

# Fourth Lusaka Learning Lab Report



Chamba Exotic Valley Motel, Lusaka, Zambia | 17-19th March 2018





The meeting began with welcoming remarks and introductions different institutions such as government ministries and agencies, NGOs, and Community leadership. Among those present included Lusaka water and Sewage Company, Lusaka City Council, Lusaka Water Security Initiative, Zambia Environmental and Management Agency, Disaster Management and Mitigation Unit (DMMU), WARMA, NWASCO, grass root community federation, GIZ, Climate System Analysis team from University of Cape Town and University of Zambia.

#### **AIM**

The main aim of the fourth Learning Lab (LL) was to explore some of the key issues identified in the third Learning Lab that would form a series of policy briefs. The two key issues that were instigated and finalised with stakeholders through learning dialogue were ground water abstraction and water quality. This formed the basis for the LL in line with FRACTAL's main aim: to advance scientific knowledge about regional climate response to human activities aimed at working with decision-makers and to integrate this scientific knowledge into climate-sensitive decisions at the city-regional level.

## **DAY 1 | Activities**

The first part of the programme ran from 17-19 March 2018. The second part of the programme, which involved key stakeholders, continued until 21 March. On the first afternoon, the programme included mutual introductions, expectations, awareness, anxieties and knowledge sharing among others. This was done in an open space through an interesting game. The game was coordinated by Bettina Koele, and was followed by dinner.



Figure 1: Expectations of Learning Lab participants

Throughout the programme, activities were collaborative and interactive, and all members present actively participated. The programme was coordinated by Bettina and began with welcoming remarks by Dr. Gilbert Siame, who made introductions, recapped the key issues based on the previous LL, and reported on the FRACTAL project's progress.

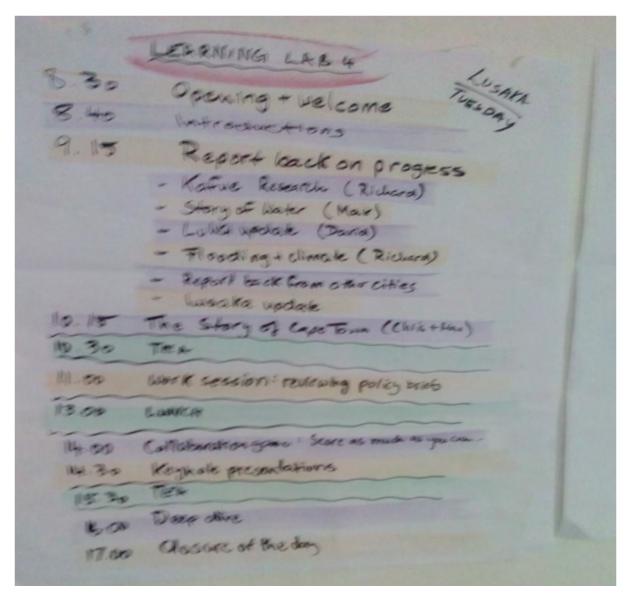


Figure 2: FRACTAL programme, Day 1

# **Opening Remarks**

Dr. Siame, Director at the Centre for Urban and Regional Planning at the University of Zambia is also part of the FRACTAL team. He officially opened the fourth Lusaka LL by first thanking all the invited guests for their efforts to attend the LL events. He further stressed that issues of underground water quality are cardinal and require a concerted effort from all stakeholders to find lasting solutions. Dr. Siame emphasised that the FRACTAL project needs to sustainable contributions to issues of flooding, underground

water security to ensure future preparedness in the city of Lusaka. In addition, he hoped that the fourth LL would strive to make submissions of statutory instruments on groundwater abstraction and what it means from the climatic perspective in Lusaka. In his opening remarks, Dr. Siame mentioned important areas of research that FRACTAL has been involved with, including;

- Understanding the extent to which and how the city engages with the question
  of climate and climate change through discourse analysis of city and policy
  documents such as the Lusaka Master Plan, strategic plan, slum upgrading
  strategy and several other documents that guide the city's planning decisions.
- Trying to identify gaps in terms of policy, areas of emphasis in terms of the city, decisions and other related programmes.
- Innovative projects on climate change, decisions and their impact on water security
- Two postgraduate students at the University of Zambia are currently carrying out separate research: one student is answering a question on water governance in the informal settlements in Lusaka and the other student is looking at determinants of water security at a community level in the city, and considering how the communities are coping.

Dr. Siame thanked Brenda Mwalukanga, FRACTAL Embedded Researcher at the Lusaka City Council and the University of Zambia, for her credible work in the preparation of all necessary FRACTAL arrangements for the LL. Dr. Siame later urged all members present to actively engage effectively and participate in the LL. He further apologised for the abrupt change of venue, which was initially scheduled to be held at Chaminuka lodge but later shifted to Exotic Valley Motel, citing logistical problems.

## **Kafue Bulk Water Project**

by Richard Jones

The key issues that came out were;

- Recognising key infrastructure systems on the supply of water is important
- Kafue water project is an important part to consider when citing a city.
- Understanding the declining levels of water in Kafue would help mitigate sustainable interventional action measures in water security in Lusaka.
- Need to get the latest information on the future projections of population growth and land use which can incorporate future impacts on the Kafue e.g. impacts of land use projects on Kafue.

## **Cape Town Story**

A recap on the burning issues identified in the first LL and the identification of a vision for going forward and for deeper exploration in the second LL and how this resulted in the formulation of a series of policy briefs in the third LL was done respectively. The event was followed by a presentation on what is happening in Cape Town to get an insight of deeper understanding of how climate change has affected underground water in the area. The presenter analysed climate change patterns in Cape Town for a period

of over 100 years (1914-2014) and discussed what this drought means for the economy - commercial and domestic consumptions such as agriculture, employment security for people working in farms, and urban areas.

Key issues and lessons that came out from Cape Town included;

- Reduction in the water consumption in both commercial and domestic usage
- Introduction of intervention strategies such desalination of contaminated water using other technology
- Creation of dams for water storage
- Municipalities and local people working together
- Cleaning of small rivers to prevent clogging
- Durban community mobilisation in checking the drainage by working together with other stakeholders

Later reflections on the lessons and impacts of the drought happening in Cape Town and how it has affected the livelihoods were discussed in the context of water security concerns in Lusaka city through questions, concerns, and remedies.

## **Water Story**

by Maximillian Leighton

Maximillian gave a brief presentation on water from the perspective of the city of London in relation to what is happening in Cape Town and key issues that came out included:

- Water is quite beneficial to recipients such as humans and other living organisms
- Need to employ sustainable usage of water techniques that should ensure water security
- Need to have a sense of duty on water consumption
- Need to ignite change in behaviour in underground water

## **Lusaka Water Security Initiative (LuWSI)**

by David Nonde Mwamba

Lusaka Water Security Initiative:

- Has a governance structure with a steering board
- Has a multi-stakeholder partnership with other stakeholders with projects such as the wall field protection around Shaft 5
- Awareness and education campaign with LCC, MCA, UNICEF, and Zambian Breweries
- Relationship between LuWSI and FRACTAL is successful
- GIZ is co-financing a Water Security and Action Plan
- It is also empowering a Planning Process Plan
- Stakeholders to be involved in planning, support and implementation phases
- Work package to include the following:
  - 1. Design
  - 2. Technical assessment

- 3. Categorising groundwater
- 4. Social and economic analysis
- 5. Develop the plan and implementation process

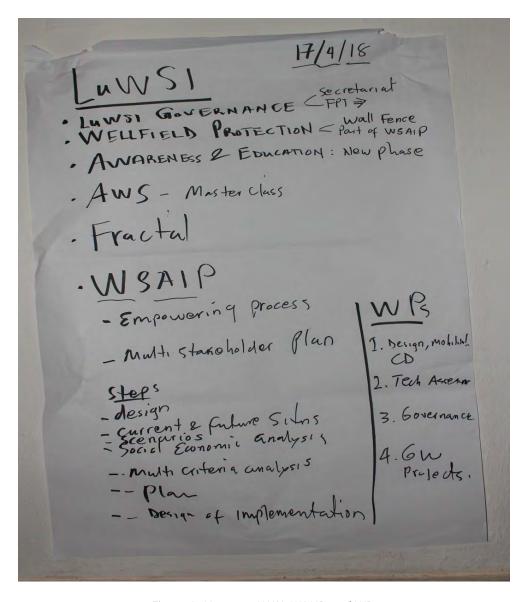


Figure 3: Notes on LWSI, WSAIP and WPs

#### Reflections

- Application of small opportunity grant
- Need for transformative approach
- Training transformative leadership

## Negotiation and performance interactive activity

The group was divided into four groups, group A, B, C and D using simple random sampling. This was followed by an interesting game that involved picking cards of their own colour by representatives of each group and tallying them in accordance with the requirements or conditions stipulated on the flip charts. Group A scored high points

followed by Group B, C and then Group D. The key point of the activity was to show how interactive activities and negotiations should be done during a policy presentation. The lessons and reflections learnt were that it is important to:

- Consult and deliberate deeply about issues through collaboration before making any decision and to show that all group members are important and can play an important role if well engaged
- It is important to understand the bigger purpose by knowing why and whom are we negotiating for
- It is better to maintain transparency when making negotiations
- Collaboration is easy, and it can be done
- Collaboration is difficult, but it can be done

# **Water Resource Management Authority (WRMA)**

The report on groundwater legislation was made with emphasis on the following points:

- Three statutory instruments issued by the government in March 2018 include;
  - 1. Fees and charges, statutory instrument of No. 18 of 2018
  - 2. Licenses of drillers and other construction of water boreholes, statutory instrument of No. 19 of 2018 that should protect the water resource provide conditions for who and how ground water should be extracted
  - 3. Groundwater and borehole regulations a person drilling a borehole must have a licence
- Ground and surface water is finite and needs to be protected.
- Groundwater is now classified as a public resource which requires regulations
- Classification of categories:
  - 1. Class A high tech drilling companies, at least four cargo trucks, two hydrologists
  - 2. Class B One hydrologist, two supervisors, two drilling reeds k20000 per year
  - 3. Classes C and D are left to Zambians to participate hire or have at least one drilling reed; K10000 renewed every year
- Capacity development for the drillers
- It is now law that one must apply for drilling a borehole it is a criminal offence to drill without approval
- Currently there are 150 applications for drilling boreholes
- 50 applications have been approved

# Lusaka City Council (LCC) Peri-urban

A report was given by an LCC representative and among the key issues that emerged included;

- LCC is working with Lusaka water supply and sanitation in provision of water through water trust boards
- LCC is a member of the board
- Main challenges are over population in peri-urban hence planning for such areas is difficulty
- Numerous shallow wells in peri-urban areas

- LCC is working with Care International
- Accumulation of garbage has contributed to the outbreak of diseases such as cholera
- Buildings are wrongly constructed hence taking development to such areas is not easy

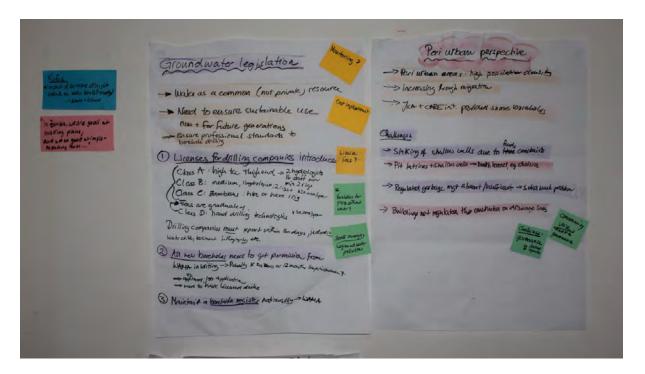


Figure 4: Groundwater legislation and the peri-urban perspective

#### Reflections

Issues of weak local governance structures is another contributing factor, communities are not given the voice to speak out on issues affecting them, especially in water and sanitation. Politics have penetrated the board of directors as a result it is not easy; as a result, community structures is failing to spearhead their projects.

## Deep dive activity

Deep dive activities involved two key issues, namely water quality and groundwater abstraction. Members were divided into two groups. One group was looking at water quality and the other group was looking at groundwater. However, members were free to move and interact with each other.

# Groundwater/flooding key messages

Keynote presentations in water supply and sanitation involved:

• Groundwater resources are negatively impacted due to over-dependence (79% of the 2.4 million Lusaka residents are dependent on groundwater for supply)

- Water demand outstrips the capacity for supply due to increased industrialisation, destruction of recharge areas and climate variability
- Declining water levels due to dilapidated water infrastructure (49% of non-revenue water)

In addition, the following recommendations were made:

- Strengthen collaboration for water supply
- Improve groundwater regulation
- Expand and upgrade water sanitation infrastructure
- Instil a water stewardship culture among the public



Figure 5 (above): Deep dive activity on groundwater | Figure 6 (below): Key messages around groundwater



## **DAY 2** | **Deep Dive Switch Activity**

The day opened with a recap of the previous day's events, followed by deep dive switch, a report back on groundwater, tea break, report back water quality, group work, key messages and LL, planning and then followed by lunch. Day 2 was characterised by members changing positions or maintaining the same groups; these included those from water quality joining those in groundwater protection and vice versa or maintaining the same groups and discussions and deliberations continued. Later, presentations of key policy issues and recommendations of key messages were presented to the policy makers through drama.

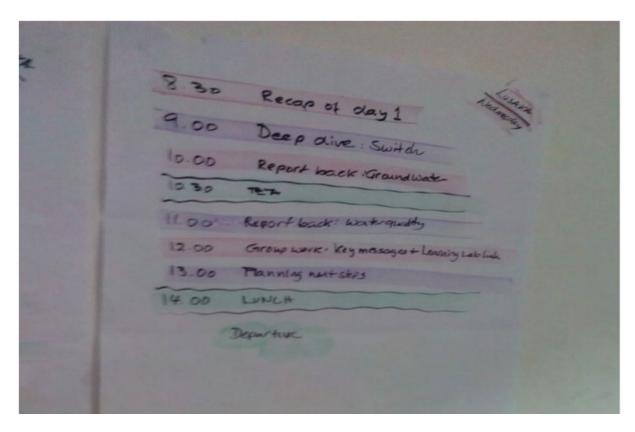


Figure 7: Programme outline for Day Two

## Key messages on flooding:

- Lusaka experiences flooding in the rainy season mainly due to heavy rains and high-water table
- Flooding is compounded by poor waste disposal management in drainage
- Uncoordinated/ poorly development of drainages
- Latest projections suggest more intense rainfall

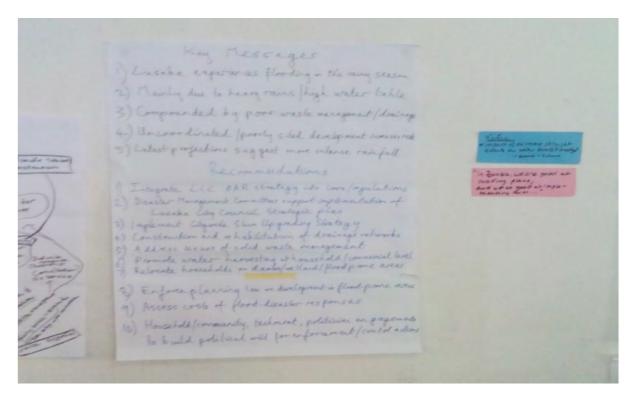


Figure 8: Key messages and recommendations on flooding

#### Recommendations

- 1. Integrate LCC DRR strategy into laws/regulations
- 2. Disaster management committees support implementation of Lusaka City Council strategic plan
- 3. Implement city-wide slum upgrading strategy
- 4. Construction and rehabilitation of drainage networks
- 5. Address issues of solid waste management
- 6. Promote water harvesting at household/commercial level
- 7. Relocate households that are living/located on dambo/wetland/flood prone areas
- 8. Enforce planning law on development in flood prone areas
- 9. Assess costs of flood disaster responses
- 10. Strengthen community, technocrats and politician engagement

#### **REFLECTIONS ON LEARNING LAB 4**

This session was done through participants stating what they observed, what they liked, and if possible suggesting what needed to be improved. Comments included:

- 1. There was a sense of togetherness. People are ken to get involved.
- 2. People seem to have understood the processes and methodology of FRACTAL.
- 3. Need to explore ways of better integrating the peri urban areas.
- 4. The report back session on what institutions were doing post LL 3 was interactive and people enjoyed being updated.
- 5. Enjoyed seeing the mix of people.
- 6. Recognised that people who had missed the third LL still tried to attend the fourth LL.
- 7. People enjoyed the lucky draw and the gift from another city.
- 8. Enjoyed that the lucky draw was held on the second day of the LL.
- 9. One participant wondered what would happen after FRACTAL and how the momentum in the city could be kept alive.
- 10. Participants got insights from the role-playing exercise and informed the presenters of the policy briefs on how best to tailor their messages for policy makers.
- 11. The field trips are a key learning aspect of the LLs and this should be considered for the next city engagement.
- 12. Suggestions on field trips included Chunga dumpsite and Kafue Gorge so that participants could tour the hydropower station and the Met Department.
- 13. It was suggested that the governance spaces in Lusaka should be explored and the option of developing capacity of actors operating in shadow spaces. We need to understand the different spaces and how the project can effectively operate in this space and build capacity.
- 14. For the next LL, it was suggested that the focus and deep dives would be on flooding and water supply and a presentation would be designed focusing specifically on the peri-urban areas.
- 15. The next LL should have adequate representation from the peri-urban areas.
- 16. Develop a participatory video of bringing the peri-urban into the decision-making space.
- 17. Hold the next LL in September 2018. Proposed dates were for the week of the 2 September, with a planning and preparatory meeting planned for the 3<sup>rd</sup>, a peri-urban engagement on the 4<sup>th</sup>, and the LL on the 5<sup>th</sup> and 6<sup>th</sup>.

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