Towards an inclusive, reflexive learning approach for dealing with climate risks in cities

Alice McClure

"What really made an impression was this approach of learning how to learn."

The Future Resilience of African CiTies and Lands (FRACTAL) project aims to advance knowledge about climate change relevant to southern African cities, and to enhance the integration of this knowledge into medium to long-term decision-making associated with these cities. From the outset, the FRACTAL team acknowledged that climate change is a problem loaded with complexity and uncertainty, especially when we consider how risks manifest in rapidly developing and dynamic cities in southern Africa. A transdisciplinary co-production approach was adopted, alongside disciplinary research, to better understand climate change risks in these cities by integrating knowledge and experiences beyond academic framings. This approach included reflexive, inclusive and participatory methods to support learning within and between a wide range of stakeholders in different cities, such as local and national government representatives, NGOs, civil society organisations and researchers spanning several disciplines.

Methods that were implemented to support reflexive, inclusive and participatory learning processes included *inter alia* field trips, games and roleplays, city-to-city exchanges, development of Climate Risk Narratives (CRNs) and visioning processes, social events, dialogues and high-level breakfasts, and embedding researchers in decision-making contexts. Learning Labs (LLs) anchored city learning processes and created spaces for many of these methods. LLs are facilitated events that bring together a broad range of stakeholders to constructively engage with complex 'burning issues' (Arrighi et al. 2016). At the core of these labs is the objective to "try to solve a complex problem through innovative solutions requiring stakeholders to explore it from various angles" (Arrighi et al. 2016). Importantly, stakeholders were encouraged to be actively involved in the co-production of climate change knowledge; they were not expected to be passive receivers of climate change information.

"It's put learning and reflection at the core. It is about generating knowledge, not just information. The growth mindset of people involved is inspiring. The amount of personal growth I have gained from FRACTAL has been amazing."

"The process stretched my knowledge and imagination levels; a part of me was extended. True learning happened because of the process."

"That's an activity that really stood out for me. [when asked if someone had presented the same information on a powerpoint] I would probably have closed down because I thought I knew. Maybe they would have started the powerpoint and I would have shut down. I was compelled to learn because I needed to put something in a box and there were some that created dilemmas (e.g. terms that needed to be between two boxes). As you are deliberating, you are clarifying... You need to justify your actions."

"...questions that people were asking felt more informed. When thinking back, people didn't really understand how to frame their questions and we didn't know how to frame our answers. People were less afraid to ask questions [at the end of the process]."

"Social evenings were also important. These bring people together and you start cutting the barriers... you allow people to take the lab work into the social spaces... I don't have an expectation that I must learn yet I learn quite a lot... I think this is also because we're taking one step closer to one another."

"Most of what I know about climate change comes from the FRACTAL project."

"I am seeing information that was not previously being documented, going beyond the formal structures and systems we know like those represented by organograms, etc. And the analysis of this knowledge and information coming out of these engagements is now trying to understand how climate information can be infused into these unknown processes in the city. So I think new knowledge is being produced, across the cities."

"The Embedded Researcher in the FRACTAL process taking place in [city x], to me, is the greatest innovation that has happened. It is the greatest contribution to knowledge co-production"

The learning approach adopted in FRACTAL advanced understanding of several aspects of climate-related risks in southern African cities. Through hearing a diversity of knowledge and perspectives, participants gained a richer understanding of Southern African city regions, as well as multiple non-climate and climate drivers of these risks. Participants of learning events, such as LLs, connected their everyday experiences, work and mandates with these risks, better understanding their role in responding to climate-related risks. Several learning activities sought to introduce and, in some cases, interrogate climate change information relevant to the cities. The widespread notion of 'finding entry points' for climate change information was challenged within FRACTAL. Team members instead worked with decision makers and other citizens to co-create entry points for climate change information in decision and planning processes.

The relationships, trust and comradeship that were developed through the various learning processes were extremely important to support sharing of perspectives, knowledge and evidence amongst a broad group of stakeholders. Several participants have expressed an appreciation for approaching issues of climate risk in southern African cities in a more collaborative way and are hoping to carry this forward through various avenues of work.

Several insights and experiences associated with these reflexive, inclusive and participatory learning approaches are captured in the statements quoted throughout this two pager. These statements were all shared by participants at various FRACTAL learning engagements.

"It was by design, because you know how most workshops are; you will have the presenter here and he will do his presentation and we ask questions, then he sits and another presenter gets up and it's the same. These ones were very different. They were very involving; you would act out things, you would do posters, creating your future of your city. Somehow, you're part of the process and what's going on; you are not sitting passively."

"And that, to me, has been one of the reasons why people have stayed engaged with the process. They are able to ask questions that they cannot solve. And there will be someone in the room who can do that, who can put some answers on the table or to facilitate a process for all of us to learn. That is the contribution of the co-production process."

Arrighi et al, 2016, *Dialogue for decision-making: Unpacking the 'City Learning Lab' approach*, FRACTAL working paper, available at http://www.fractal.org.za/wp-content/uploads/2017/03/RCCC-FRACTAL_wps-7-City-Learning-Lab-V4.pdf

FRACTAL
FUTURE RESILIENCE FOR AFRICAN CITIES AND LANDS