

WINDHOEK CITY DIGEST

Highlights



LEARNING LABS | Participants Identify Burning Issues



Above: Participants at the Windhoek First Learning Lab | Photo: Laura Burgin

FRACTAL in Windhoek kicked off with the [Windhoek First Learning Lab](#) which brought together a diverse range of stakeholders that identified two key burning issues in Windhoek as (i) Water insecurity; and (ii) Inadequate services in informal settlements (water, sanitation & energy). The Windhoek

First Learning Lab took place on the 14th and 15th March 2017 at Heja Lodge with 37 participants and 33 participants respectively. Honourable Mrs. Sophia Swartz, a member of the National Parliament, was in attendance and actively participated. The **FRACTAL Windhoek Second**

Learning Lab took place on 31st October 2017 at Heja Lodge with 40 participants in attendance.

The Second Learning Lab was designed for City Officials and focused on the proposed City of Windhoek's Climate Change Strategy

and Action Plan, the development of which is being led by City's Climate Change Desk in the Environmental Management Division. One key outcome is for FRACTAL Project to host the "Transformational leadership on climate change" training for the City's decision makers.



Above: Participants at the Windhoek Second Learning Lab | Photo: Yadah Media Group

RESEARCH | Climate Risk Narratives Developed

The [*Windhoek Climate Risk Narratives*](#) were developed and further co-produced (i.e. iterated by scientists and city stakeholders) in the Windhoek First Learning Lab. Climate risk narratives are an approach developed by FRACTAL to generate and communicate information about future changes to the climate and the city in an engaging and relatable way.

They translate findings from multiple complex analyses and graphs into a story of what the climate and its impacts on a city could be like in 2040. The three draft Windhoek Climate Risk Narratives are:

- (1) Much hotter with a drier rainy season;
- (2) Hotter with more rainfall later in the rainy season; and
- (3) Warmer with similar rainfall.

WORKSHOP | Awareness Workshop for City Councillors

A ***Climate Change and Decision Making Awareness Workshop for Windhoek Councillors*** took place on 17th July 2017 at

Heja Lodge. The workshop was attended by the Mayor of Windhoek, Mr. Muesee Kazapua, five City of Windhoek Councillors

and two Windhoek Constituency Councillors. The workshop was jointly facilitated by the City of Windhoek; University of Namibia; Ministry of Environment and Tourism; Namibia Meteorological Services; and decisions; for their early involvement in policy development; and for climate scientists to prepare and share simplified

ThinkNamibia Environmental Awareness and Climate Change Project. The Councillors recognized the need: to revisit environmental related policies in order to make informed climate sensitive versions of climate change related policy. [Articles for the awareness workshop for Windhoek Councillors.](#)



Above: Group photo from the Windhoek Councillors awareness on climate change and decision making workshop | Photo: Elise Nghalipo

RESEARCH | Windhoek Urban Governance Research

Windhoek Urban Governance Research explored the link between urban governance arrangements, decision making and climate change issues. The face to face interviews took place from 14th August – 31st August 2017 with a total of 32 respondents participating. Initial draft highlights of the research are:

- The City of Windhoek has four levels in the decision-making process namely Full Council, Management Committee, Strategic Executive Forum and Departments. The first two mainly take decisions while the latter recommend decisions.

- The commercialisation of water and energy means that decision-making on the two sectors is a shared responsibility between the City of Windhoek and national entities, notably NamWater and NamPower.

- The City of Windhoek is autonomous in terms of taking city-level decisions and government interference in city decision-making is minimal.

The preliminary report is available: [Windhoek Urban Governance Preliminary Findings](#). Further analysis will be undertaken.

CITY EXCHANGES | Harare and Lusaka team visits

Dr. Chipso Mubaya and Dr. Mzime Ndebele-Murisa from Chinhoyi University of Technology (CUT) visited Windhoek from the 20th to the 23th of August 2017. The [Harare FRACTAL Team visit to Windhoek](#) was aimed at looking at both passive and active adaptation management strategies of Windhoek in order to compare the risks and vulnerabilities in the energy and water sector with Harare.

The **Windhoek-Lusaka City Exchange Programme** funded by FRACTAL's Small Opportunity Grant took place 16th-17th October 2017 in Lusaka and 02nd-03rd November 2017 in Windhoek. Participants for the exchange included a Councillor from City of Windhoek (Honourable Mrs. Agata Iiyambo), three technical City of Windhoek officials (Ms. Charmaine Mwilima, Ms. Zelda

Scheepers and Ms. Grazy Tshipo), two Directors from Lusaka City Council (Mr. Maliwa Muchuu and Mr. Godwin Chinoya) and the Principal Investigators and Embedded Researchers from both cities. Site visits in Lusaka included the Kafue River, Lilayi Shaft 5 abstraction borehole and Kalikiliki informal settlement. Whilst in Windhoek, the Goreangab Wastewater Reclamation Plant, Havana informal settlement, and artificial aquifer recharge borehole were visited. On the second day discussions were held on water & climate change related issues in both cities.

Ms. Brenda Mwalukanga stated that "the population of Windhoek is on average equivalent to one settlement in Lusaka. That was something that struck me" in the [Windhoek-Lusaka City Exchange Programme Blog](#).



Above: Group photo from the Windhoek-Lusaka City Exchange programme at the City of Windhoek | Photo: Martin Shikongo

RESEARCH | Water Security and Infrastructure Decisions

A burning question ***"What climate information is needed for infrastructure design in Windhoek?"*** from the First Learning Lab was further researched by FRACTAL team. The [Walker et al Paper](#) demonstrated that it is critical to review the conventional design standards for critical water infrastructure to reduce risk in the face of climate change. The paper was presented at the 18th WaterNet/WARFSA/GWP-SA Symposium that took place on 25th-27th October 2017 in Swakopmund, Namibia.

The ***"Water Security in Windhoek: governance, water demand and supply, and livelihoods in the context of urbanization"***

and climate change" research is funded by the SysTem for Analysis, Research and Training (START) through the Global Environmental Change (GEC) Programme. The researchers are from the University of Namibia (Prof. John Mfuno, Prof. Lawrence Kazembe, Dr. Ndeyapo Nickanor), UNAM Multidisciplinary Research Centre (Dr. Earl Lewis) and NamWater (Mr. Johannes Sirunda). Preliminary results have been presented at the Windhoek Second Learning Lab and at the 9th Ecosystem Services Partnership Conference in China for a paper session (11-15 December 2017). The authors are busy drafting a paper for publication.

Ongoing Content Analysis for City of Windhoek documents related to water, energy and climate change.

TRAINING | Water Evaluation and Planning System (WEAP)

"Water Evaluation and Planning" system (WEAP) Online Training funded by FRACTAL took place on 28th -30th November 2017. The WEAP model is a software tool that takes an integrated approach to water resources planning. The Windhoek beneficiaries were

Ms. Charmaine Mwilima, Ms. Zelda Scheepers both from City of Windhoek, Mr. Johannes Sirunda (NamWater), Ms. Tertu lileka (Windhoek START GEC Research Assistant) and Ms. Kornelia Ipinge (Windhoek Embedded Researcher), among other participants.

FINAL WORD

| The City of Windhoek and City of Bremen in Germany have joined in a ***"Windhoek-Bremen Climate Partnership Project"***.

| ThinkNamibia launched a Project on the ***"Promoting Renewable Energies in Namibia"*** (PREN). The PREN Project will focus on promoting and raising awareness on renewable energies and resource efficiency in Namibia within the context of climate change mitigation and adaptation.

| The Development Workshop launched a book on [Informal settlements in Namibia:](#)

[their nature and growth.](#)

| The Southern Times Newspaper for Southern Africa and the Ministry of Environment and Tourism hosted an International Climate Change Conference on 12 October 2017 in Windhoek. <http://www.sasscal.org/?p=1742>.

| The Council for Scientific and Industrial Research (CSIR) and Kulima have launched the second edition of the [Climate Risk and Vulnerability Handbook for southern Africa 2017](#).

Did you know?

- That diversification of bulk supply of renewable energy generation and alternative water supply are key performance areas in the City of Windhoek's Transformational Strategic Plan for 2017-2020.
- The City of Windhoek has started its process of developing a City's Climate Change Strategy and Action Plan and the Renewable Energy Policy.

EVENTS

13-14 March | Stakeholder workshop for the proposed City of Windhoek's Climate Change Strategy and Action Plan

April | Third FRACTAL Learning Lab

April | City of Windhoek's Transformational Leadership on Climate Change

18-21 June | Adaptation Futures 5th

International Climate Change Conference in Cape Town, South Africa (see <http://adaptationfutures2018.capetown/>)

31 October - 2 November | 19th WaterNet/WARFSA/GWP-SA Symposium

FRACTAL

Future Resilience for African Cities and Lands (FRACTAL) is a trans-disciplinary group of researchers from partner organisations around the world. Together with a broad range of stakeholders, they are working to co-produce relevant knowledge that will support resilient development pathways and enable decision-makers to better integrate pertinent climate knowledge into their resource management decisions and urban development planning. FRACTAL is a four year project within the multi-consortia [Future Climate for Africa](#) (FCFA) programme - jointly funded by the UK's [Department for International Development](#) (DFID) and the [Natural Environment Research Council](#) (NERC).

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