



FRACTAL

FUTURE RESILIENCE FOR AFRICAN CITIES AND LANDS

Briefing note from the climate risk narratives learning webinar

What have we tried? what have we learned? What does this mean for us going forward?

Introduction

This briefing note provides key discussion points from the third FRACTAL learning webinar, during which the team reflected on the climate risk narrative process. In particular, we asked ourselves; **what have we tried? what have we learned? What does this mean for us going forward?**

The session was structured in three main parts; an introduction on the evolution of the narratives from Chris Jack, feedback from a few city researchers on their narrative processes, then groupwork and feedback to reflect on the key questions presented above.

The evolution of the narratives

Chris Jack from CSAG kicked off the webinar with an overview of the evolution of the narratives.

From a CSAG perspective, narratives were initially developed as a climate information communication device. This was in response to the frustration that the CSAG team was feeling after many years of using classic ways of communicating climate science; through maps and other complicated visualisations, which require technical capacity for interpretation. Furthermore, these methods of communication struggle to facilitate adequate engagement on topics related to uncertainty.

The motivation for developing climate risk narratives or stories links to the fact that when people do engage with complex science, they build a story in their head that explains the information with which they're engaging. One could spend much time exploring the psychological aspects involved in the process of perception but essentially, if the climate information aligns with the story in the mind of the person engaging with the information, (s)he is normally willing to integrate the information into her/his story. If the information deviates from her/his story, (s)he either rejects the information, or revises the story in her/his head. The narratives were originally developed to short-circuit this process by building stories for the individual engaging with climate information, instead of counting on her/him to translate the information effectively into her/his own story.

the only studies that have to date explored changes in synoptic-scale weather systems important to the generation of damaging wind and wave events along the South African coastline – more work is needed towards quantifying the impact of these weather systems under climate change.

3.3.6 Narratives of climate change for South Africa and its provinces

3.3.6.1 Northern Cape

The Northern Cape is the driest province in South Africa, with some areas receiving less than 70 mm/year on average. The north western parts of the province are arid and experience very infrequent rainfall events produced either by the passage of rare cold fronts in winter or occasional convective rainfall during summer. The south western parts experience infrequent winter rainfall, while the eastern two thirds of the province experience summer rainfall associated with local or large scale convective rainfall systems. The south and west of the province experience low rainfall during winter. The eastern part of the province responds partly to ENSO oscillations while the south and western areas having very weak, if any, association with ENSO.

The northern parts of the province also experience some of the highest hottest temperatures in the country, with places like Upington experiencing average daytime temperatures in summer of over 32 °C and more than 30% of days in January exceed 36 °C. However, typical of many arid and semi-arid inland locations, winter night time temperatures can regularly drop below 0 °C. The western coastline is very dry, and the northern extremes transition into coastal desert. In these areas coastal marine fog forms an important source of water for ecosystems.

Historical trends show no detectable trend in annual rainfall totals over the past 50 years, though there are some weak indications of increases in number of wet days. Daily maximum temperatures

Narratives of climate change were first developed as climate information communication devices for the UNFCCC; Third National Communication for South Africa. This process was not completely effective as the narratives were inserted at the end of a very large report and user engagement did not take place. As a result, stakeholders engaging with the narratives were confused about how to use them.

After this initial experience, CSAG developed climate risk narratives for the City of Cape Town,

who had contracted the team to update climate projections for the city. A process was included, during which representatives from the City of Cape Town engaged with the narratives that were produced by climate scientists. In particular, a workshop was held during which people could ask questions about the narratives. Although participants were still confused about how to use the narratives, lots of discussion was sparked about the potential future of the city through the process of developing the narratives; this is when CSAG started thinking about narratives as a conversation starter.

Climate Change Projections for the City of Cape Town

An update based on the most recent science

Christopher Jack, Piotr Wolski, Anna Steynor, Christopher Lennard



The narratives were then pulled into the FRACTAL project as a way of bringing the climate conversation and science into the city learning processes. The narratives have since been iterated in the city contexts, pulling together other types of knowledge, such as knowledge about policies and plans of a city, as well as local terminology for climate phenomena. Through FRACTAL, the narratives evolved into a knowledge integration device, the climax for which has been the work done in Blantyre, Gaborone and Harare. In these cities, socio-economic narratives were first developed by people living within the city, after which a climate lens was applied.

Framed as conversation starters and knowledge integration devices, narratives are very effective as they provide a more inclusive process for fleshing out potential futures into few stories that are cohesive, or at least sparking important conversations. As a communication device, they do still play a role in FRACTAL but are not the silver bullet of climate science communication.

[Feedback from cities on narrative processes](#)

After Chris described the evolution of the narratives, city partners provided feedback on how narratives have landed in their particular contexts through FRACTAL.

Genito on Maputo

The narratives for Maputo were presented during the second learning lab in May 2018. Participants at the lab perceived the narratives as final stories for the future of the city, instead of the first iteration to be tested or discussed, and therefore showed some

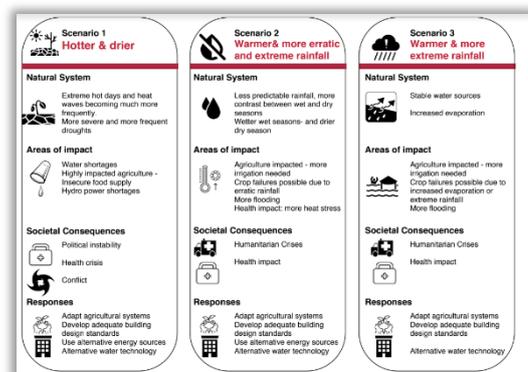
concern with the information that was presented. The negative feedback that was received seemed to indicate that participants felt slightly offended by the negative futures presented as these could indicate that leaders or institutions are not doing their job. Participants seemed more accepting of positive narratives.

Rudo and Natsai on Harare

In Harare, the narratives that were developed by the city researchers were received well. There was, however, similar feedback to that received in Maputo; some people highlighted the importance of focussing on a positive future. The lead researcher from Harare was convinced that the way the narratives landed was influenced by the political context; people were feeling positive about the potential future of the country and city in light of the upcoming elections and therefore wanted to read a positive message. In line with this, feedback from government included comments that they're currently implementing initiatives that should influence the future of the city in a positive way. Other stakeholders provided feedback that positive narratives would trigger positive decisions from decision makers. Other comments related to the idea that the situations described in the narratives are already being felt; the situation is therefore not the future, it is the present.

Bettina on Lusaka

In Lusaka; the narrative process has included other interesting activities. For example, the city team synthesised the narratives into an infographic, which was a useful process to sharpen people's perception of what the future might hold. It also facilitated a useful discussion on possible response strategies for the futures described in the narratives, many of which are the same across different futures. The narratives that have been developed for Lusaka through the FRACTAL project have also been included in proposal writing processes in an attempt to access funding, for example from the Green Climate Fund (GCF). It has been interesting to apply the climate risk narratives to specific problem (e.g. policy briefs on water issues) to understand how this problem would be impacted or worsened.



Jess on Blantyre and Gaborone

The processes in Blantyre and Gaborone were extremely useful to spark conversations on issues of climate change for the cities. In Gaborone, the process facilitated learning across departments and groups about the work that others are doing. Once they had learned about the work of others, participants seemed impressed that they had common objectives and many phone numbers were swapped to continue conversations. Another outcome of the processes in Blantyre was reflection by the participants on the interventions that their departments are currently implementing and, in some cases, realising that these might not be enough to mitigate the effects of climate change. These realisations were mainly a result of a more holistic perspective of the system of focus, which was revealed through discussion across departments.



Figure 1. Stakeholders in Gaborone swapping phone numbers after the narratives workshop

Summarising the evolution and application of narratives

As we can see from the feedback presented above, climate-related narratives have been used in different ways in different contexts, with a variety of impacts and outcomes. Three categories of narratives applications were summarised within the webinar group for reflection and feedback, as presented below.

Narratives as...

- a **process to explore systems and impacts** on these systems as well as decision making
- a **platform to identify** more **information gaps** for more resilient decision making, and how to go about filling these. This is not only relevant for climate information, and relates to the connections that were evidently made in Blantyre and Gaborone.
- a **tool to imagine the future** and think about possible ways of the visioning the future **together**.

Breakout discussions: What have we tried? What have we learned? What does this mean for going forward?

The three overarching questions of the session were then presented to breakout groups for discussion and feedback: What have we tried? What have we learned? What does this mean for going forward?

Feedback from these group discussions is presented below.

What have we tried?

- In Lusaka and Windhoek, we began developing narratives about risks relevant to the cities that were consistent with messages coming out of climate projections. These were presented by the city Task Team during the learning lab as a way of engaging with stakeholders on issues of climate change that are context-specific. During these processes, the Task Teams tried hard to align the narratives with the climate evidence;

much attention focussed on presenting the narratives using a lot of careful language construction. This was still very much within the framing of a **communication device**; situated between the evidence and someone wanting to use that evidence.

- **Infographics** have been developed for Lusaka, Maputo and Windhoek.
- In Blantyre, Gaborone and Harare, the process was **started (i.e. initial narratives written) by researchers living and working in these contexts**, after which climate information was weaved in.

What have we learned?

- The narratives are a **good way to start conversations** and engage s/holders but how they land **dependents on the type of stakeholders** who are engaged in the process.
- Some stakeholders are **inspired by a positive narrative** rather than a gloomy situation; perhaps we should develop both.
- It is extremely important that narratives be **aligned with ongoing processes** in context; they should be viewed as unfinished stories in need of extra contextual knowledge. In line with this, teams need to be very clear that the point of these stories are in line with specific to the issues with which cities are dealing.
- We can put theoretical frameworks around the work on narratives that has been done within FRACTAL, but it is important that these **theoretical frameworks come after the practicality of using the narratives** in the cities as a knowledge integration device. In this sense, the theoretical framework is of service to a practical context.
- **Data contained in the narratives need to come from available sources in each of the countries**; stakeholders will always judge the figures that appear in the narratives based on what they already know and have seen.
- Even though stakeholders engage in the narrative co-production process, there's some **uncertainty with regards to when to take action**; the narratives describe a future for 2040, so when is the right time to take action?
- The **infographic** is a useful for a quick presentation, but **a lot of the texture and contextual information is lost** in translation to this form. It should therefore be used as a **complementary tool**.
- From a natural scientist perspective, **evidence comes in different forms; tying the narratives to evidence is a complex process**. For some of the natural scientists, there's been a slow unlearning some of their training... Particularly around the role of different types of evidence for building the narratives. We've asked ourselves the following questions; what is the role of different types of evidence in these climate risk narrative processes? What is the role for imaginaries and imagination vs. the role of classic scientific evidence?
- The **person or people who write the first narrative very much set the overarching theme for the stories**. Initially, these have been climate scientists but in Blantyre, Gaborone and Harare, it was researchers living and working in these cities. Generally, the iterations and discussions after the first drafts home in on the details but the overarching story does not usually change. This raises the question; **who should set this overarching story?** Perhaps the city actors themselves should be involved in developing the initial storyline as it is quite difficult to change.

What does this mean for moving forward?

- We need to have discussions about the final outputs, including trying to **share what we've learned** with a broader team, as well as other researchers who are interested to take part in similar processes.
- We should think about **how we can check the impact** (i.e. develop indicators) to track **effective processes** that the narratives have support instead of just the output of the narratives themselves.
- We **should develop guidance notes**; we should think about a legacy and how to hand these processes over to the cities.
- Perhaps there is a need to take from the science-policy interface to **speaking with communities**; to try and get a sense of what different communities think about these futures... Maybe with a view to grow cultural narratives around climate-related issues or fit them into existing cultural narratives.
- There is **room to integrate narratives into ongoing processes** in FRACTAL cities (e.g. Gaborone, Lusaka and Maputo).
- Communicating the process is very important; we need to clearly articulate why we are doing this. This includes **articulation about the value of learning and reflections with decision makers**.