



UNIVERSITY OF NAIROBI

UoN-SMUS II AFRICA REGIONAL CAMPUS 2026

THEME: EC(h)OTONING the urban pluriverse

WUP: REFRAMING URBAN WASTE SYSTEMS THROUGH EC(H)OTONING

Venue: UoN-Towers, Harry Thuku Road, Nairobi, 5th Floor, Press Room

Date: 3rd - 9th May 2026

Time: 8:30 am - 5:00 pm

Host: UoN-SMUS scientific coordinators, The University of Nairobi

The Global Center of Spatial Methods for Urban Sustainability (SMUS) is funded by the German Academic Exchange Service (DAAD) with funds from the German Federal Ministry for Economic Cooperation and Development (BMZ)

Format: Policy dialogue; civil society engagement; field excursion along the Nairobi River corridor; comparative academic case studies; student micro-studio presentations and book write shop

Urban Waste, River systems and urban ecotones

Waste management systems play a critical role in shaping the health of urban environment. The pathways through which waste is generated, collected, transported, recycled, or discarded ultimately determine how materials move through the urban environment. Where these systems break down or remain incomplete, open spaces, drainage channels and rivers become repository for the city's unmanaged waste streams. The resulting pollution affects not only environmental quality and biodiversity but also the well-being of communities living along the riverbanks and the broader ecological functioning of the urban landscape.

Urban rivers and land fills, for example, occupy complex transitional spaces within rapidly growing cities. They form the interface where natural ecological systems meet the built environment, and where water, land, infrastructure, livelihoods, and governance converge. These spaces are not static boundaries but dynamic zones of interaction, tension, and adaptation. In ecological studies, such transitional landscapes are often understood as **ec(h)otones**, areas where different ecosystems overlap and where ecological, spatial, and social processes unfold simultaneously.

The **Nairobi River basin** represents one such urban **ec(h)otones**. Flowing from the **Ondiri wetlands** through densely populated neighbourhoods, markets, industrial zones, and informal settlements before reaching **Ruai**, the river traverses multiple layers of urban life. Along its course, the river intersects with human settlements, economic activities, transportation networks, and municipal infrastructures. These intersections produce a landscape characterized by constant negotiation between natural processes and urban expansion.

Within this context, the Nairobi River has increasingly become entangled with the city's **urban waste management challenges**; - Rapid population growth, informal development, industrial activity, and gaps in waste collection systems have resulted in significant volumes of solid waste, sewage, and industrial effluents entering the river system. These flows of waste are not isolated environmental problems but are embedded within broader socio-economic and governance dynamics, including informal economies, limited infrastructure, regulatory gaps, and competing land uses along the river corridor.

Understanding the Nairobi River through the lens of an **urban ec(h)otone** offers a useful way to examine these layered relationships. Rather than viewing the river solely as a polluted waterway in need of technical rehabilitation, this perspective highlights the river as a transitional space where ecological processes, human livelihoods, governance systems, and urban infrastructures intersect. In this sense, the river functions as both an environmental system and a social landscape shaped by everyday practices, survival economies, and institutional interventions.

At the same time, the Nairobi River corridor has become a site of experimentation and intervention. Government-led rehabilitation initiatives, civil society programs, community clean-up efforts, and academic research projects have all attempted to address the challenges of river pollution and waste management. These efforts reflect a growing recognition that restoring the river requires coordinated engagement across multiple actors and disciplines.

This workshop therefore situates the Nairobi River within a broader discussion on **urban waste management systems and river pollution**, while reframing the river and waste landfills as living urban **ec(h)otones**. By examining the interconnected relationships between ecological systems, urban infrastructures, governance frameworks, and community practices, we invite participants to generate new perspectives on how polluted urban ecosystems can be understood and addressed within the wider dynamics of rapidly transforming cities.

Goals of the Workshop

1. **Bring together key stakeholders**, including government agencies, civil society organizations, and academic institutions, to exchange knowledge **on urban waste management systems and river pollution in the Nairobi River basin**.
2. **Examine the Nairobi River as an urban ecotone and living laboratory** by conducting a **guided field excursion across key river zones**, allowing participants to observe and analyze the spatial, environmental, and socio-economic dynamics influencing river pollution.
3. **Facilitate interdisciplinary dialogue** between policy actors, community organizations, researchers, and students through **thematic discussions and panel sessions** focused on waste management systems and urban river governance.
4. **Promote comparative academic learning** by hosting **case study presentations from partner universities**, highlighting experiences and strategies related to urban waste management and river restoration in other African cities.
5. **Support student-led research and analysis** by inviting university teams to develop **concept paper presentations addressing the workshop challenge on waste management and river pollution**, to be presented and critiqued at the end of the workshop.
6. **Identify key insights and collaborative pathways** that can inform **future research, policy engagement, and interventions** related to the Nairobi River and urban waste management.

Format of the Workshop

The workshop will take place over **one week, 3rd May- 9th May 2026** at UoN Towers, University of Nairobi, Harry Thuku Road. It will bring together government officials, civil society organizations, universities, researchers, and students to explore the relationship between **urban waste management systems and river pollution** in the Nairobi River basin through the new concept of Ec(h)otone.

The format combines **policy dialogue, academic exchange, and field observation** to provide participants with both conceptual and practical insights into the challenges facing the river.

The programme will include **policy discussions with government stakeholders, engagement with civil society organizations working along the river**, and a **field excursion along key sections of the Nairobi River corridor** from **Ondiri wetlands (the source)** to downstream areas toward **Ruai**.

The workshop will also feature **comparative case study presentations** from invited universities, including the **University of Dar es Salaam** and the **University of Pretoria**, focusing on experiences with urban waste management and river restoration in other African cities.

To guide the academic discussions and student outputs, the workshop will focus on the overarching thematic question:

How can urban waste management systems be reimagined through ec(h)otone?

Participants will be encouraged to explore related questions, including the systemic factors that contribute to river pollution in rapidly urbanizing cities, the relationship between informal economies and urban waste systems, and the role of governance, planning, and designs in river/land fill restoration.

Throughout the week, participating universities will develop **short papers or presentations** addressing these questions, with the final session dedicated to **student presentations, critique, and synthesis of key insights emerging from the workshop**.

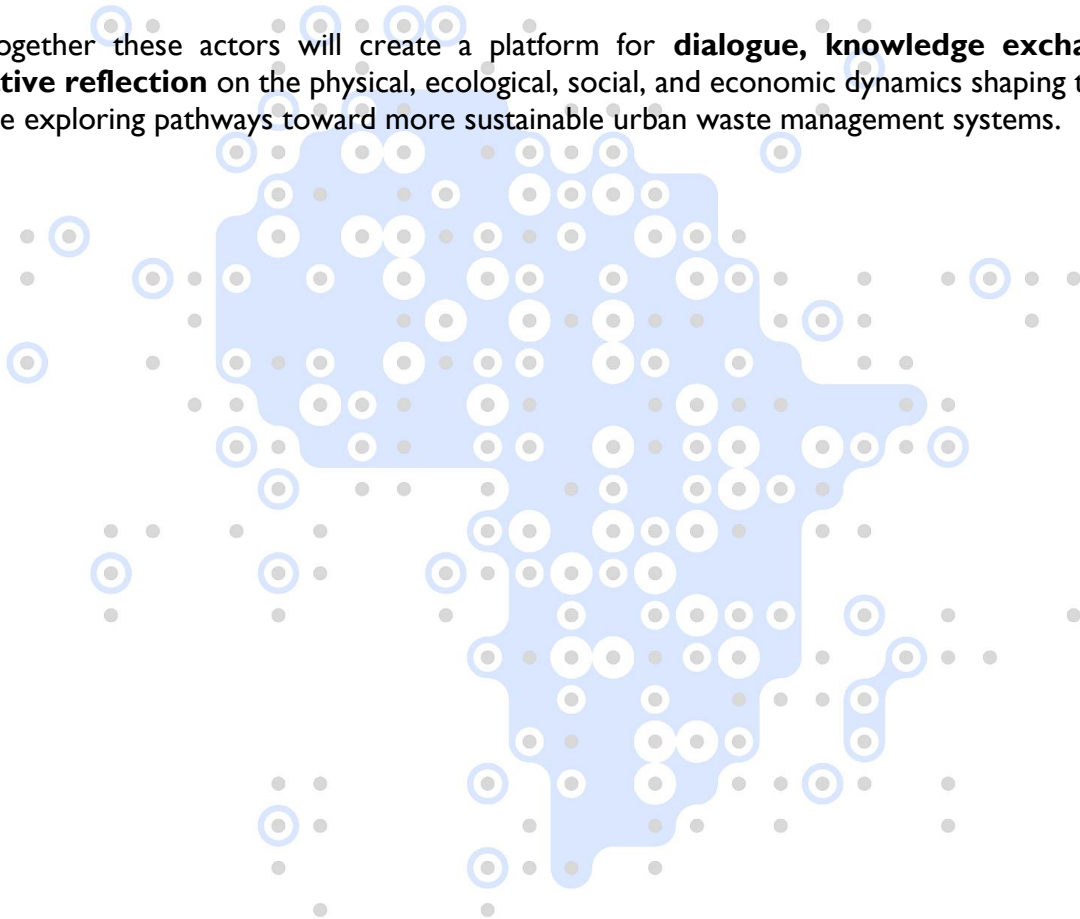
Target population

To support the exploration of urban waste management systems and their impact on urban ecologies, the workshop will bring together a diverse group of stakeholders engaged in the governance, management, and study of the Nairobi River basin.

The target audience includes **policymakers and officials from national and county governments**, particularly those responsible for urban planning, environmental management, water resources, and waste management. The workshop will also engage **researchers, academics, and university students**, who will contribute analytical and comparative perspectives on urban environmental challenges.

In addition, the workshop will involve **civil society organizations, community initiatives working along the Nairobi River, development agencies, and private sector actors**, whose work intersects with waste management, environmental conservation, and urban development.

Bringing together these actors will create a platform for **dialogue, knowledge exchange, and collaborative reflection** on the physical, ecological, social, and economic dynamics shaping the Nairobi River, while exploring pathways toward more sustainable urban waste management systems.



Detailed Programme

| 3RD MAY 2026; SUNDAY Theme: <i>Arrival and Hotel Reception</i> Venue: Hotel Boulevard, Harry Thuku Road | | |
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| 4TH MAY 2026; MONDAY Theme: <i>Research, Policy and Governance: Ec(h)otoning Urban Waste Systems</i> Venue: UoN-Towers, Harry Thuku Rd, 5 th Floor, Press Room | | |
| Time | Activity | Facilitator |
| 0800-0830hrs | Registration of Participants | SMUS-UoN |
| 0830-0900hrs | Welcome and Opening Remarks | Dean-FBED Chairman-DURP |
| 0900-1000hrs | Key note address: Possible topic: Bridging the research-policy gap in urban waste systems | Prof. Dr. Lwasa |
| 1000-1030hrs | Health break/Tea break | All |
| 1030-1130hrs | Setting the Research Context The concept of ec(h)otoning and urban waste systems | Dr. Kundani |
| 1130-1230hrs | Possible Topic: Echotoning as a method: socio-spatial research and participatory implementation in urban waste water systems | Prof. Dr.- Ing. Angela Million |
| 1230-1300hrs | Plenary Reflections and Discussion | Dr. Ambani |
| 1300-1400hrs | Lunch Break | All |
| 1400-1445hrs | Policy Dialogue I: The Nairobi River Regeneration Project <ul style="list-style-type: none"> • Intersection with urban waste systems- the Dandora landfill and trunk sewer projects | Invited Policy Representatives NRC |
| 1445-1515hrs | Policy Dialogue II: Waste Management in Nairobi: Institutional Roles, Gaps and Opportunities in Waste Management Systems | Invited Policy Representatives- NCC |
| 1515-1545hrs | Break out session: Extended Policy Dialogue III: Institutional Roles, Gaps and Opportunities in Waste Management Systems | All participants |
| 1545-1600hrs | * Micro Studio Brief: Introduction to the student workshop challenge and expected outputs | Core partners Dr. K |
| 1545-1600hrs | Tea Break | All |
| 1600-1645hrs | Group Presentations and Reflections: Extended Policy Dialogue III: Institutional Roles, Gaps and Opportunities in Waste Management Systems | Dr. Ambani |
| 1645-1700hrs | Key highlights: Conclusion on research-policy dialogue | Peer Reviewer |
| | Vote of thanks | SMUS-UoN |
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**5TH MAY 2026; TUESDAY****Theme:** *Civil Society Perspectives: Community Realities and Grassroots Responses***Venue:** UoN-Towers, Nairobi.

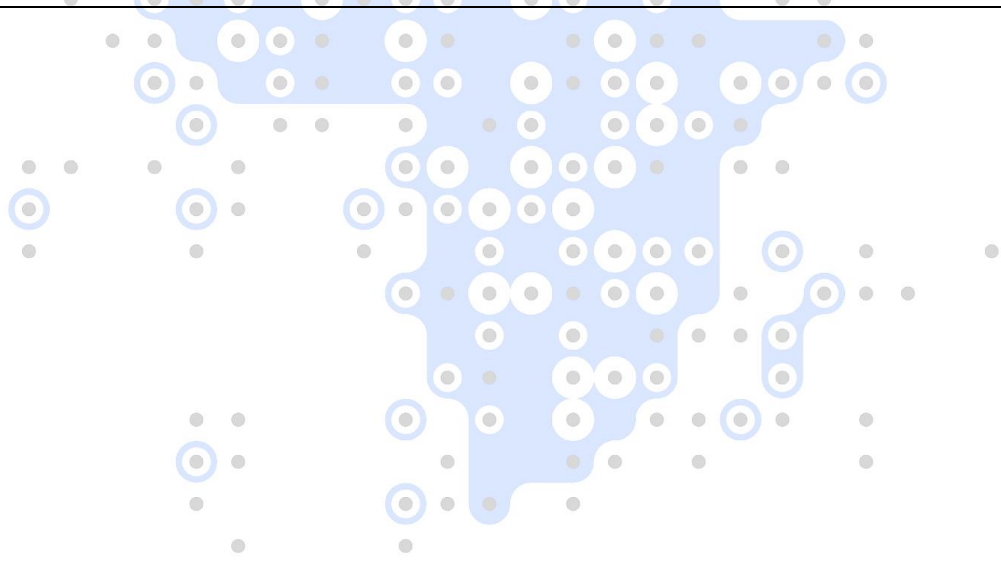
| Time | Activity | Facilitator |
|---------------------|--|---------------------------------|
| 0830-9000hrs | Registration of Participants | SMUS-UoN |
| 0900-0915hrs | Opening and Recap of Day 1 | Dr. Ambani |
| 0915-1015hrs | Intersection of Policy Actors and Civil Society Engagement on waste & River Management | KDI |
| 1015-1030hrs | Health break / Tea break | All |
| 1030-1100hrs | Community Perspectives on Urban Waste Management and River Pollution | SDI |
| 1100-1200hrs | Grassroots Innovations in Waste Management and River Restoration | Kombi Green |
| 1200-1245hrs | Plenary Reflections and discussions | Dr. Ambani |
| 1245-1400hrs | Lunch Break | All |
| 1400-1500hrs | Community champions for river restoration and environment conservation | Friends of Ondiri Swamp KECC |
| 1500-1545hrs | Breakout Session: Bridging & scaling up community-Led Solutions and Opportunities in urban waste | All |
| 1545-1600hrs | Health break / Tea break | All |
| 1600-1645hrs | Group Presentations and Reflections: finding synergies across civil society actors for upscaling grassroots creativity in waste management | Group Rep |
| 1645-1700hrs | Wrap-Up and Key Takeaways from Civil Society Engagements | Peer reviewer |
| | Vote of Thanks | SMUS-UoN |
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6TH MAY 2026; WEDNESDAY**Theme:** *Field Excursion: Understanding the Nairobi River Corridor*

Meeting Point: UoN-Towers Nairobi.

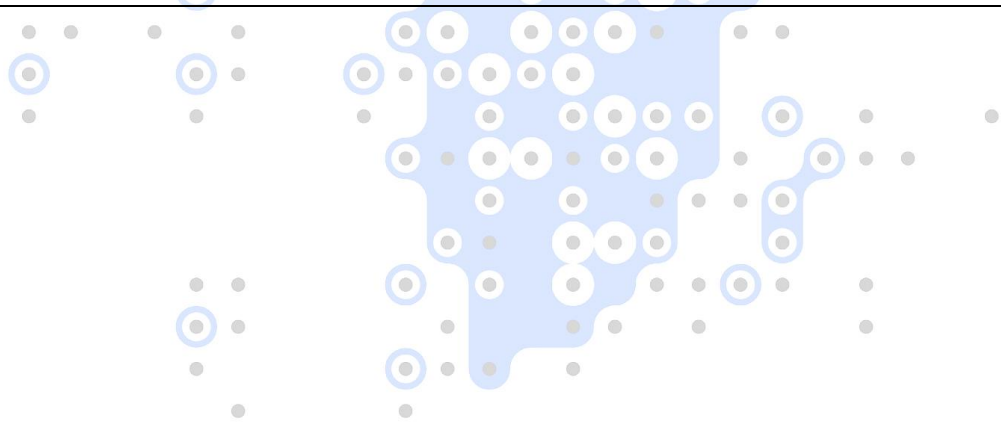
Tour guide: Josephat Karomi-Kamkunji Champions

| Time | Activity | Facilitator |
|---------------------|---|--------------------|
| 0830-0900hrs | Assembly and Briefing for Field Excursion | SMUS-UoN |
| 0900-1000hrs | Visit to Ondiri Wetlands (Zone 1) – Source of the Nairobi River | SMUS-UoN |
| 1000-1100hrs | Visit to Kawangware (Zone 2) – Informal Settlement Area | SMUS-UoN |
| 1100-1200hrs | Visit to Grogan Area (Zone 3) – Industrial and Market Activities | SMUS-UoN |
| 1200-1300hrs | Health break / Lunch break | All |
| 1300-1400hrs | Visit to Kamukunji Area (Zone 4) – Urban Residential and Market Area | SMUS-UoN |
| 1400-1530hrs | Visit to Dandora / Mathare (Zone 5) – Informal Settlements and Downstream River Segments | SMUS-UoN |
| 1530-1630hrs | Visit to Ruai (Zone 6) – River Exit Zone | SMUS-UoN |
| 1630-1700hrs | Return, Reflection and Way Forward | SMUS-UoN |
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**7TH MAY 2026; THURSDAY****Theme:** *Comparative Case Studies: Urban wastes in African Cities***Venue:** UoN-Towers, Nairobi.

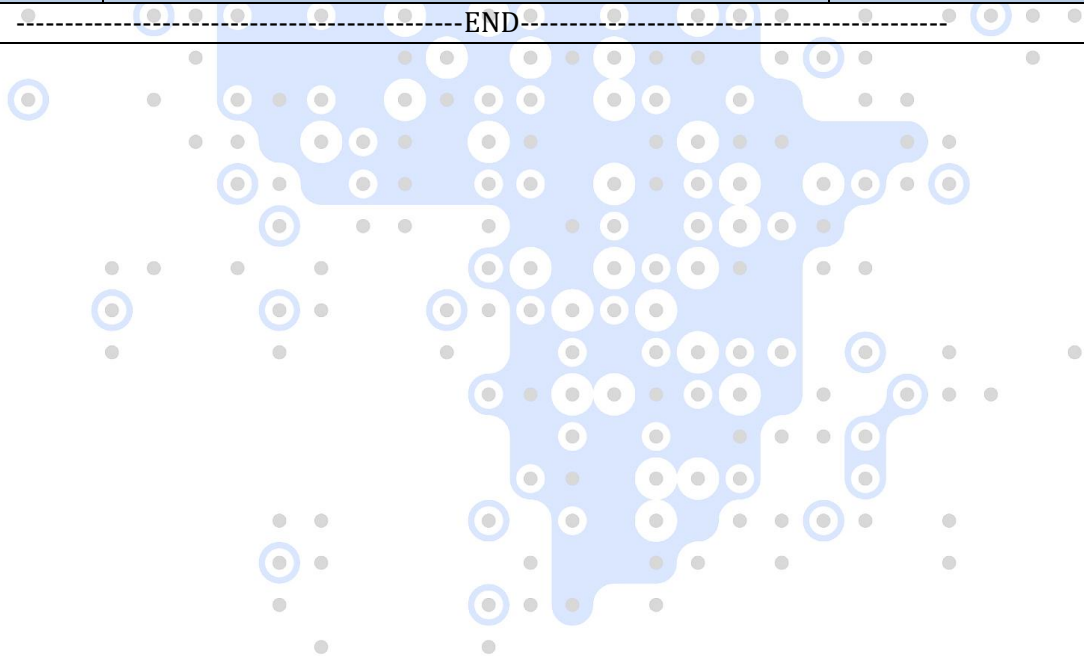
| Time | Activity | Facilitator |
|---------------------|--|--|
| 0830-0900hrs | Registration of Participants | SMUS-UoN |
| 0900-0945hrs | Role of Civil Societies on river regeneration and waste management | Public Space Network |
| 0945-1030hrs | Case Study Presentation: Bahati Affordable Housing | KU Dpt. of Architecture |
| 1030-1100hrs | Health break / Tea break | All |
| 1100-1200hrs | Case Study Presentation: Urban Waste Management in Pretoria | Dr. Kundani |
| 1200-1300hrs | Case Study Presentation: Urban Waste Management in Dar es Salaam | Dr. Frank Edward Dr. Lightness Kokwijuka |
| 1245-1400hrs | Lunch Break | SMUS-UoN |
| 1400-1445hrs | Plenary reflections on the case studies: Comparative Approaches to Urban Waste Systems and River Restoration in African Cities | ALL |
| 1445-1630hrs | Book Volume Discussion: contracts, editors and chapter contributions | Core Partners |
| 1630-1645hrs | Health break / Tea break | Facilitators |
| 1645-1700hrs | Conclusion and Way Forward | Moderators |
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8TH MAY 2025; FRIDAY**Theme:** *Synthesis and Emerging Insights, Student Presentations and Expert Critique***Venue:** UoN-Towers, Nairobi

| Time | Activity | Facilitator |
|---------------------|--|--------------------|
| 0830-0900hrs | Registration of Participants | SMUS-UoN |
| 0900-0915hrs | Overview of the Student Micro Studio | Dr. Kundani |
| 0915-1045hrs | Student Presentations: | Students |
| 1045-1100hrs | Health break / Tea break | All |
| 1100-1200hrs | Academic Critique: Feedback from in house Experts | Expert Panel |
| 1200-1230hrs | Open Discussion: Linking Student Work to Policy, Practice and Research | Moderators |
| 1230-1400hrs | Lunch Break | All |
| 1400-1500hrs | Workshop Reflections I: from theory to practise of urban waste in African cities | Prof. Lwasa |
| 1500-1545hrs | Workshop Reflections II: design thinking for urban waste and river ecosystems | Arch. Kinyua |
| 1545-1600hrs | Closing Remarks and Way Forward | SMUS-UoN |
| 1600-1630hrs | Health break / Tea break | ALL |

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9TH MAY 2025; SATURDAY

Theme: *Book Development: Synthesizing Knowledge on Urban Waste Systems*

Venue: UoN-Towers, Nairobi

| Time | Activity | Facilitator |
|---------------------|---|--------------------|
| 0830-0900hrs | Arrival and Registration of Participants | SMUS-UoN |
| 0900-0915hrs | Opening Remarks: Framing the Book and Its Purpose | Core partners |
| 0915-1000hrs | Session 1: Defining the Book Structure (Concept, Themes, and Chapters) | Core partners |
| 1000-1030hrs | Discussion: Key Narratives from Policy, Civil Society, Field Excursion and Case Studies | Core partners |
| 1030-1045hrs | Health break / Tea break | All |
| 1045-1200hrs | Thematic Breakout Sessions: Developing Chapter Content (Theory, Research, Policy Context, Case Studies) | Core partners |
| 1200-1245hrs | Group Presentations: Proposed Chapter Contributions | Core partners |
| 1245-1400hrs | Lunch Break | All |
| 1400-1500hrs | Editorial Session: Refining Key Sections and Contributions | Core partners |
| 1500-1545hrs | Final Plenary: Consolidation of Book Framework and Responsibilities | Core partners |
| 1545-1600hrs | Health break / Tea break | All |
| -----END----- | | |

