

Understanding climate adaptation and transformation challenges in African Cities

Policy summary of Special Issue of COSUST, Current Opinion in Environmental Sustainabilty¹

A pioneering workshop of academics and professional urban planning experts from across Africa and abroad assessed the state of the art in urban climate change adaptation on the continent.

A selection of papers based on the workshop have been published in a special issue of the journal, Current Opinion in Environmental Sustainability. Adding their individual perspectives together produces an interesting and important picture of the similarities and locally distinctive issues in meeting challenges and opportunities for sustainable urban development in Africa.



7 RECOMMENDATIONS

- Overarching structures for regions with many municipalities are necessary; climate change cross all borders.
- Additional revenues sources are needed.
- Consider strategic metropolitan and urbanrural regional authorities.
- Train successors within the organisation to take over when "champions" are moving on.
- The private sector is diverse; some need recognition for work done, others would benefit from "resource hubs".
- Encourage multi-sectoral partnerships
- Actions need to be scalable in space and time, beyond election cycles.

See pages 2-4 for more details

¹Current Opinion in Environmental Sustainability, Volume 13, Pages 1-116 (April 2015). Edited by David Simon and Hayley Leck http://www.sciencedirect.com/science/journal/18773435/13

The Benefits of Travelling Ideas

An increasingly urban-focused strategy to tackle climate change is essential, even in Africa, since its towns and cities account for a rapidly increasing proportion of overall greenhouse gas emissions.

The workshop participants' practical experience, literally from Dakar to Mombasa and from Cape Town to Algiers, illustrates how new ideas spread across the continent, with significant input from abroad through international agencies and academic networks. This may be interpreted as facilitating rapid local learning.

However, the evidence is clear that adaptation is necessary to make such innovations locally appropriate and maximise the prospects of successful implementation and sustainable benefits. Simply trying to implement off-the-shelf strategies formulated in different contexts abroad is not the way forward. However, the considerable material and political interests embedded in urban land and property markets, as well as the governance systems of many countries, may slow down the processes.

Several contributions emphasise the need to bridge the gaps still separating theory, policy and practice in the climate change arena. To 'make a difference', the diversity of authors, affiliations and conceptual approaches was necessary and provided the basis for fruitful transdisciplinary engagements between academic analysis and practical interventions in the very diverse African contexts. Specific mitigation actions are being undertaken mainly in industrial cities with substantial middle classes and high car ownership, especially in South Africa. By contrast, adaptation interventions are diverse, reflecting local risk perceptions and profiles, resource constraints, available technologies and the capacity of planning and implementing agencies in the various countries. Some of these are surprisingly low-tech and cost effective, belying the common misperception that major investments or diversions from other budget heads are always required. One case in point is the 'floating schools' experiment designed by a private architectural firm for use on Lagos Lagoon but with wide potential application in flood-prone areas and water bodies experiencing sea level rise. (See photo p.3)

UN-HABITAT's Cities and Climate Change Initiative plays an important role in several coastal and landlocked cities. Proactive and inspirational political leaders, as in Lagos, and senior officials, as in Durban (eThekwini) often play seminal roles in turning their cities into adaptation leaders. Mutual learning through networks of cities at different scales are also valuable vehicles for promoting change.

The workshop participants agreed on the value of integrating disaster risk reduction and climate change adaptation and resilience. Disaster risk reduction work provides valuable lessons and experiences in these overlapping and complementary fields.

The nature of government structures often inhibits change and innovation for effective climate change action. This includes e.g. the lack of overarching structures for metropolitan regions with many small municipalities. Such institutions are essential to enable strategic planning and proactive mitigation, adaptation and transformation actions since climate change and disaster risk, by their very nature, cross administrative boundaries and require metropolitan or regional interventions.

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Urban local authorities have key roles in tackling climate change in the context of increasing urbanisation, but often with inadequate power and resources. Developing additional local revenue sources and/or more effective revenue collection is vital, along with multi-level governance to harness the strategic sectoral resources of the regional and national authorities.

There was also consensus on the importance of mainstreaming climate change policies into existing programmes and strategies. Otherwise climate change agendas may quickly be marginalised in favour of more immediate and tangible basic needs and other development priorities. Put differently, such mainstreaming may be the best tool to avoid the still widespread perception that tackling climate change and promoting development are conflicting agendas. Various urban greening and other carefully targeted interventions can be economical and achieve co-benefits that promote multiple agendas, including both mitigation and adaptation, creating new employment and livelihood opportunities, and providing recreation facilities that enhance people's health.

FRAMEWORKS

The conceptual and theoretical frameworks used in the research in the Special Issue are diverse. The academic authors most often use theoretical perspectives, aimed at informing other research or assessing interventions already done, while practitioners tend to see the present as the starting point for forward-looking policies.

The most widely used conceptual framework comes from the international climate change discussions, research and policy initiatives. Mitigation, adaptation, vulnerability and resilience are used in various combinations, with the increasingly important emphasis internationally on transformation of underlying structures and relations vital for making substantive shifts towards urban sustainability not yet attempted to any significant extent. Although urban transformations are often more challenging to prevailing interests, the limitations of incremental reforms to ultimately unsustainable high-consumption lifestyles by elites and middle classes - and which serve as powerful sources of envy or aspiration to the urban poor - are increasingly evident across the continent.

ECOSYSTEM SERVICES

Approaches including ecosystem services, i.e. the benefits people derive from the functioning of healthy ecosystems, are becoming more widely used. Although the extent and nature of engagement may vary, it reflects attempts to attach both inherent and measurable values to the natural environment, and its significance in order to achieve multiple objectives simultaneously, namely mitigating greenhouse gases, conserving biodiversity and supporting adaptive measures that include livelihood activities and lifestyle changes. These include improved opportunities for recreation and hence public health.

However, there are also distinct limitations and potential tensions in deploying neo-classical economic theories to the green economy. Good intentions and appropriate planning outcomes frequently become diluted or frustrated in implementation.

3.

Connections to peri-urban and rural regions are increasingly seen as important features of a dynamic region - but power and resources are spatially limited and organised within individual local authority boundaries. This is another driver behind moves to establish metropolitan and even city-regional strategic authorities.

Skilled and experienced staff are in demand - able officials and champions of climate change actions doing great jobs within their institutions are often being promoted or offered other positions. It is therefore vital to train successors and ensure that key knowledge and skills are distributed more widely so that institutional memory is ensured.

Front page pictures clockwise from top left: Lagos/Zouzou Wizman, Addis Abeba/Giustino, Casablanca/Russavia, Cairo/Luc Legay - all Wikimedia Commons Picture above: Makoko Floating School in Lagos/NLÉ Architects. (See also p.2) The private sector is very diverse and while some firms deserve recognition for important work in meeting challenges such as mitigating emissions and greening production processes, and raising workforce and public awareness, others are 'laggards', dragging their feet or engaging in cosmetic 'greenwashing'. Many small and informal enterprises would benefit from training and appropriate 'enterprise hub' facilities which enable them to halt polluting activities and share services and more costly equipment.

Multi-sectoral partnerships for trust and resources, communication and intervention are most appropriately developed and sustained through co-design and co-production among key local authority and other stakeholder groups.

> Since tackling climate and broader environmental changes requires long term perspectives, actions need to be spatially and temporally scalable, beyond election cycles and short-term donor funding schemes. Local cost-sharing and revenue generation can provide the basis for longer term sustainability, while building political consensus over the importance of tackling climate change is an effective mechanism for depoliticising this essential arena for human survival.

KEY TERMS

Vulnerability: having little capacity (assets, skills, contacts) to withstand shocks

Mitigation: reducing greenhouse gas emissions and vulnerability to the effects of such emissions.

Adaptation: changes to activities, livelihoods and lifestyles appropriate to changing environmental conditions.

Resilience: having the capacity to survive and recover from shocks

Transformation: fundamental changes to urban structures and lifestyles necessary make the transition to more sustainable urban life development in Africa.

FURTHER INFORMATION

COSUST Special Issue¹: http://www.sciencedirect.com/science/journal/18773435/13

UN-HABITAT: www.unhabitat.org

CCCI: unhabitat.org/cities-and-climatechange-initiative

UGEC: ugec.org

MISTRA URBAN FUTURES: www.mistraurbanfutures.org

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