

## SASBE SEMINAR SERIES: 2024/2025

Title: **Operationalise policy and data for better urban air quality**

Date: **19 June 2024**

Time: **17:00 – 19:00 (SAST)**

Registration Link: <https://events.teams.microsoft.com/event/c796c3c0-f2d2-45a2-a1ac-e275c46538ac@ddfa59c8-38d0-49a3-822e-1d3bcb5bf85b>

Detailed descriptions of the topics and an introduction to the presenters below.

### Hyperlocal air quality monitoring in African cities with AirQo

#### Abstract

Citizens and city authorities in many African cities lack access to timely and high resolution data on the state of air quality in urban spaces. The talk will be about the ongoing work at AirQo, a research initiative for hyperlocal air pollution monitoring and modelling for African cities. The talk will highlight the sensor networks and digital access tools for air quality modelling and analysis for citizens and city leaders in over 10+ African cities.

#### Presenters



#### Engineer Bainomugisha

[Engineer Bainomugisha](#) has pioneered and leads several social impact tech/research initiatives including, **AirQo** (<https://airqo.africa>) that leverages Internet of Things and Artificial Intelligence technologies for environmental air pollution monitoring and analysis in African cities to foster resilient and healthy urban communities. Through his work, Engineer strongly advocates for harnessing technology and computational intelligence tools to benefit humanity. As Chair of Computer Science at Makerere University, he is passionate about and actively contributes to ensuring quality Computer Science education in Africa.

# YOUTH-LED PRECISION-ADVOCACY FOR UNLEASHING URBAN TRANSFORMATION IN LAGOS, ACCRA AND CAPE TOWN

## Abstract

A different approach is needed to tackle the health impacts of climate change and rapid urbanization in African cities, one that capitalizes on the assets and strengths of these cities and their people. Africa's youthful population presents a unique opportunity for driving development, yet challenges such as high youth un/ under employment and lack of opportunities hinder their potential for innovation and growth.

To address this, young people must be included in decision-making processes and provided with opportunities for work and innovation. Their adaptability and innovation can offer valuable insights into emerging health risks and climate action. For instance, initiatives like the Cityzens4CleanAir Campaign have demonstrated how youth engagement can influence policy makers and local authorities, leading to tangible improvements in air quality. However, such engagement often remains disconnected from comprehensive climate adaptation strategies. To bridge this gap, flexible and participatory public health interventions should be co-designed with community residents, leveraging informal networks and services to reach underserved populations.

To address these gaps, UrbanBetter was established as an Africa-led global movement to accelerate building of healthy, climate-resilient urban spaces. The Cityzens arm is a citizen-sensing data infrastructure to support youth-led participatory measurement and action through:

- measuring dynamic exposures and generating evidence to inform advocacy, policy and practice.
- supporting efforts to assess the impact of public space interventions

Our mission is to equip and connect an Africa-led global movement of youth citizen scientists to effectively increase demand for healthy, climate-resilient urban environments and to mainstream youth participation in urban decision making. Harnessing the power of youth, the vitality of physical activity and the potential of citizen science, we aim to make the urban better. The Cityzens4CleanAir initiative, for example, engages youth as citizen scientists to raise awareness and inform urban design for clean air, demonstrating the transformative potential of youth engagement in creating healthy, climate-resilient cities.

## Presenters



### **Monika Kamkuemah (B.Bus.Sc(Hons), MPH, PhD).**

Monika is a postdoctoral fellow in the Department of Architecture with a joint appointment at Innovation Africa@UP, where she runs the UrbanBetter Satellite Lab. She obtained her PhD from the School of Public Health and Family Medicine at the University of Cape Town, which explored non-communicable disease multimorbidity in adolescents and youth living with HIV in the context of urbanisation and epidemiological transition. She is interested in urban health, the built and nutritional environments within cities, ensuring climate resilience and ways to future-proof the health of cities using human-centred design.

# ROLE OF AN NGO IN UNDERTAKING GROUND-LEVEL ACTION

## Abstract

Leveraging non-traditional data sources such as citizen-generated data (CGD) to fill data gaps has been gaining momentum at the local, national and international level to ensure the most marginalised population groups are being reflected in data and statistics. Working with CGD and those who produce those data, such as civil society organisations, organised local communities and citizens themselves is also a great channel for statistical offices, and government officials to engage and connect directly with citizens and further improve transparency, inclusion and accountability of data and policy. Lagos Urban Development Initiative with the support of Heinrich Boll Stiftung has been working with community members to generate data for advocacy. Olamide Udoma-Ejorh will share two projects; Walkability Assessment and the Allotment Garden to buttress the need for CGD and how as an NGO we are supporting the collection of CGD and using it for advocacy.

## Presenter



### [Olamide Udoma-Ejorh](#)

Olamide Udoma-Ejorh is Director at the Lagos Urban Development Initiative. She is currently involved in governance and social issues within the urban environment of Lagos and is an advocate for sustainable transportation and social engagement within urban spaces with a particular focus on gender. She focuses on transport management, slum upgrading, and housing rights in urbanising African cities. She consulted with UN-Habitat on the Nigerian projects for the Global Future Cities Programme. In the last 10 years she has managed and coordinated projects in the UK, South Africa, and Nigeria, working with a variety of communities and organisations to ensure that urban planning is participatory from inception to maintenance.