

# RISE AFRICA

Inspiring Action for Sustainable Cities

Discussion Series

## Building Climate Resilient African Cities – a conversation

by Pato Kelesitse



Theme: Understanding our climate reality with inspiration from African wisdom and adapting cities to climate change



African cities are rapidly changing and urbanising, and many cities are seeking sustainable paths of growth and development. We are faced with a conundrum in finding appropriate solutions to address deep-rooted challenges, such as clean water access and building resilience in the face of climate change, underscored by structural inequality, and social injustice that exist in our complex urban environments. Finding clear solutions is made difficult in these environments, where uncertainty is rampant in light of the climate crisis. So, in finding new pathways to sustainable and just transitions for African cities, a shift in thought and knowledge production is necessary to provide inspiration and guidance for those shaping our cities. Most importantly, we need ideas which galvanise action, share lessons, and encourage experimentation and new ways of doing and being in our cities.

I had a conversation with ecologist Dr. Mzime Ndebele-Murisa, exploring what climate resilience is and what role it plays in shaping the growth of African countries. In light of the complexities of building climate change resilient African cities, we unpacked the best-practice methods and highlighted the leading African cities on climate change resilience. This conversation is guided by Dr. Murisa's paper ["City to city learning and knowledge exchange for climate resilience in southern Africa."](#)

**Pato Kelesitse (PK): The phrase "climate change resilience" is rather prevalent in conversations about climate change. What is climate resilience and why is it important for African cities?**

**Dr Mzime Ndebele-Murisa (MNM):** Resilience is the ability of a system to get back to its functionality and original form after a shock. Climate can be a shock, or gradual. Climate change resilience is the ability of city ecosystems to continue to function despite these climate changes.

Cities are ecosystems and interact with ecosystems around us, one of those interactions is the built environment vs natural environment. Cities are built next to natural sources, usually water. We interact with water by using it and emitting it back into the natural environment. The way we interact with the natural environment should be sustainable and ensure that what we are using in cities will still be available in the future.

Climate change is global, thus we are affected in Africa by what happens in e.g. China, leading to extreme weather events that we then have to deal with in African cities. So whether or not we believe in climate change we are emitting or contributing to climate change, it is affecting us. African cities have no choice but to be climate-resilient.

**Pato: I think we tend to think of cities, building resilience, and the work done around addressing climate change in very simple terms and forget they are part of an ecosystem, the urban ecosystem. What are some of the challenges we may be overlooking that urban ecosystems face as we move to more climate change Resilient cities?**

**Mzime:** Most African cities host the majority of the population in terms of density, due to urban migration, in some cities, it's up to 20% of the country. Africa has the fastest population growth globally; we have a bulging youth population. This growth will put pressure on services required in cities. These services, water provision, energy, waste management, transport, infrastructure development are all interlinked, thus complicating the problem. In addition, there is governance and decision-making at the national and local levels to be considered. To further complicate it, we add climate change which is an exacerbating force.

We must also consider that the city as an ecosystem, has biodiversity protection which is sometimes overlooked when we consider the city as a built environment. The city is inclusive of natural resources, living organisms and increasingly, agriculture and food systems. There is an increase in urban and peri-urban agriculture which further puts pressure on the available, limited, water resources and the existing complicated decision-making systems.

**Pato:** It's almost like a spider web, with so many items connected to each other and dependent on one another. Looking at solutions, how should we build climate-resilient cities in Africa? We know we have a prevalent problem across the continent of solutions that look brilliant on paper but fail on the ground. What should be taken into consideration to avoid maladaptation?

**Mzime:** Africa is unique because of its endowment of natural resources and biodiversity. We have some of the largest natural lakes in the world and natural resources that we can use in a climate-resilient way to build our cities. Instead of "pancake cities" growing outwards, we can consider high-rise buildings and ensure they are environmentally friendly from the materials to the architecture and energy consumption.

African cities are encroaching into what should be zoned, according to me, biodiversity protected areas, such as wetlands, to satisfy the need for housing. The [Ramsar Convention](#) allows us to sustainably use our natural resources instead of the colonial methods of protecting and top-down methods. If you talk to elders, indigenous knowledge will tell you there are rules on how to use natural resources. Let's share knowledge to build resilience against climate change and bring back these ways of using our resources sustainably.

As African cities grow, there is an opportunity to green our cities, these new developments should be environmentally friendly, including materials. Let's design in ways that we can plant trees even on buildings and preserve water and energy. Let's use the environment for our economic benefit while preserving it.

**Pato:** I read your paper "City to City, learning and knowledge exchange for climate resilience in Southern Africa" and the "knowledge sharing for climate change resilience" solution particularly stood out for me. As you know in my work as an advocate for climate action, my primary work is knowledge sharing so I found this quite relevant to me. Please tell me

## more about the solution.

**Mzime:** Knowledge in the way we looked at it, is that there is no “superior” knowledge, just different types of knowledge. Indigenous Knowledge, Scientific Knowledge and street knowledge, we should be collaboratively working with all of these.

Why not use art for climate awareness? We should use the energy of youth and their free time to raise awareness in our communities. I am part of the “[Education Partners for Innovation in Communities](#)” Program that engages the university, the city and communities. This program engages students to identify challenges in the community and then, with the university, infuse these challenges into the curriculum so they may come up with relevant solutions. Let’s harness the passion and inexperience of youth who are innovative and not influenced by bureaucracy and politics for climate solutions. Additionally, youth communicate more effectively with communities. Building climate change resilience is inclusive, involved and participatory. It needs the youth and different energies as advocates for addressing climate change and to address sustainability and climate change.

**Pato:** That response gives us confidence at Sustain267 that we might be on the right path if our method of engagement is being given the green light by climate scientists. I am definitely in agreement with harnessing the passion, naivety and innovative ideas of youth. We need to merge the experience of researchers and scientists with the unboxed ideas of youth. Now transitioning to success, which are the leading African cities on climate resilience and that we may learn from?

**Mzime:** Our paper “City to city learning and knowledge exchange for climate resilience in Southern Africa” talks about learning from success and failures. One of the cities from our study is Windhoek, Namibia. It is a desert and they draw water from nearly 300kms away and they run a very successful [water reclamation system](#) through a partnership of the local government, public and private companies. Through this system, the city makes a clear way of maximising every drop. The pressure for water is real in Africa and globally, the next war [if there is one] will probably be over water.

Durban, South Africa hosts [River Transformative Management](#) programs and the city has partnered with the community to address flooding and protection of biodiversity.

In East Africa, we have Kampala, Uganda and Dar es Salam, Tanzania. Kampala is leading on climate resilience and they have a comprehensive strategy that they are implementing. As Africans, we tend to sign papers and not implement them. Uganda has committed [resources](#) to realise its strategy. They are doing this by promoting solar power, tree planting half a million trees and economically it will raise USD 33 million through mitigation and adaptation. Nearly 90% of their energy is from coal and they wish to reduce that significantly.

Dar es Salaam is looking at [coastal management and protecting mangroves](#). Mangroves are very

important to the environment and they are a carbon sink. The programs are funded through the United Nations and World Bank. In North Africa, Morocco is one of the countries likely to meet their Nationally Determined Commitments (NDCs). They are championing better buildings through planning and building regulations.

In my country Zimbabwe, we are trying to mainstream our NDC target of reducing emissions by 33% at the city level in [Harare](#). We ask, what would reducing those emissions look like at the city level? The local government has also installed more solar lighting and greening of the local government buildings. They have an environmental desk and budget to address issues of climate change, it is small but it is a start considering they were dismissive a few years ago.

**Pato: It's great to hear that there is progress across the continent and even as close to me as Namibia. It is quite scary that the next war could be on the water in light of the current dispute over the Grand Ethiopian Renaissance Dam between Egypt, Sudan, and Ethiopia, over the Nile Dam. To avoid getting there what should be done by Governments, political leaders, and individuals?**

**Mzime:** At an individual level, we need to know that our actions have a great impact. In our household, we separate our waste and use it as compost and ensure we are not filling our landfills with organic waste that we can make use of. We also have a solar system in place, yes it is expensive and not as accessible but we could look into solar lighting.

At city levels, we can green our buildings, our infrastructure is using climate-resilient material that is environmentally friendly. Politicians can champion not only policies but implementation too, they should walk the talk. They should use electrical vehicles where possible and promote their production and incentivise the use of renewable energy, remove the tax on solar products and sponsor green innovation and biodiversity restoration. Politicians have the opportunity to champion this cause. As governments, there should be harmony between climate resilience action and programs that are underway. There are currently a lot of piecemeal approaches, from civil society organisations, faith-based organisations, and individuals. If we come together and start to form coalitions, then we can have a bigger impact. We need to come together.

*Listen to the recording of this conversation on the Sustain267 Podcast available on [Apple Podcasts](#), [Spotify](#) or your preferred podcast player.*



### ***About the author:***

**Pato Kelesitse** is a sustainable development practitioner and advocates for climate justice, with a gendered lens, as a key pillar of development. She engages in conversation as a primary tool of advocacy. Her experience in advocacy includes youth and community engagement, conversation facilitation, and project coordination.

Kelesitse is the founder of Sustain267 and the host of the Sustain267 Podcast, a series of conversations on climate change and sustainability with Africans to amplify their voices and solutions within the climate justice movement. Kelesitse previously represented Africa, as one of 8 youth globally at the UN Climate Summit in 2014 addressing world leaders on climate change as a global priority. In 2019 she was named by Wilton Park, an Executive Agency of the UK Foreign Office, as one of the “40 under 40 African Leaders for Climate Resilience”. Kelesitse is a Climate Reality Leader trained in 2018, in Los Angeles, USA.

Email: [pkloveisart@gmail.com](mailto:pkloveisart@gmail.com)

### ***About RISE Africa:***

**RISE Africa** is ICLEI Africa’s platform for inspiring and fostering new connections that lead to swift and impactful actions for enhanced sustainability and resilience in Africa’s urban areas. Exposure to forward-thinking ideas from different disciplines through a range of curated interactions will provide an antidote to outdated “silo” thinking that is well recognised to inhibit innovation. Instead of being another ‘talk shop’ amongst like-minded individuals, RISE Africa will bring a diversity of city role players together in innovative sessions to identify new opportunities for collaborative action.