



LEARNING EVENT AND POLICY DIALOGUE

**HABITABLE FUTURES: ADAPTING POLICY IN A
CHANGING CLIMATE**

**PROGRAMME &
BOOK OF ABSTRACTS**

**17 - 18 October 2024
CSIR International Convention Centre
Crystal Room**

PROGRAMME

17 October 2024	Day 1
08:30 – 09:00	Registration and Tea
09:00 – 09:15	Welcome and Opening Remarks <i>Dr Brian Mantlana, Leader, CSIR - Holistic Climate Change - Member of the Presidential Climate Commission</i>
09:15 – 09:30	Introductions and Setting the Scene <i>Dr Sam Mc Culloch-Jones, Senior Researcher, CSIR – Water Centre and HABITABLE Consortium Member</i>
09:30 – 10:00	Presentation 1 – Climate-Migration Nexus: Policy Frameworks and the Role of Migration as a Coping Strategy - Lessons from HABITABLE <i>Dr Julia Blocher, Project Leader, Potsdam Institute for Climate Impact Research – HABITABLE Consortium Member</i>
10:00 – 10:20	Presentation 2 – Climate Change and Human Mobility: International Insights for a Resilient EU <i>Sergio Ampudia, Consultant, UNESCO – HABITABLE Consortium Member</i>
10:20 - 10:40	Q&A Session for Presentations 1 & 2
10:40 – 11:10	Tea Break & Group Photo
11:10 – 11:30	Presentation 3 – Towards a Feminist Political Ecology of Migration in a Changing Climate <i>Dr Sara Vigil, Senior Research Fellow, Stockholm Environmental Institute – HABITABLE Consortium Member</i>
11:30 – 11:50	Presentation 4 – CLARS – Harnessing Synergies for Climate Adaptation and Resilience Strategies <i>Dr Cedric Nkiko, University of Worcester – Snr. Lecturer Strategic Leadership & Organisational Behaviour</i>
11:50 – 12:10	Presentation 5 - The Role of the Circular Economy in a Habitable Future <i>Dr Lorren Haywood, CSIR – Sustainability, Economics and Waste</i>
12:10 – 12:30	Q&A Session for Presentations 3, 4 & 5
12:30 – 13:30	Lunch Break
13:30 – 15:30	Dialogue Day 1 <i>Facilitator: Dr Sam Mc Culloch-Jones, Senior Researcher, CSIR – Water Centre and HABITABLE Consortium Member</i>
15:30 – 15:45	Tea break
15:45 – 16:00	Plenary Discussion and Closure of Day 1

18 October 2024	Day 2
09:00 – 09:15	Recap Day 1 and Setting the Scene
09:15 – 09:35	<p>Presentation 6 – Migration, Movement, and Choice Behaviour in Accessing Land Markets and Shelter in African Cities</p> <p><i>Dr Mark Napier, Principal Researcher, CSIR - Inclusive Smart Settlements and Regions</i></p>
09:35 – 09:55	<p>Presentation 7 – Evidence-Based Adaptation through the Application of the Greenbook</p> <p><i>Willemien van Niekerk, Principal Researcher, CSIR - Inclusive Smart Settlements and Regions</i></p>
09:55 – 10:15	Q&A Session for Presentations 6 & 7
10:15 – 10:35	Tea Break
10:35 – 10:55	<p>Presentation 8 – Mainstreaming Adaptation into Planning and Settlement Design</p> <p><i>Amy Pieterse, Senior Researcher, CSIR - Inclusive Smart Settlements and Regions</i></p>
10:55 – 11:15	<p>Presentation 9 – National Coastal Adaptation Response Plan: People and Communities on the Coast</p> <p><i>Dr Michelle Audouin, Senior Researcher, CSIR – Biodiversity and Ecosystem Services</i></p>
11:15 – 11:35	Q&A Session for Presentations 8 & 9
11:35 -13:00	<p>Dialogue Day 2 – Session 1 & 2</p> <p><i>Facilitator: Dr Sam Mc Culloch-Jones, Senior Researcher, CSIR – Water Centre and HABITABLE Consortium Member</i></p>
13:00 – 13:45	Lunch Break
13:45 – 14:30	Dialogue Day 2 Cont. Session 3
14:30 – 14:45	Tea Break
14:45 – 15:30	Panel Discussion
15:30 – 16:00	Closing Remarks and Future Directions

Presentation Abstracts

DAY 1

Presentation 1

Climate-Migration Nexus: Policy Frameworks and the Role of Migration as a Coping Strategy - Lessons from HABITABLE

[Dr Julia Blocher](#), Project Leader, Potsdam Institute for Climate Impact Research – HABITABLE Consortium Member

Abstract

The project “HABITABLE - Linking Climate Change, Habitability and Social Tipping Points: Scenarios for Climate Migration”, funded by the EU Horizon 2020 programme, seeks to significantly advance our understanding of the current interlinkages between climate change impacts and human mobility (displacement, migration, and planned relocations). Enhanced understandings of mobility patterns allow governments and their partners to better anticipate their future evolution as well as to develop policies to minimize risks and help people on the move. HABITABLE also looks at the impacts of existing policies and legal options on the climate-migration nexus and assesses how effective past and current responses have been.

After a presentation of the HABITABLE project objectives and approach, this presentation presents the results of a legal and policy mapping for climate-induced human mobility, with specific attention to frameworks relevant to South Africa. The methodology for this mapping was designed to contribute to the co-production of strategic policy recommendations to address climate-induced human mobility. With this context, some empirical findings from the HABITABLE project are presented, including the results of semi-structured interviews with migrant households in climate-affected areas.

Keywords: Climate change, Human mobility, Migration policy, South Africa, Legal frameworks.

Presentation 2

Climate Change and Human Mobility: International Insights for a Resilient EU

[Sergio Ampudia](#), Consultant, UNESCO – HABITABLE Consortium Member

Abstract

This event will present the report titled “*HABITABLE Futures: Promoting Mobility in the Context of Climate Change Disasters and Environmental Policies in the EU*”, which examines the complex relationship between climate change, migration, and human mobility, with a focus on

the European Union. The report emphasizes the need for coordinated, human rights-based strategies to manage climate-induced migration, advocating for policy integration at international, regional, and national levels. It also provides 25 key strategic recommendations, highlighting the need for the EU to adopt a holistic approach that integrates legal reforms, protection mechanisms, and financial support systems across all governance levels. The primary goal is to ensure that migration policies are aligned with human rights standards and contribute to sustainable development, resilience, and climate justice.

Keywords: Human mobility, Climate change, European Union, Policy integration, Human rights-based strategies.

Presentation 3

Towards a Feminist Political Ecology of Migration in a Changing Climate

[Dr Sara Vigil](#), Senior Research Fellow, Stockholm Environmental Institute – HABITABLE Consortium Member

Abstract

Research on climate and migration interactions has greatly evolved from environmentally deterministic explanations to more sophisticated and complex accounts of human (im)mobilities in a changing climate. Despite acknowledging gender and social inequalities as key factors shaping vulnerability and resilience, the multi-scalar power relations influencing human (im)mobility in the context of climate change have been underestimated. This paper argues that a feminist political ecology of migration can enhance our understanding of the gender and social inequities embedded in the climate-migration nexus by conceptualizing power relations across different scales in our world economy. Through a critical review of the literature, this paper highlights the ways in which a feminist political ecology approach can help unpack the power differentials that shape climate and migration interactions. The paper concludes that a more nuanced understanding of power relations across different scales is crucial for both advancing the conceptual understanding of the complex nexus between climate, migration, and inequality, and addressing the root causes of these challenges.

Keywords: Migration, Climate change, Feminist political ecology.

Presentation 4

CLARS – Harnessing Synergies for Climate Adaptation and Resilience Strategies

[Dr Cedric Nkiko](#), University of Worcester – Snr. Lecturer Strategic Leadership & Organisational Behaviour

Abstract

This presentation examines the synergies between climate migration projects and climate adaptation and resilience strategies, focusing on climate-induced socioeconomic vulnerabilities (SEVs). We highlight collaborative efforts from the EU-funded HABITABLE project, the NFRFI-funded CLARS project, and CSIR Smart Places, emphasizing the intersections between climate change adaptation and migration.

The CLARS project enhances research and innovations from the Lake Victoria basin and the Great Lakes Region/s, integrating migrant communities into climate resilience planning. This approach promotes the sharing of successful interventions and lived experiences, shifting the traditional North-South knowledge transfer paradigm to more inclusive South-North and South-South exchanges.

We will provide insights into how these projects address SEVs by fostering resilient, inclusive, and sustainable communities. Using case studies and collaborative frameworks, we will discuss developing future climate change adaptation policies informed by on-the-ground realities and cross-regional cooperation. Additionally, we will explore how these collaborative efforts can advance our understanding and policy implementation, identifying research gaps for future collaboration using already identified research funding streams.

Keywords: Climate adaptation, Resilience strategies, Socioeconomic vulnerabilities, Migration, Collaborative frameworks, Policy development.

Presentation 5

The Role of the Circular Economy in a Habitable Future

[Dr Lorren Haywood](#) CSIR – Sustainability, Economics and Waste

Co- Authors: Benita de Wet, Dr Suzan Oelofse

Abstract

The circular economy is often conflated with recycling, particularly of plastics. However, it is based on a holistic concept of circularity, where products and the materials they are made of, never become waste, but maintain their economic value and utility through maintenance, reuse, refurbishment, remanufacturing, recycling, and composting. Toxic or damaging materials are replaced with benign materials, beneficial to humans and other life forms. Materials and

resources in the existing growth economy which can be incorporated into circular economy include plastics, food waste, construction materials, chemicals, water, and electronics, to name a few. By reducing waste and pollution, and contributing to cleaner air, water, and land the approach can significantly improve habitability thereby supporting thriving human communities and natural ecosystems.

Keeping materials and products in use for longer at their highest value, reduces the need for virgin resource extraction, lowering energy consumption and greenhouse gas emissions. Over time, this will contribute to climate change mitigation, reducing extreme weather events, heatwaves, and rising sea levels, all of which threaten the habitability of human settlements and the natural ecosystems on which they depend. The circular economy can bolster the resilience of communities by creating livelihoods in local production, repair industries, and waste management, reducing dependence on global supply chains and strengthening local economies. This in turn enhances people's capabilities for adaptation to environmental and economic challenges. Circular economy principles can also be used to design cities that minimise waste, optimise resource efficiency, and utilise sustainable materials. Green infrastructure, such as energy-efficient buildings and sustainable transport systems, can significantly improve the habitability of cities. Radically shifting away from our current linear economy towards that of a circular economy fosters opportunities in which human societies can transition and flourish in a more sustainable and equitable future.

Keywords: Circular economy, Sustainability, Waste reductions, Climate change mitigation, Resilience.

DAY 2

Presentation 6

Migration, Movement, and Choice Behaviour in Accessing Land Markets and Shelter in African Cities

[Dr Mark Napier](#), Principal Researcher, CSIR - Housing and Urban Studies Research Group, CSIR Smart Places

Abstract

Migration and movement patterns in and across southern African cities and towns often reflect a complex interplay of vulnerabilities and opportunities, with moving and displaced populations navigating various risks and promises in their quest for safer living conditions and access to economic opportunities. This presentation delves into the intricacies of residential mobility and land access in these urban contexts, examining how individuals make housing decisions and interact with land markets amidst shifting circumstances. By employing established theoretical frameworks and research methods, the study explores what conditions are needed to enhance the ability of urban areas to accommodate newcomers effectively, providing secure land, adequate shelter, and sustainable livelihoods.

The discussion integrates insights from well-regarded academic concepts and methods including access to urban land markets, housing adjustment, housing careers, and residential mobility. Through an examination of a set of case studies, the presentation explores what theoretical frameworks and research methods may be used to better understand residential choice-making behaviour.

Drawing from a range of disciplines, from architecture to geography to property economics, the presentation provides an overview of theoretical frameworks that can add to our understanding of complex dynamics and inform practical interventions to improve urban resilience and sustainability in the face of evolving migration trends. These methods and case studies address the unique contexts of southern African cities and towns.

Keywords: Migration, Land markets, Urban resilience, Residential mobility, Choice behaviour.

Presentation 7

Evidence-Based Adaptation through the Application of the Greenbook

[Willemien van Niekerk](#), *Principal Researcher, CSIR - Inclusive Smart Settlements and Regions*

Abstract

The GreenBook is an open-access planning support system designed by the CSIR to help South African local municipalities better understand their risks and vulnerabilities related to climate change, population growth, exposure to hazards, and resource scarcity. It provides detailed, spatially explicit risk profiles for every municipality in South Africa, offering a clear understanding of both current and future (2050) climate risks, such as floods, droughts, wildfires, coastal flooding, and temperature extremes. The GreenBook also proposes actionable adaptation measures aimed at minimising the impact of these hazards on communities and infrastructure, while simultaneously supporting developmental goals.

By integrating scientific evidence, data analytics, and geoinformation, the GreenBook enables municipalities to adopt adaptation measures based on reliable data. Its two key objectives are to serve as a comprehensive repository of climate risk, demographic, and adaptation information, and to be mainstreamed into local government planning processes. This is achieved by addressing the need for credible, accessible data, maps, and insights that can be seamlessly integrated into planning instruments. In this presentation, the practical application of the Municipal Risk Profile Tool and the Adaptation Action Tool – central features of the GreenBook – will be demonstrated.

As an evidence-based tool, the GreenBook provides municipalities with essential information and resources to assess risks and develop climate-adaptive settlements. The GreenBook thus contributes significantly to local government planning and the broader effort to create climate-resilient settlements in South Africa.

Keywords: Greenbook, Climate resilience, Municipal risk profile tool, Adaptation action tool,

Evidence-based planning.

Presentation 8

Mainstreaming Adaptation into Planning and Settlement Design

[Amy Pieterse](#), Senior Researcher, CSIR - Inclusive Smart Settlements and Regions

Abstract

Climate change adaptation mainstreaming is recognised as a key strategy to ensure that cities practice adaptation for long-term sustainability and resilience, additionally, it is widely recognised that adaptation should drive transformation and address structural causes of vulnerability. Mainstreaming transformative adaptation into municipal planning requires collaboration across sectors, and a shift in mindsets and approaches to both planning and climate change adaptation. Despite climate change adaptation mainstreaming being recognised as an approach to deal with the compounded effects of developmental challenges and climate change and to facilitate transformation; how to go about mainstreaming, the factors that influence the process, and what the challenges and opportunities are for transformative adaptation are, are not well understood. This presentation offers insight into how local government can mainstream climate change adaptation into municipal planning processes, and into the institutional conditions that could enable transformative adaptation in local government.

Keywords: Mainstreaming, Climate change adaptation, Resilience, Municipal planning.

Presentation 9

National Coastal Adaptation Response Plan: People and Communities on the Coast

[Dr Michelle Audouin](#), Senior Researcher, CSIR – Biodiversity and Ecosystem Services

Co-Authors: Dr Melanie Luck-Vogel, Amy Pieterse and Benita de Wet

Around 40% of the South African population lives within 60km of the ocean, with projections that this will increase. Coupled with the effects of climate change (e.g. storms, floods, droughts and wildfires) greater exposure of communities to climate-related hazards can be expected. The extent of such exposure is dependent on numerous factors including settlement location, socio-economic factors and the effectiveness of disaster management. To enable effective responses to climate hazards, the Department of Forestry, Fisheries and the Environment (DFFE) is leading the development of a Climate Adaptation and Response Plan (CARP), funded by GIZ and drafted by the Council for Scientific and Industrial Research (CSIR). The draft CARP presents tangible recommendations for South Africa's coastal sector on responding to local climate risks in the context of the Integrated Coastal Management Act, the National Climate Change Adaptation Strategy and the Climate Change Act. These recommendations are presented

according to five main 'elements', one of which relates to communities on the coast, which is the focus of this presentation. Climate threats to coastal populations include injuries and loss of life, physical and psychological human health impacts and displacement and loss of property and livelihoods. Interventions will be presented to achieve three main outcomes for coastal communities namely: increased resilience to the impacts of climate change; increased awareness around the potential impacts of climate change and effective adaptation measures and the implementation of effective measures for disaster risk reduction and response.

Keywords: Coastal adaptation, Resilience, Disaster risk reduction, Coastal communities.

Panel Discussion Team

Suzan Oelofse

CSIR Principal Researcher, Integrated Waste Management



Suzan is a Principal Researcher at the CSIR, specializing in integrated waste management. Her work focuses on the institutional and legal frameworks for waste management in South Africa, as well as improving waste information and data. She also explores ways to reuse industrial waste streams, reduce environmental impacts, and address food waste, supporting South Africa's transition to a circular economy.

Sergio Ampudia

UNESCO, Master of Public Policy



Sergio is a dedicated Sustainable Development Consultant with a rich background spanning various sectors, including international organizations, government, and civil society. Over the past decade, he has worked on a range of impactful projects, from advancing sustainability initiatives across Latin America and the Caribbean with the OECD to promoting transparency and access to information in Mexico. His passion for sustainable development is also evident in his leadership role with COPARMEX Mexico City and as the founder of PROCNIE A.C., where he championed renewable energy projects. With a deep understanding of policy, finance, and sustainability, Sergio brings a unique and global perspective to development challenges.

Anton Earle

ICLEI Africa, Global Coordinator: Water systems

An environment and development professional, Anton Earle leads teams in water management and development internationally, facilitating the interaction between governments, civil society, the private sector and other stakeholders for risk-reduction for investments in climate-resilient development. He is experienced in governance and institutional formation for water management at the inter-state level in Africa, the Middle-East and East Asia. His current position is ICLEI's Global Coordinator of Water Systems.



Hayley McKuur

National Department of Human Settlements (DHS), Deputy Director Policy Development

Hayley has over 23 years of international and local experience working in the infrastructure, housing and human settlements sectors. She is currently working in the National Department of Human Settlements in policy development. Her role involves conducting research into new policy direction for the housing and human settlements sector.

