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Stories worth telling

OCTOBER 2019
Cross-city

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CO-EXPLORING BURNING ISSUES, DECISION-MAKING PROCESSES & CLIMATE INFORMATION NEEDS

This story illustrates the importance of transdisciplinary co-exploration. Decision-support methods and participatory exercises can facilitate the co-exploration of 'burning issues', decision-making processes and climate information needs. Decision-making can be complex and influenced by a range of stressors, including climate variability and change. Although climate impacts are felt, climate information is not currently incorporated into the decisions and actions of many city planners and policymakers - very few use the appropriate type, scale and format of climate information, and future climate projections are rarely consulted. Hence, scientists and researchers can overestimate planners and policymakers' grasp of climate science, and underestimate the complexities of city decision-making. Using a range of decision support methods and activities, co-exploration in FRACTAL cities has built shared understanding and trusted relationships, informed city agendas and strengthened confidence and capacities of researchers and decision makers.

THE CHANGE STORY

Decision-support methods such as the Analytic Hierarchy Process (AHP), Decision Scaling, the Climate Capacity Diagnosis and Development (CaDD)[1] tool and other exercises on climate science and adaptation terminology were tailored to be participatory and bottom-up in order to co-explore, with city stakeholders, current decision-making processes, barriers to incorporating climate information into these, and types of climate information and adaptation options.

In Windhoek, FRACTAL engagements supported the development of the City of Windhoek's Climate Change Strategy and Action Plan (CCSAP). This included an initial application of AHP and CaDD with CCSAP representatives and further applications, at the request of the CCSAP coordinator, with the city's senior management team (Strategic Executives) and the city's Department of Infrastructure, Water and Technical Services. As a result of FRACTAL's various interventions, the CCSAP became the ICCSAP - an Integrated Climate Change Strategy and Action Plan and capacity development was included as a cross-cutting theme in the strategy.

In Lusaka, a Decision Scaling approach was applied to assess the city's water system's resilience and the future potential of the Kafue River to satisfy the city's water demand. In several FRACTAL cities, participatory exercises were used to co-explore climate science and adaptation terms. A clearer and shared understanding of climate science language and terminology surfaced between stakeholders during discussions. A Technical Advisor in Lusaka commented, "Like many of my colleagues, the FRACTAL engagements helped me gain a deeper insight into climate terminology, climate science and how important these are for decision-making."

1 The CaDD tool has been developed by Trioss (https://www.weadapt.org/knowledge-base/adaptation-decision-making/climate-cadd).

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RELATED IMPACT STORIES (IS) | Distillation of climate information through transdisciplinary co-production (IS3); What is the climate narrative in Lusaka? (IS12); Moving towards integrated and inclusive climate change planning in Windhoek (IS15).

The Future Resilience for African Cities and Lands (FRACTAL) project aims to address the challenge of providing accessible, timely, applicable and defensible climate information that is needed by decision-makers operating at the city-region scale in southern Africa. FRACTAL impact stories have been collaboratively developed by various research teams. They highlight key methods, engagments and research findings from the FRACTAL project.

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"What we have done with FRACTAL – we have developed a common understanding – the challenges of climate change are here to stay. We cannot turn a blind eye. It needs to part of our daily work."

Strategic Executive, Windhoek

UNPACKING THIS STORY

AHP is a decision-support method that can be used to compare and rank or prioritise adaptation options. Applying AHP with CCSAP representatives in Windhoek surfaced distinct perspectives and priorities in different city departments, opening discussions on how various factors are considered (or not considered) in current decision-making processes and how these could be balanced. It also offered opportunity to further delve into information (climate and non-climate) that would be needed to make decisions on prioritising actions. The discussions signalled the importance of the CCSAP being a city-wide plan with broad ownership and engagement across departments, rather than the mandate sitting only within the environment department.

This was reinforced when exploring the city's organisational capacity to address climate change using a participatory application of the CaDD tool. Through co-exploration processes using AHP and CaDD methods, a strongly matched set of needs between senior decision-makers and technical staff in the City of Windhoek was identified.

A common desire for knowledge sharing and learning was seen both vertically and horizontally within the city. Increased communication across levels and divisions requires few resources but could have a high impact. If better cohesion and coordination can be achieved it could result in more effective policy implementation and action on the ground.

Existing champions and FRACTAL Embedded Researchers (ERs) were key to these co-exploration processes. Identification and creation of 'entry points' by these key individuals allowed co-exploration using these various methods and approaches to further enhance impact.

LEARNINGS

These experiences showed that adequate time must be dedicated to the early stages of engagement, research and analysis: understanding 'burning issues', decision spaces and processes. After that adaptation options can be identified and appraised. An extended period of co-exploration at a project's start can build shared understanding among stakeholders around issues, decision processes and other stakeholders' priorities and preferences. Research partners can have misplaced assumptions around existing climate science knowledge and decision-making processes, and these can promote confusion. Co-exploring assumptions with stakeholders at an early stage is therefore critical. Tailoring decision-support methods to be participatory and bottom-up, co-exploring different perspectives and reaching a common understanding is needed before applying these methods in a formal manner to appraise adaptation options.

Deep co-exploration of different knowledge types can help to:

- Uncover what questions *actually* need to be asked;
- Identify what decision support is needed (including both climate and non-climate information) and how it can best be co-developed; and
- Create ownership and trust in a project process and its results.

Asking key questions and ensuring open dialogue was key to FRACTAL's approach

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