

**Gaborone City Fractal-Narratives
Stakeholder Feedback Workshop
24th October 2018**

Workshop Report



FRACTAL

FUTURE RESILIENCE FOR AFRICAN CITIES AND LANDS



FRACTAL

FUTURE RESILIENCE FOR AFRICAN CITIES AND LANDS

Introduction

The stakeholder feedback Gaborone City narrative workshop was held on Wednesday the 24th of October from 0830hrs to 1430hrs at the University of Botswana Library Room LG25/26. The workshop was attended by 19 participants comprising of researchers from the University of Botswana and private institutions, a multidisciplinary team from Gaborone City authority, Department of Water and Sanitation, Water Affairs and Metereological Services. Just like the first the workshop was criticised for leaving out ordinary City residents and civil society. It was resolved to find ways to involve a wider sepectram of stakeholders.

The objectives of the workshop were to facilitate:

- Gaborone City water/climate change stakeholders interaction.
- Feedback on previous Fractal and Narratives workshop, research and action activities
- Dialogue on way forward for Gaborone City climate change impacts response and action

Introduction of FRACTAL and City Narrative Development Initiative

Workshop participants were briefed and reminded of the initial interactions which introduced the project through stakeholder visits, intraction workshops and data collection surveys.

The Future Resilience for African CiTies and Lands (FRACTAL) project was brefly explained as having the overarching objective to advance scientific knowledge about regional climate responses to human activities and work with decision makers to integrate this scientific knowledge into climate-sensitive decisions at the city-regional scale (particularly decisions relating to water, energy and food with a lifetime of 5 to 40 years). To do so, climate knowledge is being grown in the cities through the use of *climate narratives*. These narratives are plausible¹ “stories” of the future of cities, under conditions of climate change (i.e. focussing in the year 2040). Narratives are useful tools to integrate specialist knowledge such as that of climate scientists with contextual knowledge (e.g. knowledge of decision

¹ Backed up by credible climate science

makers in cities). In this process, all forms of knowledge are considered equally important to develop relevant and significant knowledge for cities in which FRACTAL is working.

Within FRACTAL, researchers in Blantyre, Gaborone and Harare have developed future narratives for a particular sector in their city for the year 2040. After this initial step, climate scientists validated these narratives in terms of plausible climate futures.

Presentation on sustainability

The presentation was used to set the context of climate change work and stakeholder interactions and roles in building resilient cities. It was explained that the overarching principle of sustainability is justice between generations; where each generation ensure conservation of resources for their current use and that of future generations. Sustainability was identified with three component objectives:

Environmental Objectives

- Biodiversity conservation
- Sustainable use (Energy, water, wildlife, forests, minerals, soil) etc.
- Good natural resource governance (accountability, responsibility, transparency, trust, integration, participatory, capacity)

Economic Objectives

- Sustained growth
- Efficiency (productivity)
- Innovation (clean and appropriate technology)
- Inclusive
- Beneficiation

Social Objectives

- Wealth distribution (equity, benefit sharing)
- Good and improving quality of life (including good health, education, security, identity and dignity)
- Freedoms (of movement, speech and choice)
- Equitable access to opportunities

- Good governance (accountability, responsibility, transparency, trust, integration, participatory, capacity)
- Social security (pensions and institutional support)

Sustainability is about maintaining the balance between the objectives, ensuring that none is achieved at the expense of the other. The prerequisites of sustainability were identified as:

- Peace and security
- Stable and supportive political environment
- Functional institutional and administrative structures

Discussions:

It was noted that the work on the narratives was very good work and comes at the right time when the country is transiting to a planning approach which embraces the concept of sustainability:

Participants highlighted the positive developments in the country. The development of the National Sustainability Framework was particularly celebrated. The stated purpose of the framework is to support and provide an overarching guide for integrating the principle of sustainable development into all national policies and strategies, including the country's medium and long term development plans as well as into the practices of state and non-state actors. It is meant to help planners to balance economic, social and environmental objectives where possible and to manage trade-offs where balancing is not possible.

It was also agreed that the most relevant principle from the National Sustainability Framework for the City to adopt is *integrating sustainable development into planning at all levels*: Sustainable development will need to be committed to as both a principle and an approach in order to underpin all development planning processes in the City of Gaborone - from the way development plans are framed through to their implementation. Tools for sustainable development planning will need to be developed to support urban planning processes, while building the capacity of development planning institutions and structures to adopt sustainable development approaches to planning.

It was noted specifically that integrating water as early as possible into urban development planning process provides the best opportunity to achieve optimal solutions and implement efficient and effective best urban development management practices. These should include:

- Ensure the delivery of best practice urban water management through planning and design of high quality urban areas in accordance with sustainability and precautionary principles.
- Water conservation by minimizing water use within developments.
- Maximise water reuse, including using wastewater and harvested stormwater.
- Achieve highest value use of fit for purpose water, considering all available forms of water for their potential as a resource.

Presentation on previous work

The main presentation at the workshop gave feedback on the past work on the narratives and FRACTAL project in general. The presentation is attached as annex 1. Participants showed great interest in the possible futures:

The possible futures alluded that in the next 30 years Gaborone City or the residents would experience:

- Adequate measures to deal with the impacts
- More information and knowledge
- More resistant infrastructure
- Changed mind sets
- More real time data systems
- Access to information on the internet
- Smart water management plans were in operation
- Plans would be effective (implemented)
- Increased urbanization of rural areas
- Reduced stress on resources
- More integrated and coordinated planning strategies
- Improved participation of the community
- New research institutions providing information.

Group Work and Discussions

Table 1 below presents the summary of group work. The work was based on the possible futures. Participants decided on the critical possible futures and then suggested actions which will be necessary to ensure that those futures are realized. It was noted that the futures are positive but will need certain actions in order to be realized:

Selected Futures	Actions
Smart water management plans were in operation	Formulate policy frameworks Resource allocation (human capital, financial resources)
Development Plans would be fully implemented	Develop monitoring and evaluation frameworks Integrated development planning Resource allocation
Increased urbanization of surrounding rural areas	Decentralization of services Provide facilitative infrastructure Capacitate the community

Reduced stress on resources	Promote 3Rs Promote innovative technologies
More integrated and coordinated planning strategies	Strengthen local structures
Improved participation of the community	Capacitate the communities Information dissemination
New research institutions providing information.	Have courses tailor made for climate change issues Establish climate change structures at local authorities

Conclusion and way forward

A brief presentation was made on the visit of two City representatives to attend the Windhoek City learning lab and observe the development of their climate change action plan and strategy. The following observations were reported:

- That Windhoek has managed to mobilize a wide stakeholder base to participate in the climate action and strategy
- That both cities have supportive local level leadership who are aware of the climate change threat.
- That Windhoek City Authority has more autonomy and is better in control of its resources than Gaborone.
- That Windhoek City is much further along in coming up with strategies and actions to for resilience.
- That Windhoek has strategic partnership with several international institutions which support its climate action capacity development.

The following were agreed:

- To make effort to keep the network active for stakeholders to continue to cooperate and communicate more.
- To widen the stakeholder group and workshop participants to include representatives from the private sector, general members of the public and civil society.
- Engage each other in sector planning. Sectors must budget time and funds for stakeholder engagement.
- Gaborone City decided to seek facilitation and funding to develop the City **climate change strategy and action plan**.
- That the City must actively seek funding for stakeholder interaction as well as to resource a strategy and action plan development process.

Appendix 1: Stakeholder Feedback Presentation

Gaborone City Fractal-Narratives Stakeholder Feedback Workshop 24th October 2018

Dr. Lapologang Magole

Climate Sensitivities Gaborone

- **Drought**
 - Dam completely dried out 2015/16
 - **Impact**
 - Domestic and industrial water supply
 - On estates developments
 - Water restrictions this severe for the first time in Gaborone
 - Sand mining restrictions
- **Floods**
 - More frequent
 - **Impact**
 - Infrastructure
 - Economy
- **Frequent heat waves**
 - **Impact**
 - Rising air-condition use
 - Ill health

Gaborone City FRACTAL and Narrative Workshop

- University of Botswana: 16 - 17 April 2018
- 19 participants; UB, GC, DMS, DWA
- The objectives of the workshop were:
 - To bring together Gaborone city water sector stakeholders
 - To initiate dialogue on *Mainstreaming Climate Change Adaptation into Gaborone City Water Management*
 - To do a rapid appraisal of stakeholders, institutions and climate change adaptation responses for the City of Gaborone
 - To draft the Gaborone city narrative

Possible Future (30 years)

- Smart water management plans were in operation
- Plans would be effective (implemented)
- Increased urbanization of rural areas
- Reduced stress on resources
- More integrated and coordinated planning strategies
- Improved participation of the community
- New research institutions providing information.

Methodology

- Workshop
 - Day one
 - Policies and legal instruments
 - Stakeholder analysis
 - Water problem/issue analysis
 - SWOT Analysis
 - Day two
 - Narrative workshop
 - Survey

Possible Future (30 years)

- Adequate measures would be in place to deal with the impacts
- More information and knowledge
- More resistant infrastructure
- Changed mind sets
- More real time data systems
- Access to information on the internet

Objectives of the workshop

- Gaborone City water/climate change stakeholders interaction
- Feedback on previous Fractal and Narratives workshop, research and action activities
- Dialogue on way forward for GC climate change impacts response and action

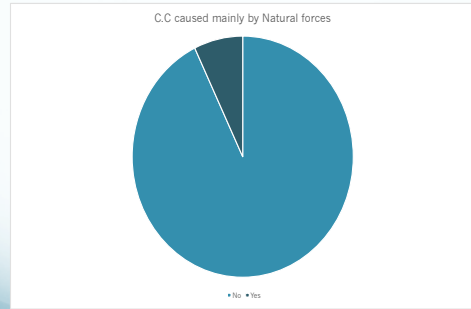
A Bright Future??

- “we are confident in our plans”
- “we are already thinking about these issues”
- “Batswana are willing to change – we can change our mind sets”
- “we already subscribe to most of the international processes and goals”
- “all that is left to do is to align our budgets”
- “climate change is cross cutting – there is a lot we can do”

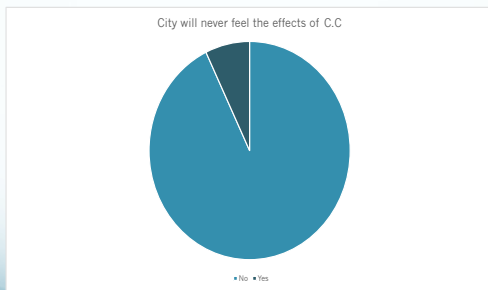
Conclusions and way forward:

- To make effort to keep the network, cooperate and communicate more.
- Engage each other in sector planning. Sectors must budget time and funds for stakeholder engagement.
- Gaborone City decided to seek help to work on a **climate change strategy and action plan**. It was decided that the City needs to be organized to respond to climate change impacts.

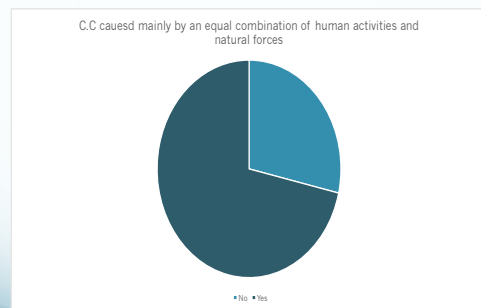
Results



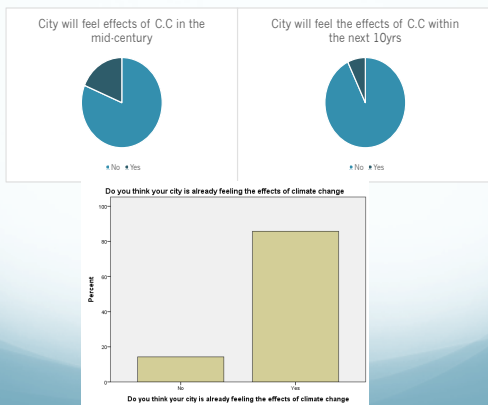
Results



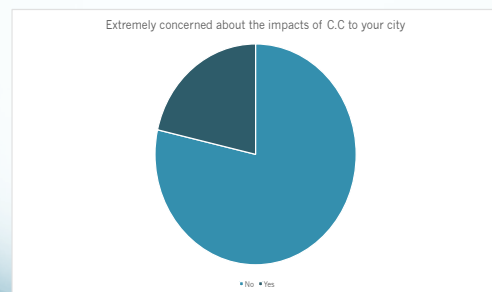
Results



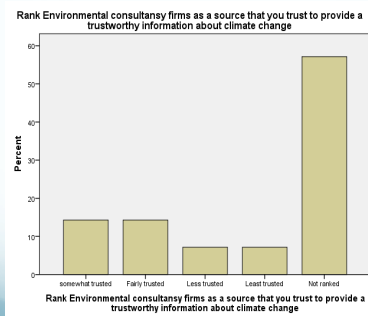
Results



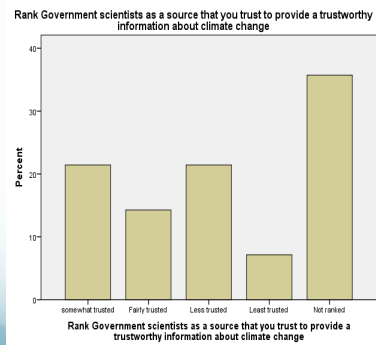
Results



Results

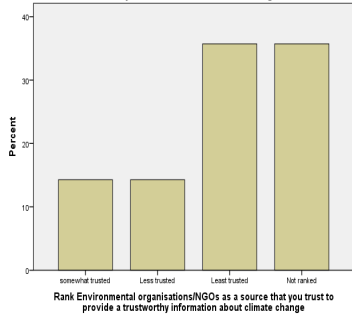


Results



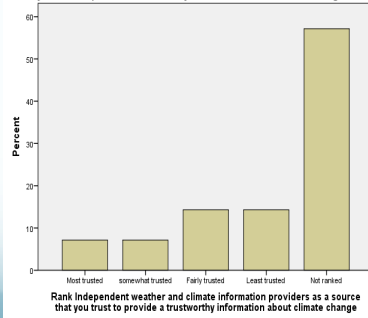
Results

Rank Environmental organisations/NGOs as a source that you trust to provide a trustworthy information about climate change



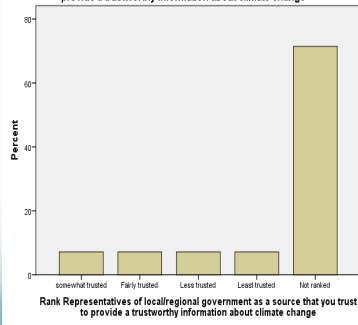
Results

Rank Independent weather and climate information providers as a source that you trust to provide a trustworthy information about climate change



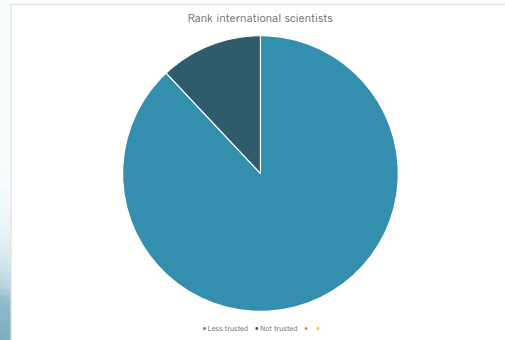
Results

Rank Representatives of local/regional government as a source that you trust to provide a trustworthy information about climate change



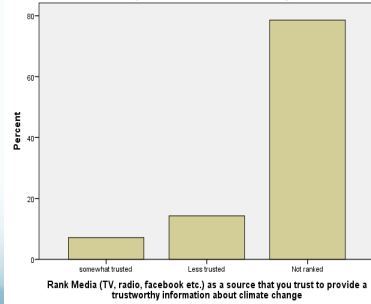
Results

Rank international scientists



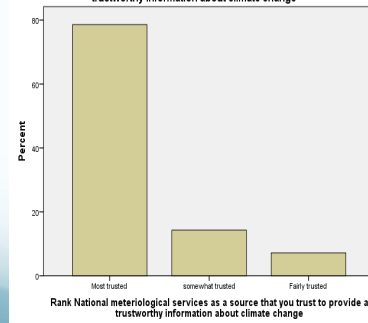
Results

Rank Media (TV, radio, facebook etc.) as a source that you trust to provide a trustworthy information about climate change



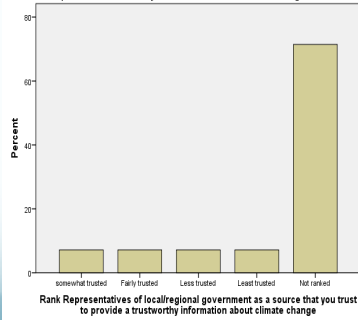
Results

Rank National meteorological services as a source that you trust to provide a trustworthy information about climate change



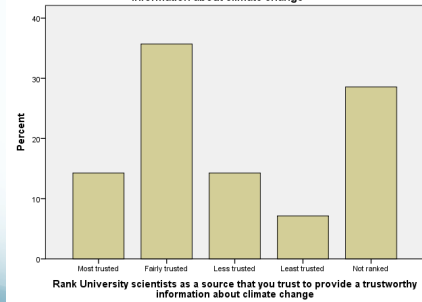
Results

Rank Representatives of local/regional government as a source that you trust to provide a trustworthy information about climate change



Results

Rank University scientists as a source that you trust to provide a trustworthy information about climate change



APENDIX 2: Workshop agenda:

Time	Session	Facilitator
08h30-09h00	Registration	UB All
09h00-09h15	Introduction & Welcome	All UB
09h15-09h45	Presentation on Sustainability and Introduction to Fractal & Narratives	UB All
09h45-10h00	Discussion	All
10h00-10h30	Tea	All
10h30 – 12h00	<ul style="list-style-type: none"> ● Presentation of workshop and survey results ● Discusion 	UB All
12h00-14h00	<ul style="list-style-type: none"> ● Group work on <ul style="list-style-type: none"> ○ Results analysis ○ Problem analysis 	All
13h00-14h00	Lunch	
14h00-15h30	Closing <ul style="list-style-type: none"> ○ Groups Report back ○ Final discussions ○ Way foward 	GCC