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

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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

Data:
Church and White (2006)
Scenarios 2100:
50 – 140 cm (Rahmstorf 2007)
55 – 110 cm (“high end”, Delta Committee 2008)
Scenarios 2200:
150 – 350 cm (“high end”, Delta Committee 2008)
Scenarios 2300:
250 – 510 cm (German Advisory Council on Global Change, WBGU, 2006)
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
Rising sea levels
Desertification
Loss of Forests
Malaria
Floods
Drought and crop failure
Storms
Reducing water supply

Impact of climate change on Africa

Source: DFID White Paper 2006
Observed climate trends in cities

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 CHOOGM
  – 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