



Collaboration for Active
Mobility in Africa



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CAMA Newsletter



The Collaboration for Active Mobility in Africa is a Partnership for Sustainable Solutions initiative in Sub-Saharan Africa funded by the Federal Ministry of Education and Research Germany (DAAD) and the German Academic Exchange Service (BMBF).

Greetings, CAMA Community!

As CAMA project nears 4 years this year, it's time to reminisce on the incredible journey we've embarked upon with the CAMA project. It's been a year filled with thrilling endeavours, transformative initiatives, and invaluable partnerships that have propelled us closer to our vision of creating safer and more sustainable urban environments.

From the bustling streets of Nairobi to the vibrant landscapes of Kampala and the charming alleys of Mekelle, CAMA has been at the forefront of fostering positive change across our cities. Together, we've delved into the very heart of urban mobility, advocating for the rights of pedestrians and cyclists and championing the cause of inclusive, people-centric urban planning through research, education and stakeholders' engagement.

Our journey through 2023 has been nothing short of remarkable. We've conducted surveys on walking and cycling experiences, perceptions and attitudes in Nairobi, Kampala and Mekelle, meticulously mapped out active mobility infrastructure in the three cities, and engaged with stakeholders in the active mobility spaces. But that's not all – we've also taken our message to the global stage, representing CAMA at prestigious events such as the Walk21 Kigali Conference, where our voices resonated with policy makers, researchers and practitioners from around the world.

Together, let's continue to walk, pedal, and stride towards a future where every street is a pathway to opportunity and every journey a celebration of human potential. Join us as we take a snapshot of our work this far.

Exploring the Walking and Cycling Landscape in Kenya:

Perceptions, Attitudes, and Infrastructure



In recent years, the walking and cycling landscape in Kenya has undergone significant changes, reflecting evolving attitudes towards sustainable transportation and healthier lifestyles. The sight of individuals walking or cycling has become increasingly common, signifying a shift towards more environmentally friendly modes of transport. This piece delves into the perceptions, attitudes, and the available infrastructure on walking and cycling and how it's shaping this transformative journey.

Perceptions of walking and cycling in Kenya have seen a notable transformation, with a growing recognition of the numerous benefits of this mode of transportation. Traditionally, walking and cycling was viewed as modes of transportation primarily for those unable to afford motorized vehicles, walking and cycling are now being embraced as choices aligned with health, environmental, and economic advantages.

Communities are beginning to appreciate the simplicity and accessibility of walking and cycling, recognizing them as efficient means to navigate urban congestion and promote physical well-being. Additionally, there's a cultural revival of sorts, with walking and cycling being rediscovered as authentic ways to connect with one's surroundings, fostering a sense of belonging and community engagement.

Kenya's infrastructure for walking and cycling is undergoing a paradigm shift, albeit at varying paces across different regions. Urban centres such as Nairobi and Mombasa are witnessing investments in dedicated cycling lanes, pedestrian-friendly pathways, and



Damaged walking lane at the University of Nairobi Roundabout. PHOTO: CAMA Library

green spaces, aimed at promoting active mobility and reducing dependence on motorized transport.

However, challenges persist, particularly due to lack off or inadequate infrastructure development. Limited resources and competing priorities often hinder the establishment of safe pedestrian walkways and cycling routes, impacting the mobility and safety of residents. Nonetheless, initiatives and advocacy groups are playing a crucial role in amplifying the need for inclusive infrastructure development, ensuring

that walking and cycling are accessible to all.

Looking ahead, there is immense potential for further advancements in Kenya's walking and cycling landscape. By fostering a culture that prioritizes active transportation and investing in infrastructure that supports it, Kenya can unlock a multitude of benefits, including reduced carbon emissions, improved public health, and enhanced urban liveability.

Collaboratively, CAMA hopes to be instrumental in realizing this vision through applied research and creating awareness on the benefits of active mobility. Embracing innovative solutions such as the Living Labs and generating knowledge that will be vital in shaping a more sustainable and equitable transportation ecosystem in Nairobi, Mekelle and Kampala cities.

As we stride towards a more sustainable future, let us continue to champion the cause of active mobility, ensuring that walking and cycling remain integral components of Kenya's transportation fabric, accessible to all, and beneficial for generations to come.



Walking and cycling lanes on Muindi Mbingu Street, Nairobi. PHOTO: CAMA Library



CAMA stakeholders' engagement in 2023 at the University of Nairobi. PHOTO: Mary Mwangi



Advancing Walking and Cycling in African Cities through

RESEARCH & CAPACITY BUILDING

Winnie Mitullah & Anne Kamau

Walking and cycling are making a leap in development of African cities, courtesy of research, capacity building and climate action global movement. Walking remains a major mode of transport, yet it has not been sufficiently prioritized in transportation planning and interventions. This gap is being addressed through formulation of relevant Non-motorized Transport (NMT) policies, legislations and implementation accompanied by research. Few countries and cities have dedicated part of their transport budget to the provision of Non-motorized Transport (NMT) infrastructure, although the actual expenditure often falls short of the budgeted amount.

The CAMA project is one among the many research projects focusing on walking and cycling. Since 2021 when the project began, the Kenya component of the project has made remarkable progress in the areas of knowledge production and building capacity of young scholars. The project has undertaken a survey of walking and cycling in three road corridors in Nairobi, mapping of walking and cycling infrastructure in the same corridors and videography of vehicle human conflicts on University Way.

The survey on walking and cycling revealed that most of the sampled population (84%) walk daily, while 19% cycle daily. Although this cycling figure is low, it signifies an improvement from previous data and indicates progress in promoting cycling within cities. However, there is a noticeable disparity, with fewer women compared to men cycling, and a lower percentage of younger individuals compared to

older adults participating in cycling. Additionally, cycling decreases as age increases, which is concerning given that cycling is a healthy activity that enables individuals to reach their destinations using clean energy.

Availability of infrastructure, safety, a friendly environment, and socio-demographics are key factors that influence walking and cycling. The type of infrastructure also matters, as demonstrated by the limited use of overpass walking infrastructure in two of the corridors covered by the survey. Along the University Way corridor, many pedestrians dangerously run across the eight-lane road instead of walking eighty meters away to climb the provided overpass into the city center. These research findings are relevant for evidence-based policymaking and interventions and are currently being used to engage partners, including policymakers, in interventions beginning with collaborative Living Lab testing.

In building capacity, the project has concentrated on young scholars to demystify the myth that the transport sector is exclusively for engineers. Transport as a sector can be examined from various disciplines, with the best approach being a multidisciplinary one, which the Kenya team has fully embraced. The core team, primarily consisting of social scientists, works closely with the Department of Transport Engineering, the Department of Urban and Regional Planning, and the School of Computing and Informatics. Postgraduate students, who are being mentored in transport research, collaborate with senior scholars. They focus on their project

papers (thesis) leveraging on CAMA project and other University of Nairobi on-going transport research, including participating in local and international conferences.

Apart from participating in CAMA Karlsruhe 'Hands on Mobility' workshop/conference, the students participated in the *First African Walk 21 Conference* held in Kigali, Rwanda and the *First African Transport Research Conference* held in Cape Town, South Africa. At the Cape Town Conference, several students took part in the Volvo Research and Educational Foundations (VREF) NextGen event. Some of the students are also regular participants in the on-going VREF online seminars on mobility and access in African cities. The mentorship and these conferences have exposed students to transport issues, expanded their academic networks and provided the confidence required in academic growth.

The plans for the 2024 Living Lab activities, which will coincide with the Urban October events, have commenced. It is anticipated that several partners, including the IDS CAMA project team, the Socially Just Public Transport Working Group, Naipolitans, UN-Habitat and UNEP, and the Nairobi City County will participate. Overall, the CAMA project has contributed to the advancement of knowledge on walking and cycling and mentorship of students. The knowledge generated has laid the groundwork for Living Lab testing, which is expected to enhance the capacity of students, senior scholars and provide lessons to policy makers and practitioners.

Unlocking Insights into Urban Mobility:

A Collaborative Research Endeavour

by *Azeb Tesfaye, Kassel University Germany*

In the pursuit of understanding urban mobility dynamics in diverse contexts, a comparative study across three vibrant cities: Nairobi, Kampala, and Mekelle was conducted between December 2022 and January 2023. This research initiative aimed to decipher mobility behaviour, shedding light on crucial factors influencing transportation choices.

With the invaluable support of enumerators, an online survey in the three cities, amassed a dataset of 1367 responses from the partner universities in the respective cities. This rich repository of data now resides within the University of Kassel's archives, poised to catalyse further insights into urban mobility patterns.

The survey uncovered a tapestry of similarities and disparities among the three case cities. Notably, walking emerged as the predominant mode of transport across the board, underscoring its significance in urban mobility landscapes. However, significant disparities surfaced in bicycle usage frequencies, reflecting varying cultural and infrastructural contexts. Moreover, the study delved into the nuanced interplay of socio-demographic factors, infrastructure quality, spatial considerations, and user perceptions in shaping active mobility preferences.

A critical revelation from the research pertained to the cultural norms inhibiting cycling adoption,

particularly among children, the elderly, and women. These insights underscored the imperative of culturally sensitive interventions to foster a more inclusive and diverse mobility ecosystem.

The dissemination of research findings has been a priority, facilitated through an array of platforms including conference presentations, workshops, and publications. Notably, the University of Kassel team convened with fellow CAMA consortium members at the esteemed 23rd International Walk21 Conference in Kigali, Rwanda. Here, they actively participated in Kigali's vibrant car-free day campaign, immersing themselves in the ethos of active mobility while sharing insights from the CAMA survey findings.

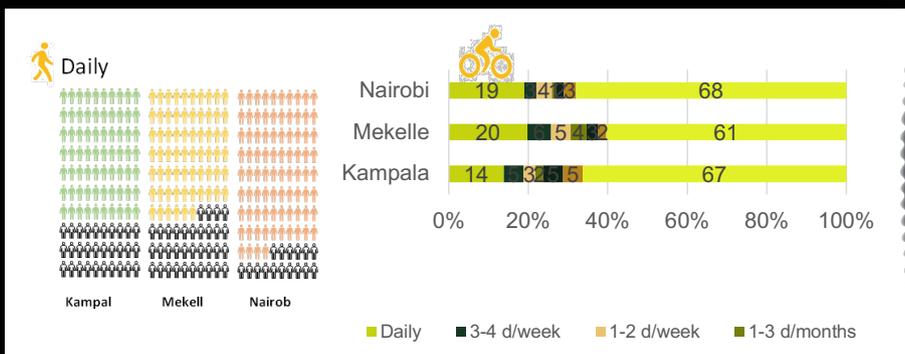
Further dissemination efforts extended to various international conferences and workshops, amplifying the reach and impact of the research. Abstracts from these endeavours serve as a testament to the research's scholarly contributions.

A pivotal moment in the dissemination journey was the Active Mobility Days organized by Mekelle University, wherein the University of Kassel contributed virtually to a stakeholder validation workshop. Here, global experiences in promoting sustainable mobility were shared, alongside key findings from the comparative study of mobility behaviour in the project countries. This collaborative discourse

not only served to validate research insights but also provided invaluable perspectives from stakeholders.

Looking ahead, the survey findings, complemented by mapping tool results, will serve as foundational inputs for designing real-life experiments and living labs in 2024. These initiatives, slated under WP3, hold promise in nurturing innovative solutions and interventions to shape the future of urban mobility.

In essence, the collaborative research endeavour spearheaded by the University of Kassel stands as a testament to the transformative power of interdisciplinary scholarship in deciphering urban mobility complexities and paving the way for more inclusive and sustainable transportation systems.



Living labs to identify the NEXT VIABLE STEP to promote active mobility

Prof. Dr. Jochen Eckart, Karlsruhe University of Applied Sciences

Walking and cycling as active mobility have often been forgotten in research and planning in sub-Saharan Africa and only in recent years national and local authorities as well as international agencies are putting more effort on this topic. There are efforts to develop walking and cycling policies and infrastructure in cities like Nairobi, Kampala and Mekelle. However, these new projects are minimal in scope, have design flaws that make them unattractive, and are in places that do not serve the majority of the people who need to access them.

So far, the promotion of active mobility in sub-Saharan Africa often has been based on the premise of “what do experts think, instead of what users need”? In order to further develop active mobility, an under-standing of “what users really need” is required. Based on this premise the CAMA project is utilising living labs to test innovative solutions to promote active mobility.

Living labs are applied research approaches in which stakeholders from science and practice conduct joint research in order to find solutions to

current challenges, jointly initiate transformation processes and create ‘knowledge for action’ (cf. Schneidewind 2014). Living labs are characterized by four features:

- Living labs are based on the idea of joint research between science and practitioners in order to develop socially relevant and needs-oriented solutions (cf. Arnold/Piontek 2018). Living labs differ in that they involve a wider range of practitioners from civil society and a greater intensity of participation in the research process.
- Living labs utilise crowd mapping approaches to better understand the user perspective of cyclists and pedestrians. In the CAMA project a behaviour survey and the crowd mapping of the existing walking and cycling infrastructure were implemented. The local learning alliances in Kampala, Nairobi and Mekelle are using the results to develop possible solutions to promote walking and cycling in the respective cities.
- Living labs involves “real-world experiments” and evaluating its

impact as well as its potential transferability (cf. Arnold/Piontek 2018). Real-world experiments will focus on small, temporary solutions to promote walking and cycling at the community level.

- Living labs strive to both initiate and sustain transformation processes for active mobility (practice goals), to produce generalisable knowledge about transformation towards active mobility (research goals), and to enable learning of practice actors in a protected environment (educational goals) (cf. Beecroft et al. 2018).

In the CAMA project the learning alliances already identified local challenges for pedestrians and cyclists and developed a list of tangible temporary solutions to promote active mobility. This year selected solutions will be implemented as real-world experiments in Nairobi, Kampala and Mekelle. The results will be used to engage all stakeholders in a learning process on how to better promote walking and cycling.



Stakeholders brainstorming on a potential living lab on University Way. PHOTO: Mary Mwangi



Presentation of potential living lab on University Way at a stakeholders' workshop in Nairobi. PHOTO: Mary Mwangi



Living Lab example in Germany. PHOTO: Jochen Eckart

Nairobi Place Making Week:

EXPLORING PEOPLE AND STREETS

Mary Mwangi, Institute for Development Studies

Placemaking Week Nairobi is an annual event organized by Placemaking Network Nairobi to celebrate public spaces and community-led activities in Nairobi. It is part of Urban October, a UN-sponsored month-long conversation on urban development and climate action. The 2023 event focused on the “Connected City: Exploring People, Rivers, and Streets as an Ecosystem” theme, aiming to raise awareness about the Lower CBD’s transformative potential. Activities involved co-designing streets with stakeholders and using them as laboratories for design scenarios.

Collaboration for Active Mobility Project (CAMA), utilized a web application to map the activities of everyday road users, with a focus on pedestrians and cyclists. The crowd mapping application was used to collect feedback from the road users of River Road during Placemaking week. The exercise focused on engaging road users along River Road to gather their feedback based on their experience. The comprehensive exercise explored aspects such as the modes of transport employed, frequency of road use, identification of walking and cycling infrastructure, encountered challenges, proposed solutions, and an overall rating of the street/road.

A total of 99 road users actively participated in this endeavour, providing their insights through the mapping platform. The major challenge raised was on the absence of dedicated walking and cycling infrastructure on the road which leaves



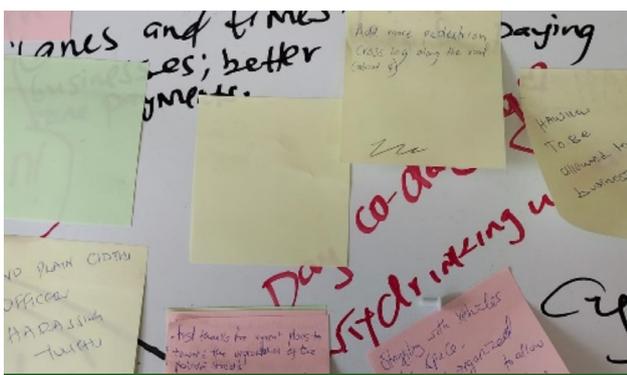
Road users giving their proposal on how to improve River Road during the Nairobi Place Making Week. PHOTO: CAMA Library

pedestrians and cyclists vulnerable to the chaotic flow of vehicular and boda boda traffic.

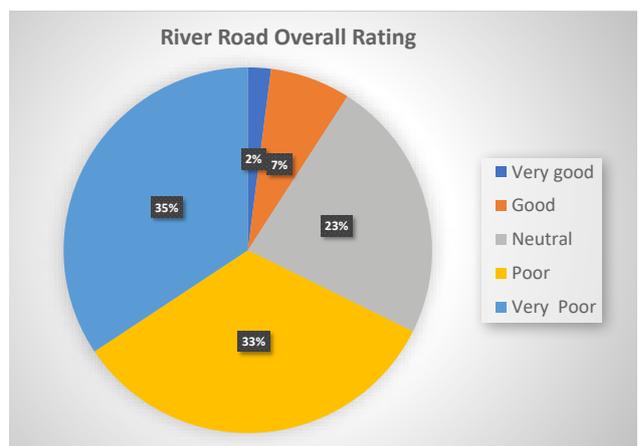
The community-driven suggestions for improvement included provision of walking and cycling lanes that are dedicated, well-marked, continuous,

wide, demarcated and have consideration of all ages.

The collaborative spirit embodied in this project exemplifies the power of inclusive engagement in shaping the future of urban infrastructure and active mobility.



Road users feedback during the Nairobi Place Making Week. PHOTO: CAMA Library



In Their Words: Stakeholders Reflections on Walking and Cycling in Kenya

In this CAMA Newsletter Issue, we present diverse perspectives from stakeholders entrenched in academia, practitioners, and enforcement roles in Kenya. Each article encapsulates the nuanced insights and experiences garnered through years of dedicated involvement in promoting sustainable mobility solutions.

Transport Governance, Policy and Planning for Walking

Dr Gladys Nyachio, Senior Lecture and Transport Researcher, Multimedia University of Kenya



Dr. Gladys Nyachio at a CAMA stakeholders Workshop

Walking is the primary mode of transport in African cities. Despite a growing number of policies recognizing the need to retain and protect people walking, walking infrastructure is still lacking on the continent. Walking still receives marginal resource allocations in both local and central governments. There could be various reasons for this. First, although walking is traditionally one of the main means of moving from one place to another in Africa, the concept of walking as a mode of transport is relatively new and therefore not well understood and embraced by those who govern transport. Second, there are limited walking policies in many

countries in Africa and around the world, and where they exist, they could be ineffective. Planning for walking will therefore be inadequate due to lack of a basis for decision making for this mode of transport. Third, there are no budgets for governance structures that promote walking since walking may not be in the institutional agenda for implementation. Fourth, in transport

planning for urban areas, cars are given priority; car users are automatically catered for. Why is it hard to cater for non-motorized transport users such as those walking? The question is does governance have something to do with this situation? Governance is crucial in transport planning and policy. It gives guidance in the utilization of available resources for real-world interventions where actors involved are both private and public sector. Transport governance ensures efficient, affordable and safe transport and mobility. Therefore, it is imperative to create governance structures and processes that allow both local and central governments in African countries to come up with transport and mobility policies addressing needs specific to the region.

Cycling in the Competitive Road Environment. A Brief State of Cycling in Kenya

Boniface Otieno - SP. In charge Road Safety Section, Traffic Nairobi County



Boniface facilitating a discussion at a stakeholder engagement

Pedal cycling has long been a favourite mode of mobility in western Kenya, with an estimated 7% of households boasting a bicycle, often the popular Black Mamba model. However, the landscape of cycling in Kenya experienced a profound transformation in the wake of the Covid-19 pandemic. As lockdown measures confined many to their homes, traditional avenues of exercise like gyms and fitness clubs shuttered, leading to a surge in cycling as a recreational pursuit. The absence of restrictions on cycling allowed for the emergence of "Group Rides," where enthusiasts from various neighbourhoods and estates would convene for leisurely jaunts, documented and shared widely on social media platforms. This phenomenon quickly captured the imagination of a populace seeking respite from the confines of remote work, driving a newfound interest in cycling across the country.

Moreover, the proliferation of cycling events has added momentum to this trend, with initiatives like

the Sule 100 Ride from Nairobi to Mombasa and campaigns promoting mental health and environmental conservation through cycling gaining prominence. The critical role of the National Police Service in ensuring the safety and security of cyclists cannot be overstated. Through measures such as police escorts, crowd control, and adherence to road safety regulations outlined in the Traffic Act and Highway Code, events like the 'Jubilee Live Free Bike Race' have been executed seamlessly, bolstering confidence in the cycling community. As cycling continues its ascent in popularity, the government's

commitment to infrastructure development accommodating Non-Motorized Transport (NMT) is evident, with plans for cycling paths along highways and in urban centres underway. Concurrently, awareness campaigns urging motorists to #sharetheroads and prioritize cyclist safety underscore the collective responsibility to foster a harmonious road environment. With these concerted efforts, Kenya stands poised to embrace a future where cycling thrives as a safe, accessible, and sustainable mode of transport and recreation.

Bridging Inequalities in Cities Through Active Mobility



Constant Cap giving Remarks at the Nairobi Place Making Week

In today's urban landscape, transportation justice encompasses ease of access to opportunities and services that are key towards improving one's quality of life. In many cities, however, this is not evenly distributed. Though the affluent can access private cars or opt for ride-hailing services, a significant portion of the population rely on overcrowded and unreliable public transport systems for their daily commute. This reliance not only poses safety risks but also imposes a heavy financial burden on low-income earners, who have to allocate a substantial portion of their income to transportation. For many who are unable to afford these modes of transport, walking or cycling (active mobility) become the default choice. Amidst these challenges and disparities, investment in active mobility presents an opportunity that holds the key to bridging these inequalities.

Kenya, for example, has made significant strides in addressing these transportation inequalities. Nairobi County's commitment to active mobility is evident through its NMT policy, mandating the allocation of 20% of the infrastructure budget to pedestrian and cyclist-friendly initiatives. Additionally, agencies such as the Kenya Urban Roads Authority are visibly integrating active mobility into their projects. Recent endeavours like the inclusion of active mobility infrastructure in projects such as Nairobi's Ring Roads, Ngong Road, and Limuru Road highlight this commitment. Moreover, cities like Nakuru, Mombasa, and Kisumu are actively pursuing improved pedestrianization in their central business districts, further emphasizing the importance of prioritizing active mobility as integral components of urban development.

Some of the areas that the cities can look towards include linking active mobility infrastructure with

public transport systems to offer seamless connectivity and encourage multimodal commuting. Targeting low-income neighbourhoods for investment in active mobility infrastructure is also crucial for ensuring equitable access to transportation options and improving livelihoods – especially for women and children to safely access schools, marketplaces and public spaces. Investing in these areas holds immense potential to transform the urban landscape, fostering sustainable, inclusive, and vibrant cities for all residents.

There are also other initiatives that are driving the continent forward in this field.

The Collaboration for Active Mobility in Africa (CAMA) project is working on enhancing active mobility through data-driven research. The Pan African Action Plan for Active Mobility (PAAPAM) stands as a beacon of progress in Africa's quest for sustainable urban mobility. Spearheaded by UNEP and several partners, it stems to prioritize active mobility as integral component of transportation systems across the continent, and thus unlock a multitude of benefits. In embracing the PAAPAM, the continent will not just be embracing alternative modes of transportation; it is embracing a brighter, healthier, and more equitable future for all.

It is important for us to envision cities where streets are safe for all, regardless of the mode of transport one uses, and where mobility is not a privilege but a fundamental human right. This necessitates strategic investments in active mobility infrastructure as well as promoting it as a viable alternative to motorized transport.

In Their Words:

Students' Reflections on their Experiences with the CAMA project



Clare at Nairobi Place Making Week
PHOTO: Clare Okidi

Clare Okidi – Master's Student, Institute for Development Studies, University of Nairobi

The CAMA project has significantly enriched my understanding of active mobility dynamics especially in urban areas. As a research assistant, engaging with pedestrians and cyclists during surveys and mapping exercises provided valuable insights into how Nairobi residents perceive and interact with active mobility infrastructure.

Through the CAMA project, I had the opportunity to attend Walk21 conference in Kigali which provided an opportunity to explore innovative ideas about urban mobility and

connect with like-minded individuals, particularly from Africa. The conference highlighted the gaps in active mobility systems, from infrastructure and implementation to financing and pedestrian engagement.

In my perspective, the CAMA project affirmed that people desire better walkways, cycle lanes, and want to be part of this conversation. Through the project I got to also see that it is possible to improve the pedestrian experience in our urban centres.



Brenda cycling in Karlsruhe, Germany.
PHOTO: Mary Mwangi

Brenda Munene – Alumnae, Institute for Development Studies, University of Nairobi

As a research assistant with the Collaboration for Active Mobility in Africa (CAMA) project, I gained valuable insights into active mobility and its role in urban development.

I attended workshops at Karlsruhe University of Applied Sciences and the Walk 21 Conference in Kigali, which highlighted the importance of collective efforts in addressing mobility challenges in African cities. My involvement in the project exposed me to various aspects of active mobility research and implementation, including infrastructure planning and behaviour change interventions.

I learned that planning for urban transportation requires a holistic and participatory approach, incorporating diverse perspectives and acknowledging social, environmental, and economic aspects of mobility.

I also learned the importance of context-specific and adaptive solutions to overcome mobility constraints and foster a culture of collaboration among stakeholders. The experience has deepened my commitment to advocating for sustainable urban mobility and broadened my vision for embracing active mobility as a catalyst for positive change in urban landscapes.



Anja, Brenda, Roselyne and Clare Cycling in Kigali, Rwanda. PHOTO: Anja Zeller

Roselyne Wachira - Master's Student at Institute for Development Studies, University of Nairobi

The CAMA project has provided a life-changing experience for me as a master's student interested in transport and mobility. I had the opportunity to travel to Germany for the Hands-on Sustainable Mobility workshop and Rwanda for the Walk21 Kigali conference, which influenced my research area on active mobility.

The Germany trip was eye-opening, as it highlighted the well-organized public transportation systems and prioritization of active mobility, particularly cycling. I learned that with proper planning and policy support,

roads where pedestrians and cyclists feel dignified can be achieved in Kenya.

The Walk21 Kigali conference in Rwanda was also impressive, with pedestrian walkways and cycling lanes demarcated from motorized roads, enhancing safety. The conference highlighted the importance of planning with pedestrians and cyclists in mind, especially in a world moving towards sustainable transport.

I am grateful for the experience since it has shaped my thinking and understanding of active mobility.



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For more information and updates about us and our project check our websites and follow us on social media:

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