Report on the Lusaka training for councillors

Mika Hotel, Lusaka, Zambia

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FUTURE CLIMATE FOR AFRICA

FRACTAL
FUTURE RESILIENCE FOR AFRICAN CITIES AND LANDS

Acronyms and abbreviations

ACC	African Centre for Cities
CSAG	Climate systems analysis Group
CURP	Centre for urban research and planning
DFID	Department for international development
FRACTAL	Future resilience for African cities and lands
IPCC	International panel for climate change
LCC	Lusaka City Council
NERC	Natural environmental research centre
UCT	University of Cape Town
UNZA	University of Zambia

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Introduction and background to the workshop report

This report is on the training of councillors and Lusaka city management staff on climate change and decision making. The training was conceptualised under the future resilience for African cities and lands. The project is scheduled to run from 2015-2019. It aims at co-producing climate change information which can be used at a city regional level for adaptation. One of the goals is to have climate information incorporated into city level decision making.

The FRACTAL project had already engaged stakeholders in September, 2016 at the first learning lab held at Chaminuka in Lusaka. At this learning lab, the issues that were influenced by climate change were identified. These were low sanitation levels, inadequate water supply, and flooding and unregulated ground water abstraction. It was agreed that these burning issues would be researched in the context of the peri-urban areas of Lusaka. The reason for this is that more than half the city population lives in informal or peri-urban areas. Therefore in order to adapt to climate change and influence decision making, the decision makers would have to be engaged.

A request was made by the Town Clerk of the city of Lusaka for a training of councillors and city council management in order to increase understanding about climate change. 33 councillors, 9 directors and the Town Clerk were invited to a one training workshop on leadership and climate change.

Gilbert Siame, the Director for the Centre for Urban Research and Planning (CURP) in the department of Geography and Environmental Studies at the University of Zambia (UNZA), explained that UNZA was working with the local authority in Lusaka to gain an insight on water, and climate issues on a project called the Future resilience for African cities and lands (FRACTAL). The aim was to find better solutions to issues arising due to lack of depleted water resources and the impact of climate change.

Gilbert then requested all participants to introduce themselves. He also requested that the deputy mayor of the City of Lusaka, Chilando Chitangala, say a few words to open the training. During introduction, participants identified themselves as councillors, Lusaka City Council (LCC) staff, University of Zambia staff and researchers, University of Cape Town (UCT) staff, Aurecon staff, FRACTAL staff and ICLEI staff.

Workshop process and outcomes

Welcoming remarks by the Head of Department of Geography and Environmental Studies at University of Zambia

The Head of the department of Geography and environmental Studies, Dr. Mfune, then gave welcoming remarks. Dr Mfune stressed that the workshop was being co-hosted by

UNZA, LCC and the team from FRACTAL. He thanked LCC for incorporating the university in its programmes and highlighted how the university has been working overtime with the council, in training programs. He further stated that UNZA would continue to work with the local authority. Dr. Mfune explained that the training had brought decision makers, project staff, the local authority and the researchers together to address climate change and water related issues. He noted the works of LCC and mentioned how water, sanitation and other related issues were a challenge and an area of concern for the council.

He explained that the city of Lusaka was prone to many challenges such as floods, droughts, insufficient water supply among other stresses, mainly due to the fast growing population and rise of industries. Lastly, he emphasised the need for collaboration between the civic leaders and the local authority as this would help in implementations of developmental projects. He concluded by emphasizing the need for such platforms to continue for national development.

Welcoming remarks by the Deputy Mayor of the City of Lusaka (Councillor Chilando Chitangala)

Councillor Chilanbdo thanked the FRACTAL team for the Initiative in educating the participants on climate change as well as researching on the solutions for the many climate challenges that the city of Lusaka was facing. She said it is important to have everyone present to understand measures or ways in which some of these issues can be solved. She informed the participants that she had just come from Maziyopa compound in Lusaka that had experienced flooding the previous night.

Identifying climate change issues in our communities

Jess Kavonic (ICLEI)

Jess Kavonic explained that the session aimed at identifying the climate change issues in Lusaka. She asked the councillors to list at least three water and sanitation issues that were occurring in their various wards. She further requested that participants should state the area where these issues were occurring. The pieces of paper were collected and participants were informed that their issues would be address in a later session.

Introduction to FRACTAL

Dianne Scott (ACC)

The second session on the program was the introduction of the Fractal project to participants. Dianne Scott from the UCT provided an overview of what FRACTAL is and what the project intended to do. In her presentation, she explained that generally, acceptance had grown about global climate change being a reality; therefore, cities will end up suffering the negative consequences. Dianne explained that Lusaka is one of the city that was identified for the project.

Dianne went on to give a background on the climate change agenda. She informed participants that the International Panel for climate change (IPCC) was set up in 1987. In 1992, governments signed the framework convention on climate change. In 1997, Kyoto protocol was agreed upon by nations all over the world.

The main reason for a need for climate change responses is that the global atmosphere has been receiving greenhouse gas emissions from burning of fossil fuels. This has resulted in the increase in temperature, precipitation and general change in climate. The policy goal of a stabilised global climate. Mitigation and adaptation have been used as twin dependant policy goals.

It is on this basis that Department for International Development (DFID) and Natural environmental research council (NERC) invited submissions on bids on how to work with southern countries to downscale climate change information as well as co-produce knowledge on adaption measures. . The project is to run for four years (2015-2019) to bring climate change into the decision-making agenda of cities. FRACTAL is working with institutions and cities such as Maputo, Windhoek and Lusaka which are the three cities referred to as tier 1 cities. In tier two cities are Blantyre, Gaborone and Harare which have also signed a memorandum of understanding. There are also two self-funding cities, which are Cape Town and Durban. In Zambia, the memorandum of understanding is between the Lusaka City Council, the University of Zambia and the University of Cape Town.

Dianne explained that FRACTAL had presence in eight African cities with over 27 organisations working on this project, inclusive of partners from outside Africa.

Dianne then went on to explain the aims of the Fractal project. As stated below:

1. Advance knowledge on regional climate response to global climate
2. Enhance knowledge on how to integrate this information into city- regions for decision making purposes
3. Responsibly contribute to resilient development pathways (case studied)
4. Approach through iterative, trans-disciplinary co-exploration, Co-production processes and enhance understanding of the co-produced climate knowledge

She explained that a city dialogue on Lusaka water resources and climate change was held the previous day (25.01.2017) with technocrats. Whereas today, the decision makers, researchers and managers were being engaged. The purpose of these interactions is to create a better understanding of the city and to have a learning process on these issues.

Dianne explained that FRACTAL works with an embedded researcher in each city and in the case of the city of Lusaka is Brenda Mwalukanga. She works between the University and the Local authority.

Dianne's presentation was the followed by an overview of the climate system by Chris Lennard.

Presentation on the overview of climate systems

Chris Lennard (CSAG)

Chris Lennard explained how the sun is surrounded by coldness and energy that actually causes variance in weather. The energy from the sun warms the equator, which then deflects it and causes the distribution of this energy. The distribution of the energy from the sun is what causes weather. He explained that there are differences in the climate system, such as volcanic activity, tornados etc. due to this distribution of energy. He explained that vegetation also interacts with the atmosphere as well as the human influence, which also is very impactful on the climate. He showed participants how there is always energy coming into the atmospheres and going out. Without the greenhouse gases, the earth would be colder by 30 degrees and there would be no life.

Chris explained that there is variability in the climate systems, say cyclones, tornadoes, thunders, seasonal cycles like, spring, summer, autumn and winter. Each season has its own effects on the land. He then mentioned that there are different cycles tin the season. These cycles are called El Ninos and La Ninos, each having a different effect on the climate. El Nino has a global impact where the weather will be cooler than normal. There are longer and shorter-term cycles in climate with some lasting 30 years and longer ones lasting 70 years.

Chris asked the councillors if they are able to cope with the different climate effects in their wards now. He explained that if there were currently unable to cope, then stringent adaptive measures would have to be made because the effects of climate change will be worse in the future.

Chris gave the analogy of an athlete who plays baseballs. If the athlete takes steroids, he would hit more home runs over a longer period than he would if he had not taken steroids. He then explained that the increase in greenhouse gas emissions increases the variation in climate. He informed participants that 2016 was the hottest year ever recorded indicating that there is certainly a significant shift in the natural cycle. The earth is going to get hotter in the future with each passing year.

Chris then asked participants why addressing the issue of climate change should be important. He explained that future generations would live in a much hotter environment that what we are currently experiencing. Therefore, we need to be preparing for future generations that will have to live in a world this hot.

Chris informed participant is that the models are predicting that in 2035 Zambia will be 3.5 degrees warmer than its current average temperature. He then asked the participants what the implications are.

Chris presentation was followed by questions from the participants. One civic leader wanted to know how to deal with floods currently being experienced in Lusaka? What measures are being put across by scientists to help these situations?

Chris responded that climate scientists only research and provide data of what is happening in the climate as well as what is likely to happen in the longer term. Social scientists and decision makers then put this information into policies to help the people. He further stated that this is what FRACTAL is trying to do as a project.

The second question was whether there has been any FRACTAL information that has been translated into policy.

The response to this question was that the Fractal project was only a year and a half into existence. The engagements have only began with the cities. Through these dialogues and engagements, the policy makers (councillors) as people at the grassroots need to come in and point out areas where help is needed in our society. In water resources, not much climate information has been factored into policy and decision making but in agriculture, there have been measures put in place for instance the dissemination of drought resistance crop seedlings. The FRACTAL project was an opportunity for factoring climate information into policy and decision-making.

Chris Lennard's presentation was then followed by a presentation by Piotr Wolski who gave a presentation on the historical rainfall trend observations from the period 1990-2015.

Presentation on the historical rainfall trend observations from 1990-2015

Piotr Wolski (CSAG)

Piotr explained that for the period 1900-1980, the rain pattern was more less the same and the rains were normal. However, for the period 1981-2015, rainfall has increased and it is not yet certain at the moment what has led to this. He explained that what is surprising scientists though, is that our water bodies seem to be drying up. He then questioned is why the water bodies and ground water are depleting?

Piotr then explained that the average temperatures are getting warmer over the years. Although weather temperatures vary from year to year. It is quite hard to tell whether the changes in climate are entirely due to human activities.

Piotr explained that in the future, there would be variations in the weather as indicated by various models. The models show that the rainfall in Lusaka might be lower than in the past. There will be wetter decades and drier ones too. As for the temperature, it will continue to go higher i.e. hotter in the future.

Piotr explained that the question is not whether the average temperatures of Lusaka will it get hotter? Rather it is how much hotter will it get? The models are able to indicate that it will get hot, but not how much hotter. It is more likely that rain seasons might shift in the future, coming later than usual. The temperatures towards the end of the century or 40 years from now Lusaka might experience days over 35 degrees hot in June- August. Ultimately, there will be many hotter days in October- December. Therefore in the future hot days will occur also even in winter. He then asked participants to think about the effects of these change in climate will be on sanitation, on our children, and our general lives in totality. Piotyr explained that it is hard to accurately tell, but the rain seasons might still stay the same.

Burning issues in Lusaka

Brenda Mwalukanga (UNZA)

Brenda Mwalukanga gave a presentation on the burning issues around climate change. She gave a background on how these burning issues were identified. She explained that a learning lab was held with stakeholders who were drawn from institutions working in the water and energy sectors in Lusaka. A learning lab was held in September 2016 at Chaminuka. At this learning lab, general thematic areas were discussed. From the generic thematic areas which included;

- Addressing water and sanitation challenges in the peri urban areas
- Industrial vehicular emissions in Zambia? What are we doing about it?
- Will the people and businesses of Lusaka city be water secure in 15-20 years and how important will the resource be?
- Greening of Lusaka (Green spaces, ground water, recharge areas and water sources in Lusaka city)
- Depletion of surface and ground water. Causes, mitigation, way forward.
- Urban flooding, is it a planning or climate change problem?
- The need to use an integrated land use planning approach

- Institutional and practice, what can we do? Integrated planning systems in relation to climate change

From these 8 thematic areas, priority areas of concerns were identified and have been referred to as burning issues of Lusaka since the learning lab. These burning issues are

-Frequent flooding

-Unregulated abstraction of water

-Low sanitation levels

-Inadequate and erratic water supply

She explained that the focus area would be the peri-urban areas of Lusaka due to the nature of being unplanned and hosting a large proportion of the population.

Feedback on issue identification

Jess Kavonic (ICLEI) and Rebecca Ilunga (Aurecon)

The participants were then given feedback on the issue identification held in the first session of the training program and Rebecca Ilunga facilitated an open discussion. The common issues identified by the participants were;

- Infrastructure
- Flooding
- Solid waste management
- Climate change

Discussion on common effects of climate change identified by decision makers in the city of Lusaka

Following the identification of the most common climate change issues in wards identified by participants a discussion arose as to why these issues were common and cut across wards. It was discussed that there was land that was illegally allocated in communities. In some case, construction occurs in road reserves and over drainages. This tends to promote flooding, as the water cannot run off into the drainage. A question was posed on whether the local authority can demolish such houses and other infrastructure. Participants were informed that the approach to planning in Lusaka includes development control. However, in the case of settlements only extreme cases are handled in such a manners. The meeting was also informed that land was in certain cases illegally allocated by people who were not from the planning authorities and yet seemingly had powers to do so.

It was agreed that there is no active coordination when it comes to maintaining infrastructure in the communities. When floods occur in a ward, there is little a councillor can do beside report it to the local authority. This is because councillors have very little resources to finance mitigation responses in the community.

A councillors complained that the responses and allocation of resources to peri-urban was different from what was allocated in planned settlements. Climate change and floods affects everyone, yet the local authority seemingly responds faster in planned settlements. He mentioned that Kalikiliki is an unplanned settlement that floods regularly. Yet the local authority rarely responds. Due to the increase in infrastructure it floods regularly in Kalikiliki, which is an unplanned settlement, yet the response from the local authority is rarely quick. Recently, the floods from Kalikiliki stream flowing all the way to Avondale, which is a planned settlement that shares a boundary with Kalikiliki. The civic leaders explained that the response from the local authority was quick. He requested that Kalikiliki residents be treated in the same manner as the planned settlements.

Another issues discussed was that of inadequate underground water. Participants were informed that there have not been enough feasibility studies on underground water in the city. During the discussion, it was mentioned that ward 12 was experiencing dry boreholes. There has not been water for six months and now the ward is desperately looking for a new place to drill a borehole. There is vital need for information, because half the time decision makers have little information on how to solve this information. It was suggested that climate change should be disseminated into all schools due to the gravity of the issue.

Councillors were then asked if they had adequate information to help in climate change measures. The response was that after the training they had a little more information than before.

Role of the council in climate change response

A presentation on the role of the council in climate change response was given by Josephine Chiila, a town planner in the department of city planning at Lusaka city council. Josephine cited the most visible effects of climate change in Lusaka that the local authority faced as floods and drought. She stated that challenges to responding to climate change by LCC were the existence of unplanned settlements, and the mushrooming of new settlements and infrastructure, the topography or rock structure i.e. limestone and it doesn't allow seepage into the ground, as well as poor waste management .

Josephine provided pictures of flooded houses and drainages during her presentation.

Figure 1 A flooded house in Kabwata, Lusaka

She stated that the mitigation and adaptation approach of the council included;

- Improving our drainage systems
- Promotion of dual carriageways and expansion of roads adding walkways to promote cycling and walking to reduced motorised transportation.
- Installing solar street lights and replace even ordinary street lights

Figure 2Photo credit: Lusaka city council

- Construction of ventilated pit latrines, that do not seep sewer into underground water
- Connecting households to sewer networks to reduce pollution of underground water, in Mtendere and Chalala
- Promotion of water harvesting

The tools that the council uses include

- The strategy document for building disaster risk reduction and resilience in the city of Lusaka and the sustainable housing guidelines

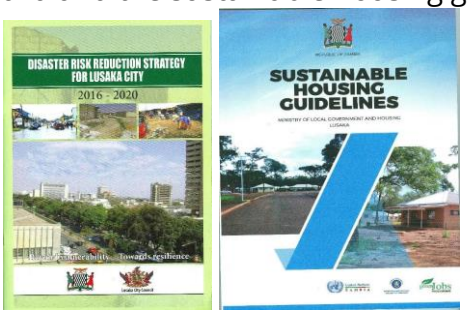

Figure 3Photocredit: Lusaka City Council

- Local planning regulations and permits that restricts building of structures in unplanned areas
- ICLEI online risk assessment and adaptation tool
- Construction of drainages and rehabilitation of roads.
- Use of solar street lamps
- Collaborating with various organisations to implement the various adaptation options currently being undertaken.

Josephine concluded her presentation by informing participants that there is need for an integrated plan and approach to responding to climate change and adapting.

Best practices

Jess Kavonic

Case studies from Malawi, South Africa, Namibia,Cape Town, New York and Lusaka were made. The sectorial approach to flood risk management and water security was suggested. These countries even have risk management teams at the community level.

Shire River Basin Management Project, Malawi

The community based integrated flood risk management in Malawi. The meeting was informed that in 29 years, Malawi had recorded 23 major floods that had caused the loss of life, crops, damage to infrastructure and public health related impacts such as cholera.

The government implemented the Shire river basin management project aimed at transforming the usual planning sectoral approach to a more inclusive stakeholder based development planning and management approach.

Figure 5Photocredit: ICLEI

Community-based Early Warning Sytems (EWS), Eden Municipality, South Africa

The Eden municipality spent 1.1billion Rands in damages after flooding occurred. The city experienced massive landslide as a result of loose soil and insufficient vegetation to hold the soil. They South African weather service has developed severe weather warnings whereas the national sea rescue institute station has developed the flood early warning system. What is important from this case study is that community members themselves then organised a flood management strategy themselves so that in times of emergeny have a clear contingency plan.

Figure 6 Photocredit:ICLEI

Reclaimation of water, Namibia

Windhoek is one of the most arid cities in Africa. There is heavy dependence on water supply from boreholes and dams. The city sought alternatives to improve water supply and developed a reclamation plant which recycles waste water for reuse. The water is purified so it can be used for irrigation, while some is treated and fed back into the dams for reuse by city residents. What is important here is the change in mindset so that water should be viewed as a resource which can be re-used.

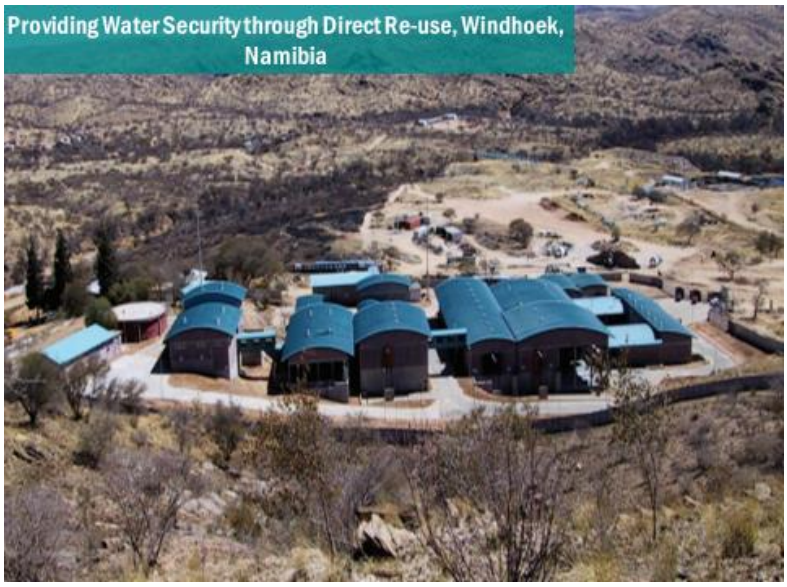

Figure 7: Windhoek, photocredit: ICLEI

Water conservation and demand management in Cape Town

The city recycles water which is used for irrigating public parks and open areas. 4000 households have been visited for leak detection and repairs. So far 258 kilometres of water pipes have been replaced to reduce pipe bursts and water leaks. So far, water wastage has been reduced by 20% and consumption has reduced by 2%. This project aims to improve the water supply however though the project a number of co-benefits have emerged.

Comprehensive climate change and sustainability plan, New York

The city has developed a climate change and sustainability plan. A climate panel that consisted of leading climate scientists, academics, private sector and communities was formed. The panel was responsible for drafting the plan which was aimed at responding to city level decision makers' demand for available climate science and information

SURe water project in Lusaka

Finally, the participatory were informed about the sure water project being implemented by Lusaka city council. So far, flood risk areas had been identified and mapped in Lusaka. Implementation plans have been developed for Kanyama and a resource plan will be developed.

Key lesson learned

Jess noted that the key lessons learned included;

- Partnerships in adaptation and plans were key as was the case in the Shire management project in Malawi. The World Bank had partnered with the government.
- Communities need to be involved as they are able to work in smaller scales.
- Mitigation and adaptation need to go hand in hand
- There is need to close the bridge between science and decision making.

Reflections

As a way to reflect on the days Councillors and management training session, Dr. Nyanga reminded the house that the Lusaka FRACTAL team will still need to know;

- What information do decision makers need?
- What can be provided by the FRACTAL project?

Participants also needed to understand what was classified as a flood? It was suggested that Lusaka city council collaborate with the district management and mitigation unit on this.

It was agreed that the University of Zambia would communicate directly with the Councillors in the areas that they wish to collect research data through the various teaching programmes they have.

It was agreed that the concentration on climate change responses should move from after effects and begin to address the causal factors.

During this reflective session, Councillors from various ward made requests on their areas of need or interest with regard to climate change adaptation in the wards. Below are the requests:

- A request from Chakunkula ward councillor was made for sensitisation of the residents on climate change issues.
- Chaisa ward councillor requested for more information on measures or adaptation options to use within their area.
- Chainda ward councillor 29, requested on more information on rainfall patterns to prepare for mitigation.
- Kabwata Councillor requested that residents could be inform to prepare for future climate change stresses through radio programs. He suggested that children could be taught about climate change from primary schools level. He further requested for direct implementation of research informed adaptation rather than researcher

concentrating on only producing papers using the data they collect from the communities.

- Kalingalinga ward councillor requested assistance in the development of awareness programs, as most residents were unaware of climate change and its effects.
- Chilenje ward 8 councillors suggested a dialogue session with all the stakeholders in his ward.
- Kanyama ward 10 councillor requested for stronger enforcement of the law concerning indiscriminate disposal of waste. Kanyama was rock and already prone to flooding and therefore, the disposal of waste worsened the situation by blocking the drainage. He informed the meeting that awareness about the negative effects and the interaction in his community is low especially because of low illiteracy levels. Programs to impart knowledge are needed. He requested for climate friendly materials be used in construction in order to preserve the environment.
- Matero ward councillor requested for education and awareness campaigns in her ward. She explained that almost half the population in her ward are illiterate and therefore may not know the effects of climate change and how they can contribute to mitigation.
- Mtendere ward councillor requested education for his people on climate change, in local languages as it might be the most effective medium of communication.
- Kamwala ward 5 councillor also requested for sensitisation on the negative effects of indiscriminate garbage disposal.
- John Howard ward 3 councillor, requested his residents to sensitise people on the negative effects indiscriminate disposal of waste.
- Mulungushi ward 18 councillor informed the meeting that his ward was a planned settlement that still faced the problem of indiscriminate disposal of waste and the need for maintenance of existent infrastructure.
- Matero, ward 21 councillors informed the meeting that he needed resources to motivate people to participate in development programs.
- Mandevu councillor requested for detailed information on the ward.
- Kamulanga ward 9 councillor, suggested sensitisation and for the council to engage the communities more often than is currently being done.
- Munali ward 33 councillors invited the local authority and its partners to educate the people in his ward. He also requested action groups to be trained in his ward.
- Munkolo ward 12 councillors requested for the key drivers of climate change issues in the ward to be identified. Thereafter the sensitisation around improved ground water management can be done. She further requested for exchange programs for leadership so that they can learn more from others.

Participants were informed that the council and the University have been collaborating and will not stop now. UNZA has students who are studying spatial planning and are required to visit the communities and identify their development gaps as part of their assignment.

Civic leaders to spearhead the planting of trees in their wards in order to mitigate against flooding

In order to plan and develop Lusaka more efficiently, a joint planning approach with the boundary towns/ district councils could be down.

Adaptation options that could be taken by the local authority in its planning regulations include planning regulations on permitting building materials that have cooling systems, approving of plans that have windows facing the north to help with cooling.

Closing remarks

Closing remarks were then given by Gilbert Siame and Dr. Nchito. Participants were informed that more engagements would be made. They were also informed that climate change adaptation can begin with our very own attitude and behaviour change

Next steps for FRACTAL

Prior to the training of councillors and LCC management on climate change and decision making, a city dialogue was held a city dialogue is a small focus group discussion that brings together technical experts in a field to discuss a much more detailed topic. In this case a dialogue on Lusaka water resources was held. After the training of LCC management and councillors, it was realised that there are several players in the climate change adaption and response arena of Lusaka and therefore it is critical to understand who these players are.

Stakeholder mapping will be conducted in the water and energy sector

A dialogue on governance will be held due to the transition in governance legislation from the Town and Country planning Act to the Urban and regional planning Act. The response to climate change by cities is being done by various institutions who draw their mandate from different legislation. To positively and effectively respond to climate change the governance structure and key institutions need to be known and understood. Their scope of mandates and limitations need to be understood in order to improve response and facilitate climate change adaptation.

Local research for the city is also planned with several topics being proposed drawn from the learning lab, city dialogue and councillors training workshop.

Mainstreaming of Climate change information into the strategic plan being developed for the city of Lusaka for the period 2018 to 2021. Data collection on climate change related

risks and vulnerabilities at a ward will be collected and adaptation options will be identified.

Mapping of flood prone areas will be conducted in the city of Lusaka through a project funded by START called the interaction of solid waste, planning and flooding in the city of Lusaka.

Main lessons learned

Cities need to conduct their own focused research from which the data collected can be reported to decision makers to influence decision that focus on climate change response in cities.

Local authority managers and councillors are keen to respond to climate change impacts and yet sometimes lack the financial capacity to do so.

More information on climate science needs to be simplified for audiences that may not have a scientific background.

Annex 1: Attendance list and participants' details

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Annex 2: Training programme

No.	Topic	Time facilitator	Institution
1.	Opening remarks	Dr. Mfune	University of Zambia
2.	Identifying climate issues by decision makers in Lusaka	Rebecca Ilunga	ICLEI/Aurecon respectively
3.	Introduction to the future resilience for African cities and lands project	Dianne Scott	University of Cape Town
4.	Overview of the climate system	Chris Lennard	Climate systems analysis group? University of Cape Town
5.	Historical rainfall trend observation	Piotr Wolski	University of Cape Town
6.	Burning issues in Lusaka	Brenda Mwalukanga	University of Zambia/ Lusaka city council
7.	Role of the local authority in climate change responses	Josephine Chiila	Lusaka city council
8.	Feedback session on the climate issues identified by decision makers in Lusaka in the first morning session	Jess Kavonic/ Rebecca Ilunga	ICLEI/Aurecon
9.	Reflection on action points and needs	Gilbert Siame /Dr. Nyanga	University of Zambia
10.	Closing remarks	Dr. Nchito	University of Zambia