Making decisions in cities in the context of a changing climate, experiences from Harare, Zimbabwe

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KEY FINDINGS

1. Lack of forward looking plans in cities which leads to reactive/crisis led decision-making.
2. Negative external interference by those in power, hence politics overrides the role of technocrats.
3. Lack of transparency, accountability and stakeholder participation, which compromises effective decision-making.
4. Lack of domestic funding in order to put sound plans into action.
5. The possibility of building resilient cities through harnessing existing opportunities.

Introduction and aim

This brief is based on a TED talk titled 'Making decisions in cities', given at the Future Resilience for African Cities and Lands (FRACTAL) project's Urban Resilience Caucus, held in Lusaka, Zambia, in 2019. The talk took participants on the FRACTAL journey in Harare as it was based on key findings of research conducted in Harare. It was based on two research projects, namely the innovation fund that focused on exploring perspectives underpinning the development of the Morton Jaffray water works and the Small Opportunity Grant (SOG) that focused on unpacking decision-making pathways in the water sector of Harare.

This brief aims to present the major findings of the two research projects on decision-making, in order to contribute towards robust decision-making in southern African cities in the context of a changing climate. The brief is timely as lessons from Harare can be contextualised in other cities, given the similarities in challenges faced by other southern African cities in the water sector.

Context

Harare is the capital city of Zimbabwe. It is located in the north eastern part of the country. Harare offers an important case study for tracing the challenges and opportunities faced by the water sector of Zimbabwe. The city has in the past experienced recurrent water service delivery challenges. In the year 2008, when Zimbabwe was hard hit by a record breaking cholera epidemic, 44% of the affected people were from Harare (WHO, 2008), a situation which pointed to the water service delivery challenges in the city. One of the major causes of this cholera outbreak was lack of adequate water and sanitation services in the city. Morton Jaffray water works, the main water treatment plant for the city of Harare, were initially constructed to service a population of 350 000 and then later upgraded in 1994 to service a population of 1.5 million before another recent upgrade.

Currently Harare provides water to a population of 4.5 million people including satellite towns of Chitungwiza, Ruwa and Norton. Infrastructure challenges have contributed to inadequate water supply in the city, which has resulted in unequal distribution of water within the city. Non revenue water in the city is also high (up to 60%) due to outdated infrastructure which leads to leakages along the distribution network (Ndunguru and Hoko, 2016). With these leakages, of approximately 450ml water produced, about 270ml is lost (Daily News 2017).

The research under the innovation fund provided a way for researchers to inovatively engage with stakeholders and policy makers as part of FRACTAL's knowledge co-production process through trans-disciplinary research. The research was conducted in order to have an in-depth understanding of development of African cities by breaking away from the western world view of development. A think tank was conducted in June 2018 with stakeholders in the water sector who were involved in the refurbishment of Morton Jaffray and this was done through facilitated conversations.

Given the growing population and the cholera outbreak, there was need to improve water and sanitation services and hence refurbishment of the water works became a top priority for the city. The refurbishment of the water works was aimed at improving water production and treatment capacity. Refurbishment of Morton Jaffray would consequently improve water supply coverage as in the past years the city had failed to supply water to all residential areas, resulting in some areas receiving water supply for a few days per week and other areas, especially the new residential areas, not having a water supply connection. The first project to refurbish Morton Jaffray waterworks was implemented in 2010 after the cholera outbreak. The project was funded by the Ministry of Finance under the Government of National Unity with the China Machinery Engineering Company (CMEC) as the contractor.

Following the innovation fund think tank, a FRACTAL learning lab was conducted titled 'Unpacking decision-making pathways in the water sector of Harare under a changing climate'. The project aimed to have an understating of decision-making pathways and recommend a suite of actions for improved decision-making in this context. The need to unpack decision-making pathways also emanated from previous FRACTAL engagements with key stakeholders in the water sector of Harare. These engagements were conducted under several projects namely START's Global Environmental Change (GEC) project, FRACTAL's innovation fund as well as the Climate Risk Narratives research projects. It is from these projects and engagements that several challenges that led to the burning issue of inadequate water supply and poor decision-making were identified.

Findings

Challenges in decision-making for cities

a. Lack of forward-looking plans in cities

Decision-making in cities is mainly reactive or crisis led which indicates a lack of futuristic planning. This was evident in the case of refurbishment of Morton Jaffray water works as the innovation fund think tank research established that the decision to refurbish Morton Jaffray was made after the devastating cholera outbreak of 2008 in Harare. Reports indicated that there were plans to have refurbishment of Morton Jaffray in different phases but the last refurbishment phase had occurred in 1994. This indicates that the initial plans to have the refurbishment of the plant in different phases had been halted until the cholera outbreak. There could be two explanations to this case. One is that, although plans are there on paper, the actual implementation of the plans depends on availability of resources/funds. Another explanation could be the fact that cities are in constant fire fighting mode meaning that there are always urgent matters to deal with hence futuristic plans are put on hold. This paints a gloomy picture. One of the participants in the think tank expressed this by saying if only there could be more cholera outbreaks in the city, development could take place. This does not mean that the participant's wish is to have more catastrophic events within the city but it does indicate that most essential developments in the city are only triggered by a crisis.

During the think tank, the facilitator shared a Rhodesian vision which was to expand agriculture production in the country and it read,"... to have up to 1 million acres under irrigation producing $300 million (£150 million) worth of agricultural produce every year (1970 prices)".This vision was then compared with the decision-making process for the refurbishment of Morton Jaffray and it was observed that the vision was forward looking/proactive rather than the decision to refurbish Morton Jaffray which was mainly triggered by the cholera outbreak. With the current retrospective decision-making process, infrastructure development for water resources will be in constant fire fighting mode if decision-making processes do not move away from the 'business as usual' way of doing things. This has implications for the future of cities as some of the effects of climate change might not have started to manifest themselves but will have devastating effects in the future. These will require action to be taken now in order to reduce the negative impacts in future. The recent cyclone Idai gives a reflection of how devastating the impacts of climate change can be and how cities should be well cushioned for such tragedies in future. In addition, the impacts of climate change will interplay with other factors such as population growth and increased demand for resources such as water and land. Priority should be given for water infrastructure development and planning despite a crisis occurring, in order to foster proactive decision-making and disaster risk preparedness. In comparison to the Morton Jaffray case study, cyclone Idai led to a growing wave and focus on climate change issues and the need for cushioning against the impacts of climate change. As an example, this shows how action is generally triggered by a crisis even in other areas apart from the water sector.

b. Negative external interference by those in power

In Harare, the role of potable water supply lies within Harare City Council which falls under the local government. However, the national government has oversight for water provision. This brings a challenge to water provision. In some cases, politicians who have power override the work of technocrats in Harare City Council. As a result some decisions are made in order to gain political mileage at the expense of Harare City Council. An example of such decisions is when politicians allow people to settle on wetlands and this has affected water provision in the city. Wetlands play a critical role in the purification of water before it reaches the main water bodies and are also responsible for recharge of streams. Although providing housing in wetlands helps politicians gain votes, it affects the ability of Harare City Council to provide water as they have to buy a number of water treatment chemicals due to high pollution of water in Lake Chivero. Apart from degradation of wetlands there are other factors which contribute to the pollution of raw water such as population increase and effluent from urban agriculture and industry. In as much as science is important in influencing policy, some decisions are made without scientific backing and in some cases even though the technocrats have the information that can influence decisions, they are sometimes ignored. This often happens when decisions are made at the top and they only come as a directive to the technocrats, hence they cannot question their superiors. In addition, even when there is legislation to guide decision-making, the voice of those in power often overrides legislation. Drawing back to the case study of refurbishment of Morton Jaffray, the central government was at the forefront of the decision-making process and some stakeholders felt that the loan was supposed to be secured as a grant rather than as part of a bilateral agreement.

c. Lack of transparency, accountability and stakeholder participation

In order to build resilience of cities, principles for good governance should be central in decision-making for the water sector. Looking at the refurbishment of Morton Jaffray case study, it emerged that values underpinning the decision (if any) were not procedural and not properly informed by pre-feasibility assessments. Stakeholders felt that the entire distribution system should have been refurbished rather than the plant only. This is due to the fact that approximately 60% of water is lost as non-revenue water due to leakages in the water distribution system among other factors such as illegal connections. This is an indication that key stakeholders as well as citizens were not effectively consulted in the decision-making process as there seem to have been different priorities and procedures with what actually took place. Stakeholder participation is

important in decision-making for key resources such as water as they sometimes have crucial information that can inform sound decision making. In this instance it is important to ensure that those with power should not solely make decisions, but rather incorporate the voices of the poor and marginalised as they are the end users of the resources and whatever decisions are made, ultimately affects them. In addition, refurbishment of the plant seems to have been surrounded by issues to do with corruption and mismanagement of funds. It is alleged that the cost for refurbishment was inflated to US$144 million yet US$50 million would have been sufficient to cover the work.

d. Lack of domestic funding

In order for cities to put sound plans into action, there is a need for resources, particularly financial resources. This also gives cities independence to make decisions and implement them rather than depend on external sources of funding. In the case of Morton Jaffaray, lack of financial resources led to a delay in the refurbishment of the plant until the cholera tragedy hit the city. Even after the cholera epidemic, the city still relied on external funding in order to refurbish the plant and ensure adequate supply in the city. However, the danger in relying on external funding or development funding is that sometimes external funders dictate the pace and manner in which development takes place. According to HCC, the move to refurbish only the MJ waterworks, leaving out refurbishment of the entire distribution system as intended, was purely because of the priorities and final say of the financiers and funders - the Chinese Exim Bank supported refurbishment of the MJ waterworks only. Due to inadequate funding, local authorities are also in constant fire fighting mode as they have to deal with crises at hand and hence some projects or plans that are forward looking or do not have immediate results are put on hold.

Harnessing existing opportunities in building resilience in cities

Although there are several challenges within the decision-making context for Harare, there are some opportunities that exist for robust decision-making and a climate resilient city. This gives hope even in the face of climate change knowing that it is not all gloomy for the city but rather there are opportunities for effective decision-making that can be harnessed. Stakeholders in the water sector of Harare identified opportunities which include a clean environment, job creation and funding. Decision-making in the water sector provides an opportunity for a clean environment. This is in the sense that decision-making can have a holistic approach that focuses on all the aspects of the environment and that protection of the environment can be central in all decisions. Some projects related to water and the environment have the capacity to create employment for practitioners in the water sector. In addition, there is an opportunity for funding in the water sector - for example the Green Climate Fund. This is based on the recent recognition of the importance of tackling environmental challenges such as climate change. This implies that decision-making pathways must ensure that decisions made can tap into existing funding opportunities. Given the growing focus on stakeholder engagement approaches and decentralisation, there is an opportunity for involving communities in the decision-making process. This will allow communities to have a sense of power and ownership, which will result in improvement and efficiency in the decision-making pathways. Decentralisation will also ensure that the people who receive the goods and services have a say in how decisions are made and ensure integration of local knowledge.

Conclusion

Challenges in water service delivery in the city of Harare are mainly tied to decision-making. However it can be noted that decision making processes can make use of already existing opportunities, hence it is not all gloomy for the city. What is needed is a shift from the 'business as usual' way of doing things as water is central to health and livelihoods of the residents and development within the city. In addition, the current decision-making in the city has implications for how the water sector of Harare will respond to climate change as it will add on new challenges. In order to tackle the already existing challenges within the water sector there is a need for proactive decision-making that is evidence based and with positive political influence. There is also a need for prioritisation on domestic funding as it has been noted that reliance on external funding sometimes dictates the way issues are tackled and in some instances, is not suitable to the context. There is also need for stakeholder engagement to ensure that development within the city is informed by various stakeholders. This will also encourage collaboration among various stakeholders rather that uncoordinated efforts due to working in silos.

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