

LEARNING FROM CRISIS

A series of modular learnings from the 2017-2018
Cape Town water crisis

☺☺☺ THE RESILIENCE SHIFT

THE CAPE TOWN
DROUGHT RESPONSE
LEARNING INITIATIVE

module

15

A new relationship with water

With low daily per-person usage targets and the threat of no reticulated water, the crisis gave Capetonians a new awareness and appreciation of water, changing the behaviour patterns in households and businesses.

Text component of module 15, accompanying the film www.vimeo.com/cinesouth/ctdri-trs-lfc-module-15

Duration: 17:07

A new relationship with water

Before the crisis, Cape Town residents and businesses largely took water for granted: it was clean and plentiful, and people didn't even think about where it came from. The crisis experience, when at one stage residents had to ration their use to fifty litres per person per day, dramatically raised the level of awareness of water. Residents radically changed their behaviour patterns around water use. They also developed a much better understanding of the nature and working of the water supply system. On a somewhat larger scale, the same awareness of water that changed residents' behaviour at the household level started to change the thinking, behaviour and usage patterns within businesses. The crisis gave a commercial driver to water savings, previously seen by businesses mainly through a social responsibility and sustainability lens. Once they started paying attention to it, they often found that substantial savings were possible. The crisis delivered a lived sense of what climate impact looks like and that we were not prepared; this is an opportunity to make people realise how important it is to put in place things now, for future change.



Business and society broadly got a new respect and appreciation for water

Feroz Koor

The relationship that the average Capetonian has with water is forever changed

Priya Reddy

If anything that came out of this is, you know, people know what water is *really* worth

Feroz Koor

EXECUTIVE SUMMARY

- Before the crisis, Cape Town residents and businesses largely took water for granted: it was clean, it was plentiful, it came out of their taps, people didn't even think about where it came from
- The crisis experience, when at one stage residents had to ration their use to fifty litres per person per day, dramatically raised the level of awareness of water, with the realisation of how fundamental it is to everything we do, and how precious it is
- Residents radically changed their behaviour patterns around water use
- Even if the extreme water-saving discipline of the crisis period did relax somewhat after the crisis, there is the hope that a lasting impact of the crisis would be that there has been a mind-set shift
- In addition to the behaviour change, as a result of the crisis experience citizens also now have a much better understanding of the nature and working of the water supply system that delivers the water to their taps
- On a slightly larger scale, the same awareness of water that changed residents' behaviour at the household level started to change the thinking, behaviour and usage patterns within businesses
- Previously, businesses were not really paying attention to water at all as it typically was a very small operating cost for them; once they started doing so in the Western Cape, they realised substantial savings; one retailer reduced its water use in its outlets in the province by forty percent, as a result of which it started rolling out similar measures in its operations in other parts of the country
- Before the crisis many large business had a social responsibility and sustainability view of water, and saw themselves as being on a path of reduction in water use, but there was no commercial driver to their journey along this path; the crisis added a strong commercial driver, leading in some instances to projects to enable real-time monitoring of scarce resources, resulting in substantial savings
- It is hard to get people and organisations to respond to climate impacts as they are often willing to respond only when they're directly faced with such an impact; the crisis made it clear to people in Cape Town across the board what climate impact looks like and that we were not prepared; this lived sense of what it might mean is an opportunity to make people realise how important it is to put in place things now, for future change

Interviewees in order of appearance:**Feroz Koor**

Group head of sustainability: Woolworths

Priya Reddy

Director: Communication, City of Cape Town

Claire Pengelly

Water programme manager: GreenCape

Lloyd Fisher-Jeffes

Water resources engineer: Aurecon

Craig Kesson

Chief Resilience Officer: City of Cape Town

Helen Davies

Chief Director: Green Economy, Western Cape Government

David Green

CEO: V&A Waterfront

Assoc Prof Gina Ziervogel

Research chair: African Climate and Development Initiative, University of Cape Town

Full interviews on [Cape Town Drought Response Learning Initiative](#) website

Opinions expressed by interviewees are personal viewpoints
and do not necessarily reflect those of their organisations

STRUCTURE

00:00:05

Hooks:

- Business and society got new respect and appreciation for water (FK)
- The relationship that the average Capetonian has with water is forever changed (PR)
- If anything came out of this it is that people now know what water is really worth (FK)

00:00:49

CAPE TOWN RESIDENTS' RELATIONSHIP WITH WATER CHANGED

- Previously, water was taken for granted; new awareness of water
- People are now aware of their usage, and more careful in their use
- There is also better understanding and knowledge among residents of the water supply system and where their water comes from (CP)
- There has been a realisation of the value of water, that it is fundamental to everything we do, and that it is precious (LFJ)
- Even if the extreme water-saving discipline of the crisis period relaxed somewhat after the crisis, one hopes that a lasting impact would be that there has been a mind-set shift (FK)
- City communication department played a role in effecting behaviour change, including using residents as spokespeople: those who were not saving became outliers (PR)
- Within the Water Resilience Task Team the aim was also to use something of a burning platform to change Cape Town's relationship with water, including the way the government approached the water situation in Cape Town (CK)
- Awareness of water became pervasive, also among children (PR, HD)

00:10:36

CAPE TOWN BUSINESSES' RELATIONSHIP WITH WATER CHANGED

- On a slightly larger scale, the same awareness started affecting thinking and behaviour within businesses
- Previously, businesses were not really paying attention to water; once they started doing so in the Western Cape, they realised the benefits to themselves and started rolling out similar measures in their operations in other parts of the country
- Before the crisis there was a social responsibility view of water use; crisis added strong commercial driver (CP, DG)

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THE CRISIS AS OPPORTUNITY

- Hard to get people and organisations to respond to climate impacts; the crisis made clear to people across the board what climate impact looks like and that we were not prepared; this lived sense of what it might mean is an opportunity to make people realise how important it is to put in place things now, for future change (GZ)

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- 00:00:49 “One of the big lessons as well that’s come out of the drought is, at a very core level, just an awareness of water. So I think that all of us to a large extent really took water for granted, it was clean, it was plentiful, it came out of our tap, we didn’t even think about where it came from. And certainly if you were to speak to your average Capetonian eighteen months ago and ask them, you know, how much water do you use, I would be surprised if ten percent could tell you. I think it was a nominal amount on the bill at the end of every month, and it was certainly that was not really a concern in their lives. That has completely changed. When you start to have to count your litres of consumption, you know, on the basis of, I’m allowed one flush a day, and I’m allowed to be in the shower for so long, and I can reuse this little piece of water, and do I have enough water to wash my vegetables, or to water my plants, you know when you start to actually start to crunch the numbers and calculate how do you survive on fifty litres a day, does your awareness of it increase significantly.”
- “But also, it’s not just about your own usage and how you use it etcetera, but it’s also about where our water comes from. You know, no-one, I don’t think anyone knew that it comes from these six major dams that are all outside of the city’s area, how it’s managed and how there are different users in the system. Now most people could probably tell you within the closest percentile as to what the current dam levels are. And I think that level of awareness of how our water system is managed has increased incredibly, and that’s something that’s not going to simply go away, there’s absolutely no way.”
- 00:02:27 “I think citizens generally have learnt the value of water, not in its monetary sense, which is one aspect that’s often debated, whether it’s too cheap or not, I don’t think that’s really where the value of water lies, and I think many have realised that, is that it’s actually fundamental to everything that we do, and that without it how are you going to live your life, and if you are going to have to collect it at a centralised point how are you going to operate your business, how are you going to do any of that, I think that lesson lots of people are a lot more aware and I think that’s been great, I don’t think many people have realised how much work was done by City officials to ensure that that scenario was not realised, but I think at least there’s been a realisation that actually water’s pretty precious, and we need to all take responsibility for it.”
- “And then there have been minor learnings, other learnings around how the system operates. A lot of people have actually learnt where their water comes from, and that it’s not just opening a tap, learnt that the environment’s key, that you need to protect your stormwater systems, there have been schools running projects on that, so people have suddenly started engaging again with how water in the full water cycle – not just water supply to your toilet – but the full water cycle, and I think that’s been a positive outcome of the drought. And it’s definitely

helped push the city towards its goal of a water-sensitive city where a key component is having water-aware or waterwise community. So that's been a huge benefit and probably helped us leapfrog a lot in that sense."

00:04:16 "For me, I think there's a new appreciation for water, just broadly, at least for people in Cape Town and the Western Cape, which probably wasn't before. You know, the kind of water saving tips and how we started saving every single drop of water which I think is currently unique to Cape Town, probably in the world now, I mean, people flushing their toilets with rainwater and having buckets in the showers and in their basins and so on, almost not letting even a single drop go to waste, I think over time, I'm not sure if we'd be keeping that discipline to that level, but I'm hoping that a lasting impact from this would be that everybody has a new, that there's been a mind-set shift, and the relationship with water has probably changed forever, which I hope."

00:05:03 "Overall I would say that this campaign was very measurable. Some of our campaigns that want to effect behaviour change are not, but this one was because we could literally see consumption going down. We saw it going down to levels that it had never been before. And while we did that in partnership with the water department in the City of Cape Town who did amazing things with pressure management and leak detection, I would like to think communications had a big say in, you know, the – I remember at one point the mayor of Melbourne came to us and said the City of Cape Town has done in six months what it took Melbourne eight years to do in terms of bringing consumption down that much. And really anyone that live in the city of Cape Town will know that it became so integral to how people were thinking; people that had never thought about their water consumption before were. I mean anecdotally and in terms of our more substantial analytics we can see that the relationship that the average Capetonian has with water is forever changed. And that is something that I think communications played a significant role in. We went on various different iterations of the campaign, and one very important one was where we had residents themselves be our ambassadors and our spokespeople, so that it became that if you weren't saving water you were the outlier, because everybody else was. Let us know if there is someone in your street or somewhere near your work where people are using excessive amounts of water, because that problem is all our problem. It became a collective effort, that we needed to keep an eye on each other, to keep an eye on ourselves, an eye on our families and our communities, and constantly remind each other and remind ourselves that if we didn't change our behaviour today, tomorrow was going to be a disaster."

00:07:00 "There is one thing about experiencing a severe drought or an emergency of any situation and that is the simple planning axiom of never letting a good crisis go to waste. And certainly my hope with the Water Resilience Task Team was to use something of a burning platform to change Cape Town's relationship with water, including the way the government approached the water situation in Cape Town,

and its assumptions for water provisions. And when the immediate crisis passes it's easy to slip back into comfort zones and to dimly remember that you couldn't flush the toilets every time you needed to use them or you had to ration your supply to fifty litres per day per person, but we should never be in that situation again as a government, and I think that if we ever are it should be considered an absolute failure on the government's part to have not taken these lessons seriously."

00:08:04 "The times that I felt happiest and most relaxed in it was when I realised how big the support network was. That we were not in this alone. That residents were willing to come on board, business was willing to come on board, our partners, globally people were willing to come on board and help us, that I would go to the supermarket and see the most responsible and amazing water saving messages. I would see our own posters and pamphlets up at clinics and libraries. And when you would hear parents say their children have become just entire water bullies, and say, no mom, you shouldn't be making pasta, it takes too much water. It was very comforting to have and to know that the future generation is hopefully going to be much cleverer about not getting us into this situation again."

00:9:01 "In terms of what people's awareness or how people's awareness has grown in the water space, I think that's been a phenomenal change. You know, six months before the drought I think very few people would have understood how our water system works, what their role is in terms of long-term water resilience, a sense of what government controls or doesn't control, a sense of the fact that climate change isn't something that might happen in fifty years' time, but is something which is being impacted and felt by many people across the globe right now. I think many of those things really came to people's awareness, I mean I don't think I've ever gone to a social occasion since the start of the drought where people don't talk about water, and I very seldom tell people what I do, if I don't know them well. So for me it's fascinating in terms of the types of conversations that are happening, and for me what's also very important is that while some of those conversations harp on the role of government and where government has failed, the majority of those conversations are focused on what they as households are doing, both now but also in terms of ongoing water use. For me that's really fascinating. I mean when you go to someone's home – I did for a child's school party the other day – and the grass is green, a lot of people were questioning, well, they must have a borehole if their grass is this green. So also that kind of, that peer checking in on each other for me is incredibly interesting to see how we value water seems to have fundamentally changed."

00:10:36 "But then I think on the business level and the businesses that we were working with, you know, we kept on seeing example after example of in a similar way, at a kind of a slightly more macro scale of what you would see at a household level you would see at a business level. Where, you know, their water bill was not a

concern of theirs, you know, the kind of input costs that most companies have been focusing on is energy. We've just come out of an energy crisis, energy costs have been skyrocketing, that's where they were really thinking about how do we become more efficient, how do we look at alternative sources of energy, etcetera. Whereas water was not really an issue. And obviously that has also changed significantly as well. So not only because you had to reduce your consumption because the price has increased so much, but a lot of the time the kind of advice that we were giving businesses was really just to simply start understanding your water, to meter it, but at a much higher level of granularity, so that you could understand how water is used, when it is used, and in what format it was used. So that you could understand that not all water is the same, that you can use different types of water for different types of purposes. And we've seen a number of examples of – there is an example of a large retail organisation that's nationwide, for them, you know, water again was a very small percentage of their bill, they didn't think about it whatsoever, but because of the crisis they needed to reduce their consumption, and simply through metering and behaviour change campaign and a few efficiency measures, actual devices etcetera, they were able to reduce their consumption by forty percent overall in their stores in the Western Cape. So for them, they were saying, we didn't, we had absolutely no idea what we were doing with water, now we know exactly, we've got a dashboard that tells us on an hourly basis as to every single one of our stores how much water is being used and we can tackle any issues as soon as we see it. Why aren't we doing this across the rest of the country? Because we're saving so much water here in the Western Cape, this has forced us into a situation where we need to tackle the water crisis, but actually there's massive cost savings that could be made elsewhere and make us more efficient.”

00:12:42

“With our focus on sustainability and understanding our consumption of scarce resources, our environmental team – and I think if I was asked would I want real-time data on scarce resource consumption, I'd probably say yes, but there are probably other priorities in the business. But this is a passion project, and literally this team have pulled together a real-time dashboard which measures the consumption of all scarce resources and it has actually proved remarkably informative and remarkably easy to maintain and sustain. So it's probably, I should have had more faith but the effort to implement, to actually create it was high, but the actual running and implementation is relatively straightforward, and it is an enormous source of value to us. Because when you are monitoring in real time you obviously monitor spikes, you monitor the exceptions, and you're able to act rapidly, and, you know, these resources are quite primitive and basic. Your additional spikes in work are simply very often leaks in one hundred year old infrastructure, you can rapidly home in on where the area is and you can resolve these, which could have taken almost a month by the time the billing comes through. So we have reaped enormous benefits out of this real time, not because

we're sitting there monitoring it every day but because it throws out exception reports which we investigate.”

“Look, I think we were on a path, there was a consciousness, but from a business point of view there wasn't a strong commercial driver. And what the crisis, or we averted, there was no crisis, we did not run out of water, we averted the crisis, but what the threat, let's say, of the crisis did, was it accelerated people's plans and let them think differently. So there's no question in my mind that we were on a path, but it was a path that did not have a strong commercial driver. It had a social responsibility driver and a consciousness, but from a business point of view it didn't have that commercial driver. And this averted crisis accelerated plans for us to do, you know, what is quite correctly good practice in a water scarce environment.”

00:15:14 “I think if I think about the drought and I think about myself and the work I've done in the past, it's really interesting for me to reflect and see how I've always been interested in adaptation to climate change. How people and organisations respond to climate impacts, and how hard it is to get people to do that. Because it seems as though only when they're directly faced with it do they want to respond. And so for me this drought has been a really important opportunity where I've seen the whole of Cape Town, from citizens across the board, to businesses, to the city government, to the national government, go: this is what a significant climate impact looks like, oh dear, we are not prepared. And so, I really feel we need to use this opportunity to experience what needs to be done in terms of adapting to climate change. We need to see how important it is to put in place measures now that can help us cope better with impacts that we're going to face in the future. So I hope that citizens who normally felt a bit disconnected from nature, from climate impacts, from what it means, now have a lived sense of what it might mean in the future, and therefore how important it is to put in place things now, for future change.”

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