

## Cape Town's Muslims Pushing Back Day Zero

Cape Town, situated at the foot of Africa, is the southernmost city in a water-stressed region. Graced by a Mediterranean climate of hot, dry summers and cold, wet winters, Cape Town has always been dependent on its winter rainfall to get through the dry months of October to April. Already victim to drought cycles, the Western Cape – the area surrounding Cape Town – has been hit by three years of below-average rainfall and deepening climate change, exacerbated by the El-Nino-La-Nina effect, the warming or cooling of the Pacific, which impacts on global weather systems.

An example of how devastating the drought has been is indicated by average rainfall figures at Cape Town International Airport. Whilst the normal average precipitation per annum has been just over 500mm, this year saw only 120mm rain falling, and the dams reflecting only 30% of capacity at winter's end. Coupled with political bickering by the Democratic Alliance (DA), which governs the region, and the African National Congress (ANC), which controls national government, the 6 million citizens of the Cape have been the victims. Warnings about Cape Town running out of water due to increasing demands and population densities have been circulating since the 1970s, and more recently, in 1990 and 2007, when it was finally predicted that if something was not done about increasing capacity, the city's taps would run dry between 2012 and 2015. Running on models that Cape Town would only see its 'Day Zero' in 2022, the city authorities did institute water savings measures, but arrogantly spurned all offers of desalination (Cape Town is surrounded by ocean) and aquifer mining (the region is rich with subterranean aquifers). If that was not enough, the national government failed to grant tenders to increase and strengthen dam walls in the region, something that would have most certainly alleviated the problem.

The citizens of the Cape blame the politicians squarely for the water crisis. As a water expert said: water shortages are not the result of poor rainfall, but bad human management. This resulted in the city mayor, Patricia de Lille, conjuring up the ghastly 'Day Zero' campaign, centered on the panicked fear of the city's taps running dry by April this year, and people having to queue for water at points guarded by the military. However, with Capetonians making heroic efforts to save water (each person is only allowed to use 50 litres a day), 'Day Zero' has been pushed back from April to July, the middle of the rainy season, when it is hoped the dams will have more water, and the aquifers – and desalination plants – will start providing.

To give some perspective on 'Day Zero', spokesperson for the Water Affairs Minister, Mlimandlela Ndamase, said that the mayor's campaign had taken everybody by surprise. It had been a unilateral decision, taken with no national consultation and little appreciation of what hydrologists and scientists were doing behind the scenes. 'Day Zero' was never in our expert's language. Never. Whilst not denying there is a crisis, we have a duty to keep the taps open, and we will do that. We have done it before in KwaZulu Natal, where we avoided a Day Zero, and we will do it in the Cape," he said. In the meantime, Cape Town's Muslim community – over a million strong and served by 150 water-guzzling mosques – has been taking steps to save water. Awqaf South Africa, an endowment-receiving organization, which only spends the income generated from investments, has decided to step in. With its focus on integrated community development and self-reliance, Awqaf has been focusing on making mosques water-wise, which can relieve demands and cut down water costs in poor areas. To this effect, Awqaf Deputy CEO Mickaeel Collier, has spearheaded a pilot conservation project, with a view to implementing it at community centers across the region.

The idea is to supply water tanks (locally called Jo-Jo's) – and where possible – to sink boreholes. If these centers were to be equipped with 2,200-litre water containers, water tankers in a Day Zero scenario could fill these Jo-Jo's. The water could then be distributed in a safe and friendly environment.

Masjid ul-Moejahidien, which serves an underprivileged community in Manenberg on the Cape Flats, was chosen for the project. During their site visit, experts found that the tap flow rate in the wudu section was very high, with an estimated flow rate of three liters per minute. The supply stop valve was closed to 25% and water saving taps – which produce a spray instead of a flow – were installed, reducing the tap flow to about half a liter a minute. On the roof, a double layer of gutters was installed to intensify the rain harvesting system. Winter rainfall would flow into the Jo-Jo tanks, which would have internal anti-bacterial coatings to keep the rainwater pure, and could be connected to the water reticulation system via a booster pump for use inside the masjid. Sulaiman Peters, the chairperson of Masjid ul-Moejahidien, said that the installation of tanks and water savings measures would decrease their bill by at least 60-70 per cent, despite massive tariff hikes by the City of Cape Town authorities. "This water crisis has had a massive

impact on us. It really hurt the community. It was a heavy thing on us, but now we can smile,” he said.