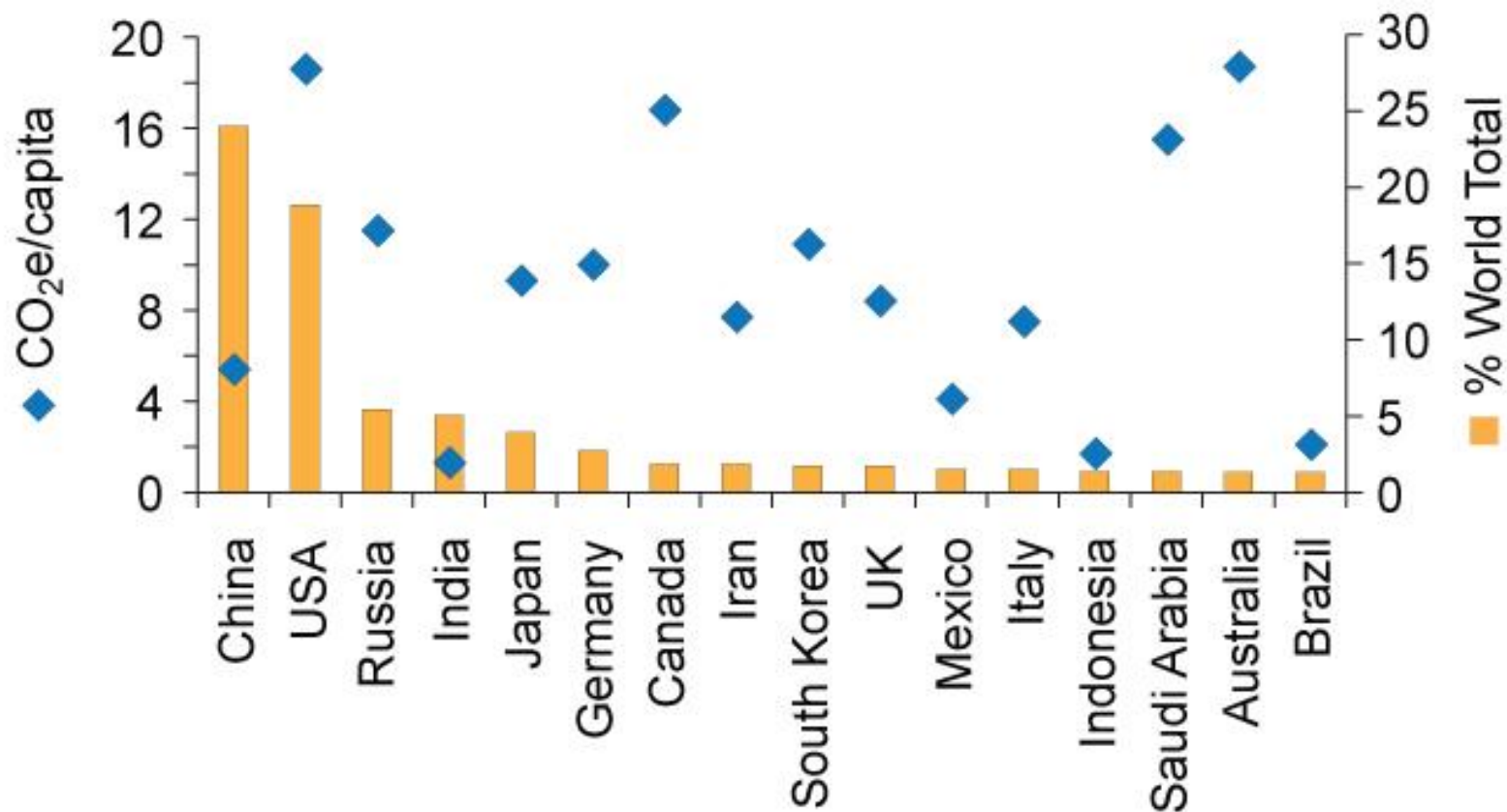
**ACC DAR Project workshop, Dar es Salaam,
8 June 2012**

GEC/Climate Change: Crucial contemporary agenda

- **Looming crisis, not just a global/development mantra**
- **Problem of timescales – impacts *perceived* to be far in future but *already occurring***
- **Evidence that development progress can be rapidly reversed, including through GEC**
- **Therefore need to embed CC/GEC planning and action within all urban, regional, national devt activities**
- **Divergent geographies of emissions and impacts**
 - **Africa at the sharp end globally**
 - **urban and peri-urban areas increasingly important economically, demographically and socially**

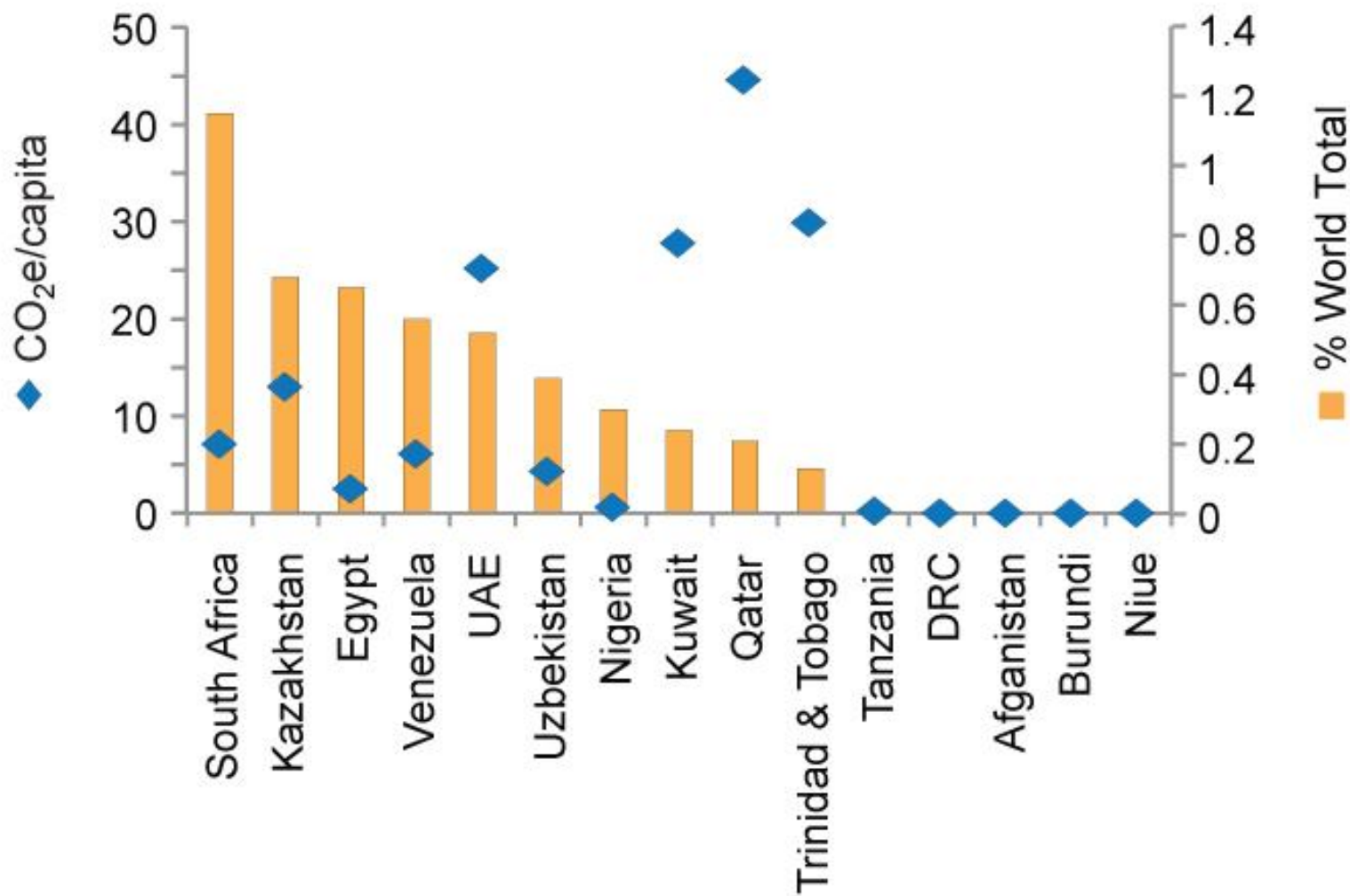
Recent Global Sea Level Rise Estimates





Top 16 GHG-emitting countries and their per capita emissions 2008

Source: WRI Climate Analysis Indicators Tool (CAIT) 2012 www.cait.wri.org



Extreme examples of GHG-emitting countries and their per capita emissions 2008

Source: WRI Climate Analysis Indicators Tool (CAIT) 2012 www.cait.wri.org

Distinguishing GEC from 'natural' disasters

- **Disasters usually short, one-off extreme events**
- **GEC**
 - **increased severity and possibly frequency of extreme events**
 - **slow-onset, (semi-)permanent changes**

Understanding vulnerability

- **Geographical/spatial vulnerability**
 - areas most likely to suffer impacts
- **Social vulnerability**
 - people most likely to suffer impacts
- **Cross-cutting vulnerabilities crucial**
 - vulnerable people in vulnerable places
 - have low recoverability/resilience, so the key focus for intervention
 - some may be at/near adaptive limits

GEC risk and vulnerabilities

- **Understand fragility and vulnerabilities to extreme events and ‘everyday’ environmental stresses**
- **Uncover structural relationships between particular areas and GEC**
- **Raise awareness, policy response and implementational capacities at all scales**

Policy responses to GEC

- **Governance responses usually inadequate, fragmented (sectoral), slow**
- **Mitigation:**
 - short- to medium term
 - reducing contribution to CC and vulnerability to and impacts of it
- **Adaptation:**
 - often longer term
 - changes to how & where we live
- **Transformation:**
 - systemic shift / new production relations

Integrating policy responses

- **Mitigation and adaptation not mutually exclusive or interchangeable**
 - both essential in integrated portfolio of actions
- **Need to be ‘mainstreamed’ into existing planning and implementation activity**
 - CC/GEC ultimately a key part of a holistic sustainable development agenda since development is meaningless without environmental and human security
 - will require some transformative changes

Impact of climate change on Africa

Desertification

Rising sea levels

Loss of Forests

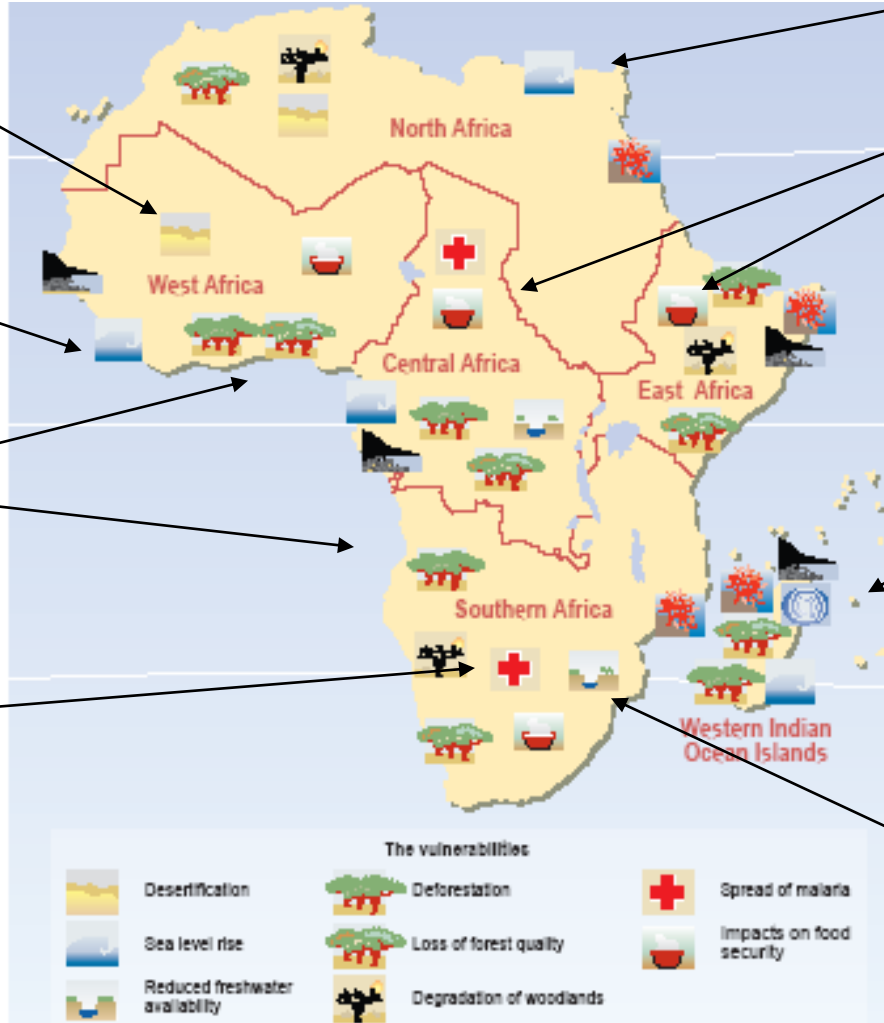
Malaria

Floods

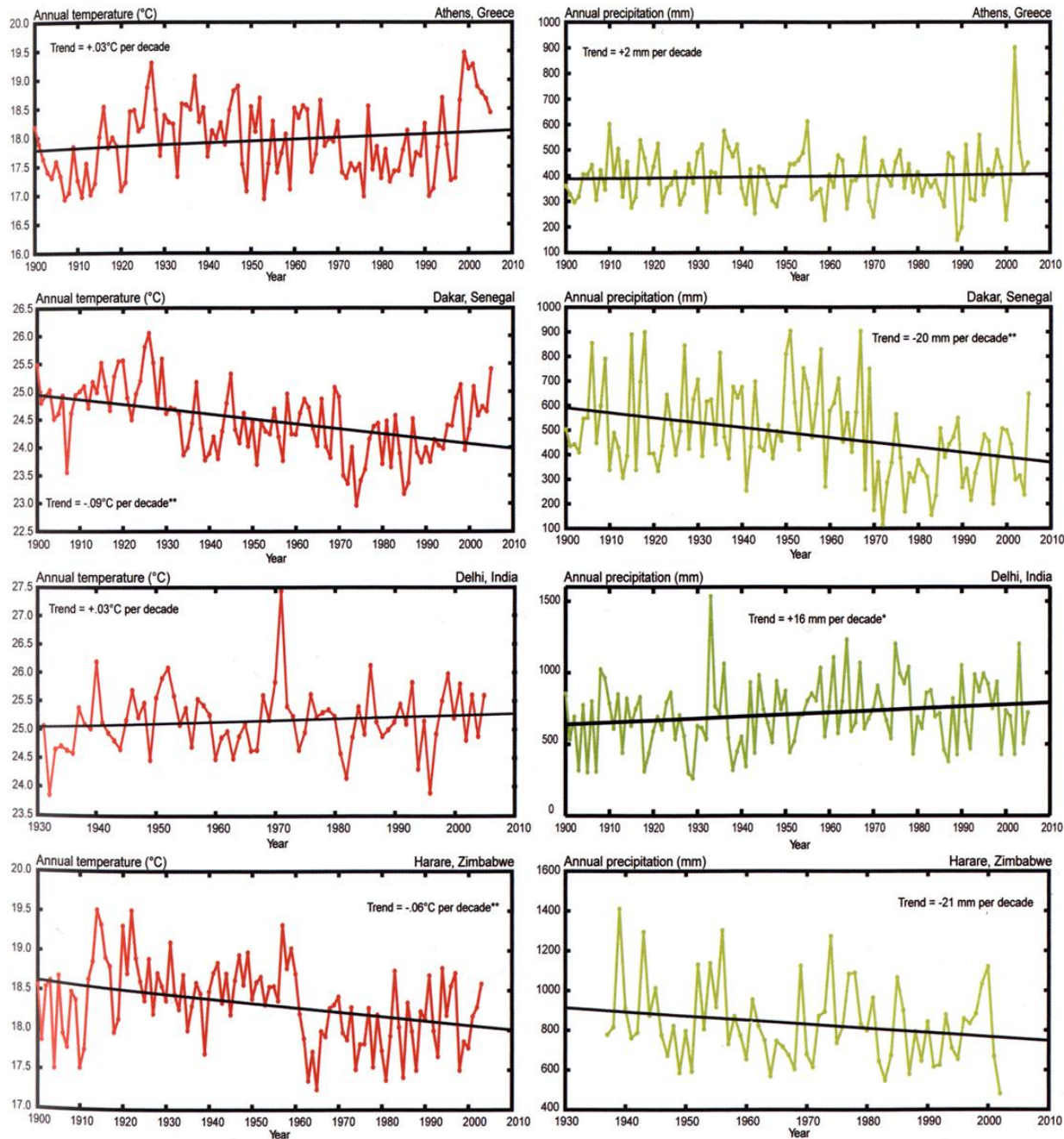
Drought and crop failure

Storms

Reducing water supply



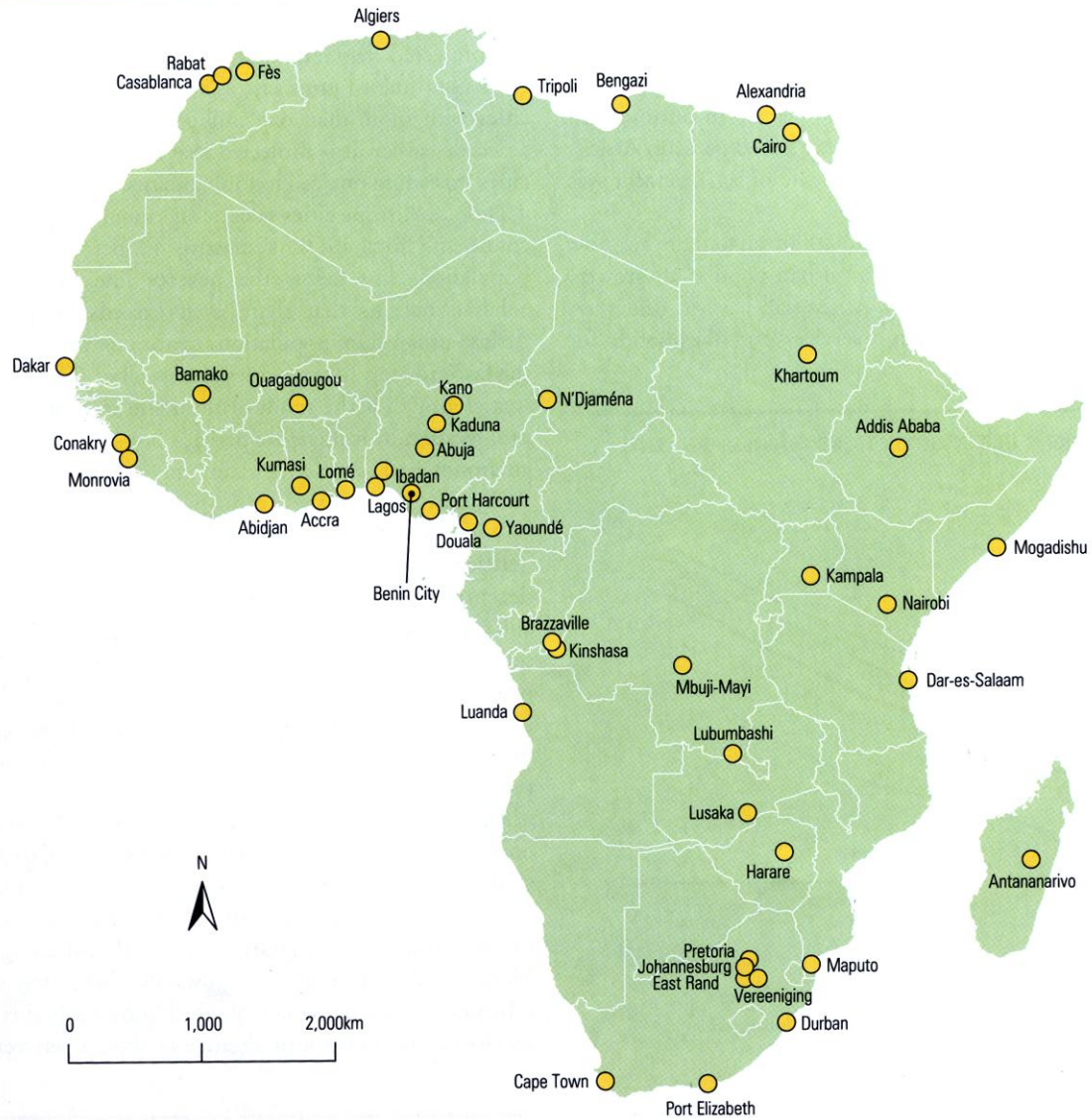
Source: DFID White Paper 2006



Observed climate trends in cities

Source: Rosenzweig *et al.*, 2011. *Climate Change and Cities*, p. 57.

49 ONE + MILLION CITIES IN AFRICA (2008)



GEC in coastal Africa

Rising sea levels

- many coastal zones low-lying**
- lagoons and estuaries**
 - much environmental damage**
- major coastal cities and ports**
 - widespread poverty**
- many livelihoods depend on coastal areas & resources**
- salinisation of water tables**

Variable temperature & rainfall trends

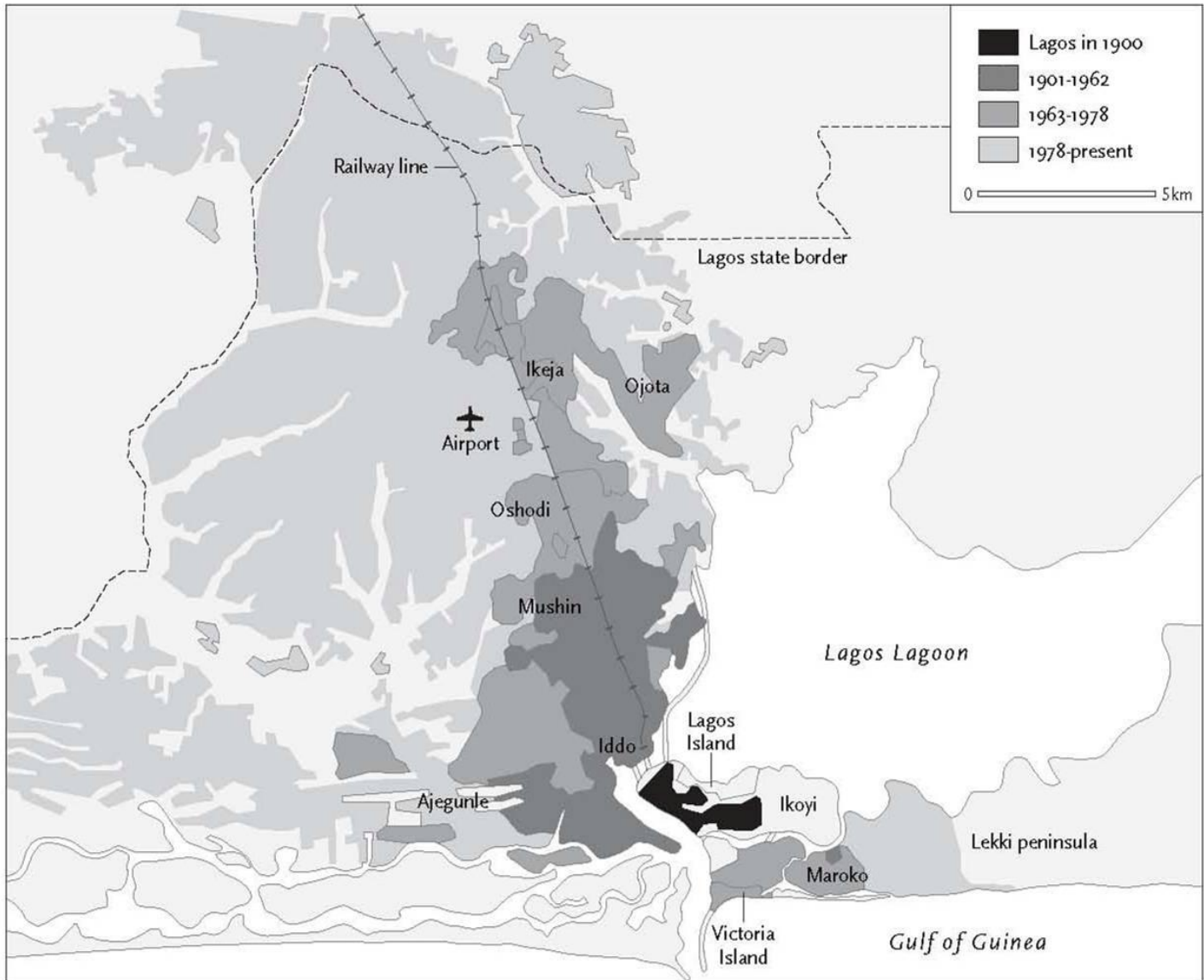
- some heat island effects**

Extreme Events: South Africa



Addressing GEC in African urban areas

- **Awareness raising: initiatives & networks**
 - UN-Habitat: SWC 2008, 2010; SUDNET, CCCI
 - SA Cities Network
 - C40 network world's largest cities /Clinton Climate Initiative
 - Commonwealth – report to Kampala CHOGM
 - ICLEI: LA21 & Cities for Climate Protection
 - Cities Alliance
- **Case studies**
 - Illustrate magnitude of problems & challenges



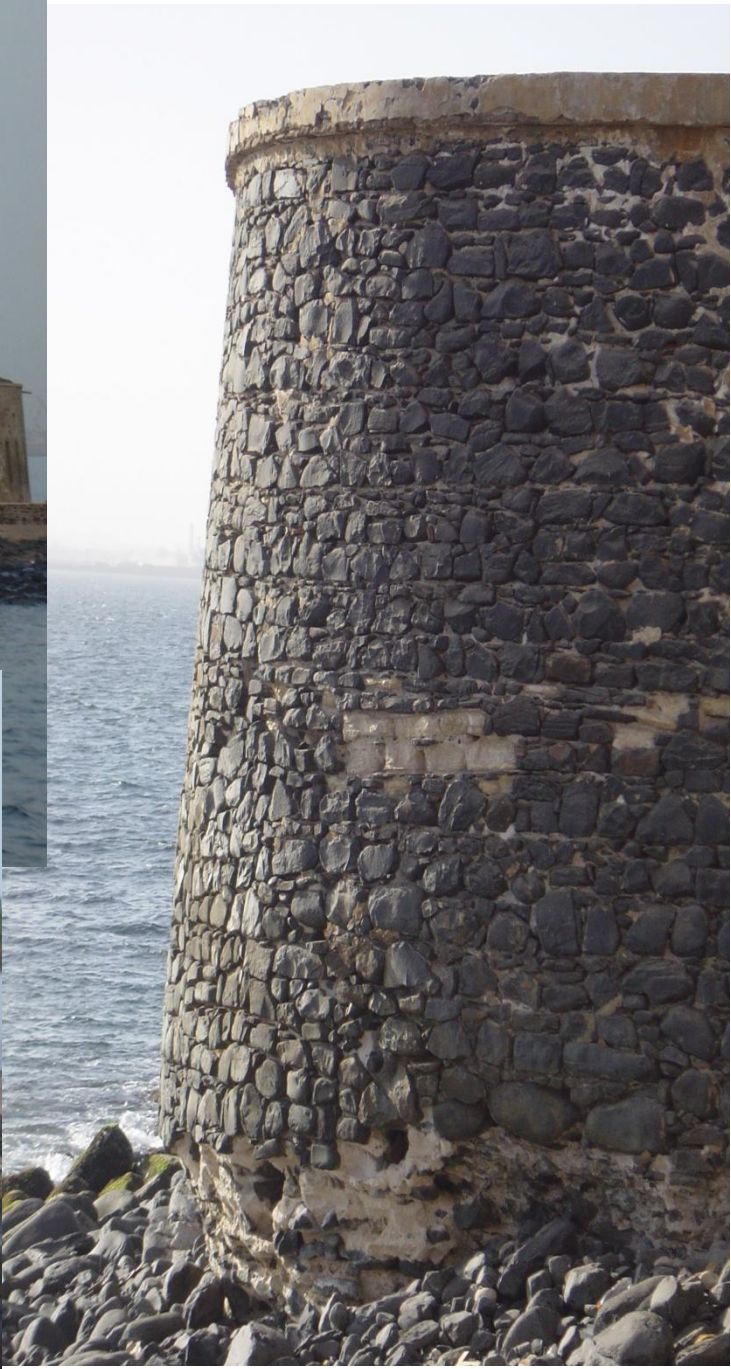












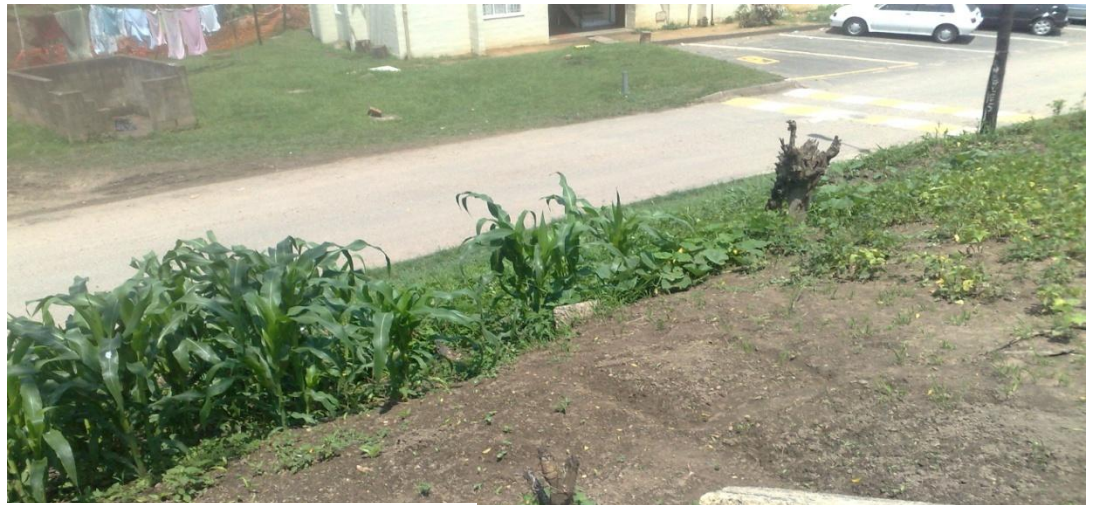












Conclusions

- **GEC/CC: profound issue for urban Africa**
 - urban areas key arenas for mitigation and adaptation but rarely feature in national policies and plans
 - **CC/GEC as a development and security challenge**
 - **broaden sustainable devt policies to include CC/GEC**
 - Sensitive to distinct coastal vs inland features
- **Key challenge: awareness re urgency and action despite long term, slow-onset nature**
 - embed in core policies to address resource availability, consumption, impacts of choice
 - careful targeting of vulnerable groups/areas is vital
 - avoid trade-offs between mitigation & adaptation & with basic needs development priorities
 - identify / plan for fundamental transformations