
THE PERILS OF THE WATER AND DROUGHT CRISES IN SOUTH AFRICA: QUO VADIS ?

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ABSTRACT

The paper argues that the South African government in respect to the drought and water crisis that is confronting the country has failed South Africans and it is too late to avert this disaster, in spite of the relevant ministry denying that there is no crisis. The water crisis was long coming. The fact that the El Nino effects were known a decade ago, the government was caught unprepared. In spite of a 'war' on water leaks, fifty percent of water disappears from pipes. Compounding this problem was the fact that R2 billion was not spent by the water department and more than R7 billion in water revenue is lost every year. Political meddling, too little planning and a loss of skills have left South Africa and the country is therefore beyond drought repair. Given the electricity crisis with extremes of load shedding and high tariffs for electricity and now the drought and water crises compounds South Africa's fragile economy and will contribute even further to unemployment, poverty and inequality and there is no strategic plan to overcome these perils as the country slides more and more into a disaster zone. The paper talks to the mismanagement of water resources as problems deepen and drought bites everywhere. On the hand theft drains urban water supplies. The issue that the paper attempts to ask is can industry ease the water crisis. It is the worst drought in decades and will have devastating effects on agriculture and the state admits the signs are bad, but talking of a water security threat is 'premature.' The widespread dearth of rainfall is set to hit food prices hard. A host of other issues will be discussed to complete this narrative.

Keywords: Water, Drought, Agriculture, Mismanagement, Rainfall, Crop Production, Threat, Collapse

METHODOLOGY

The classical methodologies used in research are not engaged in this paper. However, the authors rely completely on their observations and critical analysis, coupled with the use of newspaper articles that appeared in the popular South African press to articulate this narrative, given the current crises of water and drought that has befallen the country. This does not alter the trajectory of the paper nor does it dilute the thrust of the realities confronting the country in terms of this crisis.

ETHICAL CONSIDERATIONS

There are no ethical considerations whatsoever. This is justified by the all - embracing reality that both the drought conditions and water crisis is real and the latter is a situation that the government has allowed to develop over time. In this sense the narrative underscores the issues on the basis that it is already public knowledge and therefore, in no way is a criticism of the government but shows its ineffectiveness and mismanagement, in not securing water resources for the country. In reality it is moving from one crisis to another without a holistic plan to overcome these real disasters and therefore, the South African economic and fiscal crisis has been overtly exacerbated and made by government. As such there are therefore, no ethical considerations to be taken into consideration.

CONCLUSIONS AND RECOMMENDATIONS

The paper does not talk to specific conclusions and recommendations. These conclusions and recommendations are dispersed throughout the narrative and in the discussion undertaken. This is the obvious reality of a paper of this nature and some conclusions and recommendations are therefore made by the authors throughout the narrative, in terms of the analytical depth undertaken in the formulation of the paper, as a whole. In this sense the paper puts forward the realities of the drought and water crises in South Africa. It is hoped that the criticisms raised in this paper will be appreciated by the readers of this research article, and by all role – players and stakeholders involved in the provision of water.

INTRODUCTION

The South African water crisis, and make no mistake, it is a crisis, is a result of a comprehensive victory of political imperative over technocratic sense. (Mail and Guardian, Editorial, 2015: 22).

“South Africa is water - scarce country. Water is the single biggest constraint on growth and improving livelihoods. But the department tasked with securing this precious resource fell prey to internecine politics of the worst kind. Skilled workers have either left or been forced out. Those who stay are ignored or silenced; nobody wants to stick their head above the office divider if that means their job suddenly becomes redundant. Water affairs have been paralyzed. It under spent its last budget by R2billion and consistently receives qualified audits. The plans and projects that would secure South Africa’s water future are behind schedule, or fail soon after completion. Tens of billions of Rands have been wasted as trillions of liters of water leak out of faulty systems. The failing is even more comprehensive at a municipal level... Outside of the metros, South Africa’s water infrastructure is in a dire strait... Children die from cholera and diarrhea. Water projects that should stand for half a century collapse after half a decade” (Mail and Guardian, Editorial, 2015: 22). Everyone knew that this drought was coming and, knew how desperate the water situation had become, and if they did not, reading the South African press over the last six months in general would have alerted government and made it clear that South Africa will be confronted with this major problem. But instead of going public and preparing people and response systems for the entirely anticipated crisis, water affairs closed its eyes and ears to the peril of South Africa and South African’s plight because, it concentrated its efforts in dealing with political upheaval.

A new minister and a new department, taken from the environment department and twinned with the consistently orphaned sanitation department, meant the department’s focus was on transition and all that it brings. In that time the ball was dropped. Delayed construction of dams and ageing infrastructure mean that South Africa’s infrastructure and water systems cannot handle anything extraordinary, and that is what the future will be: indeed more than extraordinary. “Climate change as is being experienced over several months will make extremes of drought and flood commonplace, forcing the country to make hard decisions about who gets water first, and who does not get water at all. In the meantime a political standoff with farmers has seen them largely left to their own devices. Forty thousand head of cattle dying in KwaZulu – Natal and the price of white maize rising by more than 50 percent this year. The water – agriculture nexus has been broken, just like its energy component was broken seven years ago by the same kind of political paralysis, and with the same result” (Mail and Guardian, Editorial, 2015: 22).

Politics dictates that little will change. Mines, often built as much on political connections as on ore – bearing seams, will continue to destroy wetlands and rivers. The cost of cleaning up that water will again be picked up by the population who it makes sick. Our neighbours, also hard hit by the drought, will pick up the cost as dirty water flows across the borders, in contravention of South Africa’s international commitments. This is the sorry state of affairs, as South Africa under the present government moves from one crisis to another and to the country’s peril and

devastation. Many things could have been done and should have been done to prevent the drought and water crisis. Like the ongoing electricity crisis. They were simply not done by an inefficient public administrative system and inept bureaucracy. Many things can be done to soften the impact of the water crisis. This time there can be no mistakes. All of this lies at the feet of government and within its hands. Innovation and compassion is now required to save South Africa. Nothing more and nothing less is required to avert the deepening crises.

IT'S SIMPLY TOO LATE

There is no doubt that in the corridors of power in the capital Pretoria according to Siphos Kings (2015: 2) “the atmosphere is ‘vexing on panic’ and the rains have failed for the first time since 1994, and the carefully laid plans for such a disaster have been implemented patchily, where they were implemented at all. The cost will be borne disproportionately by women and children, two groups the government believes particularly vulnerable to water issues.” At least a decade ago the department knew the rains would dry up. El Nino, a weather phenomenon that rapidly heats the Pacific and brings drought to the southern hemisphere, is a fairly regular occurrence. But according to the Mail and Guardian (2015:2) “the department has been crippled by a regular turnover of skilled staff. There have been constant changes at Director General Level, and thus the department is in a permanent malaise and lacks consistent leadership. On the other hand, it has also to partner with other departments such as forestry, sanitation, and environment, which has seen a churn in skills.” The triumph of politicians over technocrats has left the country responding to a water crisis, rather than pre – empting it.

South Africa is an arid country which receives an average of 450 mm of rainfall each year, half the world average. Entire provinces are in crisis because of skills shortage and a lack of political continuity. It is obvious that no amount of clever politics or good administration could have averted the drought. Most agree to this but all agree that the effects could have been softened, but in reality it has intensified. To overcome the crisis, it must rain in the next five weeks, but according to weather forecasts this is not possible. The breadbasket provinces would reel and so will South Africa. People will run out of water and staple foods will become less affordable with the probability of greater civil unrest and protests adding to the problems of a mismanaged economy. According to Siphos Kings (2015) “rain at meaningful levels is now expected in March 2016 only. With most of the rain falling in the east because of the warm Indian Ocean, the water system is highly dependent on dams and pumping water uphill to get it to the interior. There were two devastating droughts in 1983 and 1992 which crippled the economy and agriculture. As things stand South Africa is on the precipice of drought disaster once again. But those droughts were in a country of 39 million people and a much smaller industrial base. The number of people has grown by more than a third, but the quantity of available water has shrunk.” In the next five

years, the 2030 Water Resources Group (2012) predicts that “there will be a water shortfall of 17 percent and that all these facts are included in the governments long – term water scenarios.” By the same token according to a water and sanitation official (2015) “regular drought and El Nino spikes are a fact in South Africa. You plan them in your 100 – year building plans. El Nino was overdue by a decade which should have given planners breathing space. The problem with plans is that you have political upheaval and everything stops. This is what has happened in South Africa.”

The water department failed to spend R2 billion and therefore, development is stymied and development is top – down and excludes communities and thus, projects fall apart when government leaves. Siphso Kings points out (2015:2) that “three officials working for the water department confirm that, although there were long – standing plans on how to mitigate the effect of a national drought, these did not get the attention they needed. We did not ignore this or plan to fail, we just screwed up. We dropped the ball. There should have been a much stronger campaign to stop leaks, stop people wasting water and to really work on industry and the agricultural sector to use water more efficiently.” This would have ensured that more water was stored in dams. The government instead paid lip service to water saving and only got serious when the crisis was too late to avert. “Water Boards have now invoked restrictions in many provinces. The Minister of Water Affairs has played the blame game and called for prayers for rain and she blamed a host of different sectors for not doing enough to conserve water, but she did not respond to the Mail and Guardian’s questions” (Mail and Guardian, 2015). The restrictions on water due to increased demand places too much pressure on the infrastructure and the department indicated that this was a dual problem and that the availability of water itself was only a secondary concern. This is the warped explanation that is out of kilter and conveniently masks the real situation. These two issues bedevil water provision nationwide. In municipalities almost half of the water leaks away because of dilapidated infrastructure and poorly built replacement infrastructure. At a national level dams are built behind schedule. In some cases almost half a decade late and the Lesotho Highlands Project is already three years late and behind schedule. These dams are meant to store enough water to bridge the gap between supply and demand in times of scarcity. The lack of storage has hit KwaZulu – Natal Province first, and hardest. According to Siphso Kings (2015:2) “the province is going through the driest period in recorded history. Some 150 000 people are receiving disaster aid in the form of water and food parcels. More than 40 thousand head of cattle have died.” The South African television services (SABC, November, 2015) have reported that hospitals in some provinces have had to postpone medical procedures because of a water shortage. The running tally of communities facing critical water shortages from previous infrastructure failure and now drought stands at 6500 and is increasing.

The hardest – hit provinces are also the country’s most important food production areas. The press (December, 2014 and October, 2015) also reported that “the average profits in the agricultural sector are 3 percent, leaving little breathing room for farmers to survive an increase in the costs of production, or a drop in the value of their produce.” In reality farmers are struggling to survive a second season of drought. Illegal mining which the government has not curbed has destroyed fertile land and under – ground water sources. This is a story of the whole of South Africa, with farmers complaining that long – term food and water security have been sacrificed for short – term gains in mineral extraction. All of this translates in poor and inferior quality food with less value at the market. This is indeed very serious and stymies development and retards agricultural production. Cattle auctions have increased and farmers are selling cattle at a loss out of fear of losing their entire herds to the drought. Herd sizes are being reduced drastically in drought stricken areas. For maize and sorghum farmers, the country’s staple food, the first year of drought was nearly catastrophic. The yield dropped by a third. According to the Mail and Guardian (2015:2) “the country went from a net exporter of maize to an importer. At R3300 a ton, this maize was 10 percent more than local production. That added to the deficit in the country’s balance of payments with foreign currency needed to buy the grain.” The World Food Programme (In Siphos Kings, 2015) “has warned that this will be further exacerbated by a second year of ‘uncharacteristically low’ rainfall, with significant drops in crop production.” In earlier Reports the United Nations Climate Change Agency (In Siphos Kings, 2015: 2) “gave a general warning that short term shocks from rapid changes in climate will put pressure on already weak social and governance structures, and possibly provide catalysts for outbreaks of civil unrest.” An example of such unrest was shown in Syria which contributed to a revolution, and is thought to have been driven by the country facing the worst drought in recorded history, which drove farmers into the cities and added enough pressure to incite revolution. The same could befall South Africa, if the government does not intervene decisively.

According to Siphos Kings (2015: 2) “The infrastructure problem is going to cost between R700 to R800 billion by government estimates. The issue is does the government have the resilience to handle this catastrophe. All of this has led to the collapse of service delivery. The problems are structural within government with scarcity of engineering capacity and the excess of political interference in water management need to be solved before long – term security can be found.” South Africa is faced with constantly high temperatures and no real rain, and even if it rains in March of 2016, the El Nino will be followed by a La Nina which will bring very heavy rains with its own devastating consequences. This is the reality and the situation is therefore too ghastly to contemplate.

POOR MANAGEMENT

Mmusi Maimane (2015: 5) the leader of the largest opposition party the Democratic Alliance (DA) says that “South Africa needs an infrastructure revolution and a change in values if it is to avoid being left high and dry. Economic growth and thus job creation will be increasingly limited, leading to instability.” Generally, it is said that countries should not waste a crisis and therefore South Africa should see the current drought and water crisis as such. There is no doubt that if the situation worsens, it would limit economic growth and development. It is obvious therefore that the country should very rapidly and urgently and strategically manage its transition from a demand driven to a supply – constrained economy. There is no doubt that South Africa has a crumbling infrastructure problem and that this infrastructure is poorly managed by the government. The high population growth, immigration and habits of consumption do not really help because it pushes up demand for water. This is thus a looming crisis and yet the Minister is in a state of denial. To make matters worse more than 90 percent of waste water treatment works are dysfunctional. Blue - green algae compound the problem and this affects the health of people. The rise of pollution and waterborne diseases are now a real threat. Food prices will rise. Water insecurity will also drive energy insecurity, because energy production relies on water. As usual in a country that has lost its way since independence in 1994 the poor will suffer. The poor are also confronted with very poor municipalities that have failed them in terms of service delivery. What South Africa requires now is good science, robust institutions and sound political leadership. In other words there is massive inefficiency and therefore efficiency has to be drastically improved. Resilience is now required in order to end the injustices being perpetrated upon the masses by the present government. There is the question of water theft which has to be dealt with decisively and on the other hand the country has to reverse the continuing infrastructure decline.

The issue of water is further very seriously compounded by the inefficient use of water by various sectors. Agriculture also has to be homed in to use water more efficiently because it uses nearly 63 percent of South Africa’s water” according to Maimane (2015). The country requires good governance. We need better management and better planning. South Africa needs people drawn from its population, irrespective of race who can do the job. Not a government that looks at every issue based on race after 21 years of a failing democracy and the marginalization of well - trained individuals and the reliance on incompetent comrades that are increasingly deployed into areas of service that are not trained for and cannot handle the professional demands of work, thus leading to a collapse of professional services. This is the order of the day in democratic South Africa as perpetuated and justified by government. Perhaps the time has come for a change in ANC leadership.

The democratic alliance according to Moatshe (2015: 4) “is putting pressure on the water affairs minister to release the 2014, Blue and Green Drop Reports. The reports are supposed to be

released after every two years in order to shed light on the state of water and sanitation infrastructure, but was last released in 2012. In other words due process is not being followed. According to Moatshe (2015) the DA suspects that the reports paint a bleak picture about the state of water and sanitation in the country and would reveal that the government had failed to maintain and upgrade water infrastructure. The ageing water infrastructure has contributed to the water shortages.”

DROUGHT BITES

The drought truly hit home when more water restrictions were imposed in the country's economic heartland. According to Lynley Donnelly (2015: 2) “years of patchy planning, chronic underinvestment in infrastructure, and the sale of a resource at prices that do not reflect the cost of supplying it have finally caught up with the government and consumers alike. As with the electricity sector, large industry and commercial users are cushioned by government because of discount rates afforded to them or allowed to pay a flat fee that does not increase with the amount of water used. In reality in South Africa we find that prices vary, according to the authorities from whom they get their water – municipalities, the national government and water boards. The water usage policy has to be reviewed by government. Many are reducing the reliance on state water supplies and this has serious implications for municipalities, in terms of revenue generation. Donnelly (2015: 2) points out that “municipalities are losing R11 billion each year in distribution losses such as leaks and water that is never billed or paid for.” She further points out that in the 2013 – 2014 financial year, Johannesburg's water loss, unbilled or stolen was 41 percent, Ekurhuleni's was 38 percent, Nelson Mandela Bay's more than 42 percent and Cape Town was just over 21 percent, according to the national department of water and sanitation.” On the other hand the Mail and Guardian (2015) states that “after electricity and rates charges, water tariffs are the third – most important revenue source for South Africa's major cities, according to the South African Cities Network, which also added that water tariffs constitute 12 percent of Johannesburg's revenue, 11 percent of eThekweni's, 13 percent of Ekurhuleni's and 10 percent of Cape Town's.

However, it must be acknowledged that water has many values beyond the cost of providing it, as it is a basic human need and strongly supports food security but is also a luxury when used for swimming pools and watering gardens. There are no universal standards as to how industries use water. Businesses must pay full costs. A national pricing strategy must be invoked in order to regulate water usage. Self - supply, through boreholes or water efficiency investments, could be costly and will reduce the overall productivity of the economy. If this is done on a large scale by rich households and big industries, the poor will be left behind with no support or cross – subsidy.

On the other hand the Water Stewardship Council (2015) states that “two thirds of South Africa’s dams are eutrophic. This contributed to plant and algae growth. In addition many municipalities fail to treat effluent properly at sewage works before returning it to the country’s rivers. This stymies development initiatives and poses health threats. None of South Africa’s water purification systems can remove the toxin called microcystin produced by plants and algae. It is carcinogenic and is a very serious health concern. There has to be greater legislation, different types of water should be used for example, it is senseless to use drinking water to manufacture bricks.”

Water is everybody’s business and to this end Muller (2015: 25) indicates that South Africa can address the water crisis by means of the following actions:

- In the long term, plan how much water is needed and where to find it. Infrastructure needs to be built on time.
- In the medium term, ensure that water boards and municipalities have practical plans to operate, maintain and expand infrastructure.
- In the short term, track how much water is used and what is needed to keep it flowing reliably.

IT'S NOT A CRISIS SAYS MINISTRY

The Ministry of water and sanitation indicates that there is no crisis according to the Mail and Guardian (2015). It stated that:

- There are no water cuts but they are water restrictions _ _ _ so perhaps to call it a crisis at this stage will be putting the cart before the horse (Water Affairs Spokesperson, in November, 2015).
- We will never have a situation of water shedding. It will never happen (Water Minister in an eNCA interview, November, 2015).
- Let me remind you that we have a responsibility to save water. All of us. When you see a leaking pipe on the road inform the authorities. Nobody should waste water. It is very scarce and we could find ourselves in difficulties if we do not act now to save water. (President Jacob Zuma, launching the war on leaks Project, in August 2015).

Statements of this nature are a constant barrage by South Africa’s politicians and bureaucrats as they go about denying the water and drought crisis. The ANC government, including the President of the country never takes any blame for any crisis and continues to defend the indefensible and purports to have any crises under control. This defies logic and paints a very poor image of the country. They are out of kilter and have lost control of the water crisis, the

electricity crisis, the economic and fiscal crisis together with widening poverty, rising unemployment and stark inequality. In reality most issues in South Africa have gone awry under the policies of the current government.

Sipho Kings (2015: 2) reports that “El Nino is a regular phenomenon – named after the Christ Child because it appears seasonally, around Christmas time, and has been identified as the cause of famines for centuries. In the 1700’s it was linked to crop failures, which led to the circumstances that drove the French revolution. Nasa, he says has warned that a warming world will make El Nino considerably worse, because the majority of warming is stored in the world’s oceans.” Regardless of El Nino, South Africa’s water scarcity will become more acute. Predictions collated by the environment department (2015) show that “by 2050 the interior will be on average 3 degrees centigrade hotter. By 2100, it will be 5 degrees hotter. This will mean less rain in the west and more in the east. But this rain will come in shorter and heavier spells, damaging top soil and crops.”

By law, the department of water affairs owns all of South Africa’s water, which it provides to municipalities and utilities such as rand water. These then pipe it to households. But up to half the water is lost due to leaks before it reaches the end user. These leaks raise the price that consumers pay and the water bills for households become exorbitant to manage and affect the poor and lower middle class drastically. At the other end of the system, sewage treatment plants work above their build capacity and release raw sewage into dams and rivers. The natural systems that would help fix this problem, such as wetlands, have been so heavily damaged that the rivers are more than 80 percent polluted. It causes great and uncontrollable pollution that affects drinking water and that water treatment plants are not cleaning water properly and efficiently. Yet the government says there is no water crisis. Cry the beloved country.

STORM CAUSES HAVOC

The El Nino phenomenon came to bear on South Africa in the Middle of November, 2015, when the country witnessed and experienced a severe storm in the Gauteng province and other areas of the country. These storms were accompanied by hail, thunderstorms and caused huge damage. The storms fitted into the description of the El Nino phenomenon because of the extremely hot heat wave in many parts of the country accompanied by the warming of the Pacific Ocean. Nearly 3000 homes were destroyed in Ekurhuleni alone (and in many other parts of the country) and air flights had to be diverted as nature vented its fury. Many observers indicated that it was the worst hailstorm in 50 years. The Star (2015: 1) reported that “trees fell on power lines wreaking havoc and put parts of Johannesburg into darkness. People were stuck in the traffic for hours. In Limpopo and Gauteng hundreds of people were left homeless and government had no option but to deploy disaster management teams, who had to make arrangements in assisting

victims with food, temporary shelter and blankets.” The heavy storms have not eased the water crisis and drought conditions confronting the country. This is just the beginning of the El Nino phenomenon and even stronger hailstorms will soon devastate parts of the country. It is frightening.”

El Nino is turning up the heat reports experts in The Star (2015: 4).” These reports indicate that that it is expected to strengthen before the end of the year and become one of the strongest on record according to the United Nations weather agency. It said that the El Nino was in the same league as those seen in 1972 – 73, 1982 – 83 and 1997 – 98.” The Star (2015) states that “governments will have to prepare for the impact on agriculture, fisheries, water and health, and implementing disaster management campaigns to save lives and minimize economic damage. However this event is playing out in uncharted territory and the planet has altered dramatically because of climate change. It is also due to human – induced climate change which may interact and modify each other in ways mankind has never before experienced.”

FARMERS BRACE FOR DROUGHT HARDSHIP

Falanga (2015: 4) states that “weeks ago there was harvest, now there is nothing, with farmers facing failed crops, loss of livestock and severe financial strain as a result of the drought and are now changing practices to survive, and this is shown by just one farm whose cherry harvest dropped from 70 tons in 2013 to 38 tons last year. The cattle and sheep are not visible through the dust as they flock around a trough fed by four water tanks. Farmers are spending millions buying fodder. All the mealies were dead and have been cut to provide silage for the malnourished and dying cattle.” In desperate Free State Province there is no water and the SABC (November, 2015) reported that “the province has water for only three to four days and is now applying severe water restrictions. In Vredefort, Free State, the drought has not only affected farmers but entire communities. The effect on society is that over the past few decades, the farms are becoming unpopulated. Farm workers have to squat in the towns because there is no work on the farms. The threat is now real, small businesses are closing down and moving out of the area.” Falanga (2015: 4) states in this regard that “people and farmers together with farm workers say that the government is not helping them and are allowing them to go backwards and feel neglected. The situation is exacerbated by fierce sandstorms but no rain. Some of the farmers are not going to plant this year. People are despondent because the long – term forecast is bad. Farmers cannot pay debt and the banks will not lend more money and therefore the farmers have to mortgage their farms to secure loans and so essentially the farms belong to the banks. If the drought persists the consumer price of red meat will increase dramatically because grain and feed prices as well as input costs will drastically increase.”

Farmers have called for urgent government funding because of a possible total collapse of South African production. Farmers in the Free State, North West, and KwaZulu – Natal amidst the five provinces declared as drought stricken and the other four provinces of South Africa have been declared as possible emergency or disaster provinces with serious restrictions imposed upon them by government; are now financially stricken because financial institutions could limit production credit for the coming season. But whether the government will be in a position to assist is doubtful because the Finance Minister signaled that the Treasury has drawn down a R5 billion contingency reserve, normally set aside for emergencies like drought. According to Nkosi (2015: 2) “this is a serious situation and therefore requires urgent interventions to lend assistance to both commercial and subsistence farmers in order to enhance food security and for purposes of promoting prosperous rural economies. Agri South Africa has had to review its forecasts for output this year to 9.8 million tons, a far cry from 14 million produced two years ago. Grain production will drop substantially in the present season and for at least another three years. Because of the drought scenario farmers have switched to the production of oil seeds contributing to the decline to maize production. The South African Poultry Association said the impact of the drought was being felt in its input costs, whilst Grain South Africa said maize imports for the rest of the season, meaning from May, 2015 to April, 2016 would decrease by 30 percent year on year and therefore, South Africa will be a net importer of maize this year for the first time since 2007 /2008. Grain South Africa said that import forecasts meant that the country will bring in about 758 000 tons. All of this would have a knock on effect on prices because stock feed shot up to R1000 a ton in the past nine months. The situation is too ghastly to contemplate.”

The South African government is in a state of complete denial with regards the water crisis and the time has come that the government acknowledges that there is a very serious water crisis in the country. Professor Coleen Vogel (2015:7, In Chernick) says there are going to be serious repercussions for South Africa because the country knew that this was coming because droughts are not new to the country.” Dry spells are normal but heavy rains are abnormal. South Africa has to be “water wise and there should be a national consultation and drought and water forums must become permanent” (Chernick, 2015:7). Mokhema (2015: 18) states that “farmers are to kill more cattle due to drought and this means that farmers will have to kill 36 percent more cattle this year than planned. The national head count for cattle was 13 million, 2.2 million of which were butchered yearly and an estimated 40 000 cows had already died in KwaZulu – Natal because of the drought and a further 800 000 might have to be killed in the province alone. Emerging farmers are hit the hardest.” More than 500 000 people in KwaZulu – Natal were facing severe hunger. Bloomberg reports (2015: 18) reports that sugar is the nation’s largest crop by quantity, according to the UN Food and Agriculture Organization. South Africa is the

continent's biggest maize producer and will reduce 2016 seasonal plantings of the grain to the smallest since 2011 because of poor rains in the main growing regions.”

The government after the horse has bolted is to announce major plans to deal with devastating drought and water restrictions that have crippled many parts of the country. This job has been entrusted to four government departments – Health, Water and Sanitation, Agriculture and Rural Development (Jamal, 2015: 1 – 2). In a ludicrous statement the Minister of Governance and Traditional Affairs said the “water situation was not a crisis but rather a problem, stemming from adverse weather conditions and water management issues. We do have a problem but we cannot describe anything as a crisis. A crisis is something that is unmanageable” Jamal, 2015: 2). This is poor rhetoric by a highly rated minister who is playing the spin doctor but does not realize that he cannot fool the people all of the time. The minister makes no mention of the mismanaged municipal systems. By the same token there seems to be no consultation with large industry and the private sector to assist. There is no doubt that South Africa is now paying the price of government inefficiency because more than R700 to R800 billion is required to fix the ailing water infrastructure of South Africa. Given government and municipal inefficiencies Molatlhwa (2015: 1) states that “water curbs with drought likely to stretch well into next year, government and municipalities have now appealed that citizens close the taps and are poised to outline severe water restrictions. Government said it would rely on the public to report each other's non – compliance.” Wishful thinking on the part of the government given its incompetence, an example of government inefficiency and a don't care attitude was seen during the electricity load shedding, when citizens were and are still compromised, whilst street lights burn during the day and lights in government buildings are never switched off during the night. Yet the government has the audacity to pontificate to law abiding citizens. The government must repair its own house first, rather than threatening citizens with overt water restrictions and severe penalties and the rampant theft of urban water supplies and it does nothing about this.

THEFT DRAINS URBAN WATER SUPPLIES

Sipho Kings (2015: 17) reports that “ten percent of municipalities' water – half a billion cubic meters totaling R3 billion is stolen. Entire provinces have been declared disaster zones and water utilities such as Rand Water have instituted restrictions. But the government is still not tackling the most easily preventable source of wasted water – theft.” A third of all water that municipalities buy from the department of water and sanitation goes unaccounted for and the average for similar water – scarce countries is 10 percent. According to the Mail and Guardian (2015: 17) “it amounts to R7 billion lost each year and municipalities' have to make up this loss in their budgets to cover the maintenance and delivery costs, including those of water. But 10 percent of all the water that goes to municipalities, which is 3 percent of all the water supplied in

the country is stolen. It is obvious that in many sprawling apartheid townships, it is impossible to save water. There is also the case of overt disobedience by citizens using water for their gardens and washing cars. Municipalities are unable and unwilling, to force poor people to pay because of protests and violence and the government does nothing to curb civil disobedience. In Gauteng water meters were destroyed by the people who resisted their implementation.” These meters would see that each household is given 6000 liters of free water every month, which is mandated by the National Water Act and the Constitution, based on the 25 liters of free water that people are calculated to need to survive each day.” The government has created a dependency syndrome and this guarantee post 1994 was a move in the wrong direction. People want everything for free in South Africa and therefore a dangerous precedent has been set. In practice the rich and the middle – classes of South Africa subsidize these irrational schemes of free water and electricity and, it is thus open to massive abuse. If one does not pay, one does not care. In this regard Siphos Kings (2015: 17) states that “the situation is repeated throughout the country, eThekweni statistics show that 8 percent of its water was lost through theft, because of 40 000 illegal domestic connections. The city of Johannesburg loses a similar amount. Most of the other municipalities registered the theft of about 10 percent of their water.”

Little progress has been achieved by government to curb this scenario – a move to reducing demand and wastage by 15 percent. A 2013 plan was implemented but by 2014 little progress has been made and the situation has worsened in 2016. “There have also been repeated launches of the national “war on leaks, but to no real avail and, about 150 million cubic meters of water is illegally extracted by farmers each year, while a total of 40 percent of all irrigation water is lost or stolen, according to government statistics”(Siphos Kings, 2015: 17). Enforcement is hamstrung because government does not have the willingness to intervene, is too afraid of civil unrest and the ideological basis of wanting to stay in power, to appease the majority poor population in order to garner their votes come election time, much to the peril of the country. There are too few people to police theft. This suits the government who constantly argue that there is an extreme shortage of resources. It has nothing to do with resources as opposed to wanting to do something about it and therefore, the country is in this untenable quagmire.

WATER SUPPLY SPENDING DRIES UP

Spending on water infrastructure by major South African cities has declined over the past few years and spending on water infrastructure in the eThekweni municipality has dropped sharply since 2009 (Molatlhwa and Goba, 2015: 7). “Johannesburg mayor and chairman of the board of the South African Cities Network said that although there had been some progress in the provision of municipal water infrastructure, serious problems remained” (South African Cities Network Report, 2015). The report (2015) says that “eThekweni’s spending on crucial water infrastructure more than halved from R1.8 billion in 2009 to R635 million in the 2013 – 2014

financial year. Molatlhwa and Goba (2015) further add that “while certain cities are prioritizing spending on water infrastructure others are not and that savings will cost the cities more in the medium to long term. The huge problem and concern they point out is the reality that cities and government in general prioritize more politically visible items, such as employee costs, because the effects not immediately apparent and this is a recipe for great disaster. They further said that eThekweni loses R600 – million a year on water due to an ageing distribution network and theft.”

DROUGHT’S BLIGHT SPREADS FROM FARMER TO CUSTOMER

South African food retailers have said that they will try to absorb some of the inevitable increases in food prices. But reports already indicate that retailers have hiked prices. This means that consumers are under pressure. Tshandu (2015: 3) reports that “the price of bread, which is a staple and cereal, which is mainly maize, the crop that the drought has hit the most has increased by 6.4 percent year on year and the price of meat has increased by 5 percent year on year and therefore the shelves indicate prices above inflation. It is difficult to say at this stage how widespread the impact is going to be. Food affordability was a serious concern and this might produce and pose a serious threat to food security, especially, for low income consumers. This is because the lowest earners who are the main consumers spend about 40 percent of their income on food.” The impact of drought in South Africa is likely to be felt in neighboring countries because of the South African food retailers have a wide presence in some of these countries and many food products originate in South Africa.

DROUGHT – RESISTANT MAIZE KEY TO FOOD SECURITY

Sihlobo and Kapuya (2015: 4) point out that “water efficient maize for Africa called Wema is delivering the promise to African smallholder farmers. It is a drought – resistant maize variety developed for Dryland farmers, particularly smallholders, who are mainly dependent on rainfall. The variety was bred to diminish the risk of Dryland farming because of climate change and the increasing incidence of droughts.” This could not have come at a better time because the Southern African region experienced a drought in the 2014 – 2015 season and these drought conditions now permeate the whole of South Africa. The drought last season led to a 26 percent drop in maize production. According to the FAO (In Sihlobo and Kapuya (2015) “grain production fell to 21.1 million tonnes from 28.5 – million tonnes in the preceding season. This places the region’s population at risk of hunger and their livelihoods because they are dependent on agriculture. South Africa’s dominance of the regional market contributes to the precarious situation. The country supplies 42 percent of Southern African maize production, and accounts for 69 percent of the regions maize imports.”

The concentration of production in and imports from South Africa means the effects in domestic market are transmitted throughout the region. It is obvious that given the drought in South Africa high maize prices will spread throughout the region. The El Nino phenomenon will not subside soon and consumers are likely to be faced with high food prices. The whole of Southern Africa has seen the depreciation of their currencies against the dollar and this adds to inflationary pressures. Low grain stocks in net import countries such as Botswana, Namibia, Lesotho, Swaziland and Zimbabwe are expected to keep prices in these countries above import parity. Collectively, according to The Mail and Guardian, 2015: 4) “these countries normally import between 30 to 83 percent of their annual maize consumption, depending on the season.”

However, poor infrastructure and high logistical costs associated with landing maize imports from overseas markets result in high regional maize prices. In South Africa the import parity price of white maize is about R3400 a tone, which is 10 percent higher than traded spot price. Drought therefore, makes efforts such Wema very relevant to resolving the region’s food security challenges. Governments must fund further research in this direction and incentives to take up the challenge. However, there has to be better soil and water conservation. Continuous innovation and adaptation could lead to consistently higher yields and social development, in order to mitigate the challenges and realities of both drought and water shortages.

INDUSTRY CAN EASE THE WATER CRISIS

Given the arguments and analysis undertaken in these narratives water experts according to Lynley Donnelley (2015: 3) “as with the electricity crisis, there is scope for the private sector to address some of the water problems and challenges. The idea should be that services like water must become more decentralized in order to foster and engineer more self – reliance. The private sector must play a leading role in stopping water leakage in the townships. More public private partnerships are required to alleviate the pressure on water sources. By law, the state is the custodian of the country’s water resources, but through partnerships the private sector can help the public sector build new infrastructure says Lynley Donnelley (2015: 3). Water should become a public good and in this regard government has to secure consistent water supply to all sectors of South African society, including households.

CONCLUSION

This narrative and paper brought home, not only the extent of the country’s water scarcity and the effects of drought on the sum – total of the South African economy and the hardships that have confronted and still confront South Africa, in terms of water scarcity but also the dismal state of its water infrastructure, the failure of government and municipalities to plan in advance to mitigate unintended devastating consequences, coupled with the state’s constrained ability to

fund it. As concerns over water losses and declining water quality and the realities of a prolonged drought mount, the department of water and sanitation has estimated that about R700 billion and R800 billion is needed over the next 10 years to fix South Africa's water infrastructure. A tall order, but it has to be done with a unison of purpose and to this end, government's political will and its willingness to intervene will be crucial, in order to secure South Africa's future economic stability and prosperity. It can be done. What is required now is strong leadership without politicking, in order to save South Africa and South Africans.

It is likely to get worse before it gets better. That is the space that South Africa finds its self in as battles to find solutions to a multiplicity of problems that permeate the country's noisy democracy. Almost all sectors of our state are in limbo. In other words after 21 years of democracy led by a revolutionary party, the ANC, which was the vanguard of freedom and the revolutionary struggle against apartheid oppression, has lost its way in that the country is poorly governed and the economy is reeling with corruption, unemployment, poverty and inequality reigning supreme to the perils of the country and its people. Key departments are in a state of paralysis because ruling party politics have assumed center stage. "It gets worst when a head of state elected through an open vote tells the nation that his party the African National Congress comes first. It does not help to navigate the challenges we face as a nation, if the man the country has put in place to oversee the affairs of South Africa, tells the nation that they come second in his thinking. This latest statement by President Zuma raises skepticism about what he has told the nation many times, that he has sleepless nights when he thinks of poverty, the people are subjected to. It also exposes as a lie what the party trumpets to citizens, that it is the party of the people" (The Times, Editorial, 2015: 12).

Given the maladministration, the corruption, the extreme levels of poverty, massive poverty, irrational inequality, a sliding economy with the rand in tatters, a bloated and inefficient public service, vulgar public service salary rises that the country cannot absorb, mounting debt that has gone out of control, a country which sits on the precipice of bankruptcy, the increased levels of strikes and protests as concerns very poor service delivery, a completely faltering basic and higher education systems, a very poor public health system, inefficient and unproductive state run enterprises protected and shielded by an equally inefficient government, housing backlogs, the electricity and water crisis that has befallen the country under the Presidents watch and overseen by the African National Congress. In reality the country is in complete shambles and is bleeding to death. The issue is where people feature when the head of the state says he knows nothing but the ANC. This statement was played out in the Parliament of South Africa on the 19 of November, 2015, when the SABC reported on prime time news that "the President was questioned on his reckless statements. He failed to answer the questions posed to him by opposition parties and continued to laugh incessantly mocking Members of Parliament and was

supported by a belligerent Speaker of the House, who did not allow the opposition to question the President and protected him to the chagrin of the nation” (SABC News, 19 November, 2015). This is a constant ploy by the President of South Africa, who shields himself with laughter and not answering questions put to him. He was accused for nonchalant behaviour by the opposition. This is the state of political affairs in South Africa and does the country no good, in the eyes of the nation and international audiences.

South Africa’s problems as a nation does not start with the President and those around him that sing his tune and too afraid to stand up against him because of political patronage and the perks that go with cabinet positions. South Africans continue to allow the worst among us to dictate terms. Freedom was attained not because of gestures but through sacrifices and collective effort of the masses. Blaming politicians and pointing fingers at all that is wrong today does not take the nation forward. Now that we have reached the worst of times given the electricity and water crisis coupled with the looming drought and collapse of agriculture, our very survival is being threatened, when a mere politician and civil servant defies the entire nation. How then, do we explain the leadership chaos and morass in most of our institutions? Perhaps in the midst of South Africa’s despair at the sorry state of affairs, hope lies within reach – in the love of our country. When and where shall we begin as patriotic South African citizens who endured so much under apartheid oppression, in order to turn the tide against an absence of sound governance and leadership of a so – called democratic and caring government that, it purports to be ?

BIBLIOGRAPHY

2030 Water Resources Group Report (2012). Department of Water Affairs and Water Resources Group. Pretoria. Republic of South Africa.

Bloomberg (2015). Sugar Disaster. The Star. November 10. Johannesburg. Republic of South Africa. Page 6.

Chernick, I. (2015). Forums can’t only happen in drought. The Star. November 17. Johannesburg. Republic of South Africa. Page 7.

Department of Environmental Affairs Report (2015). El Nino Effects. Pretoria. Republic of South Africa.

Donnelley, L. (2015). Drought bites everywhere: South African water problems deepen. Mail and Guardian. Business. November 13 to 19. Johannesburg. Republic of South Africa. Page 2.

Donnelley, L. (2015). Industry can ease the water crisis. Drought. Mail and Guardian. Business. November 13 to 19. Johannesburg. Republic of South Africa. Page 3.

Editorial (2015). Water Crisis. Mail and Guardian. November 6 to 12. Johannesburg. Republic of South Africa. Page 22.

Falanga, G. (2015). Farmers brace for drought hardship. The Star. November 17. Johannesburg. Republic of South Africa. Page 4.

In Siph Kings (2015). Comment by a Department of Water Affairs and Sanitation Official. Pretoria. Republic of South Africa.

Jamal, S. (2015). Water: Now we pay the price. The Times. November 13. Johannesburg. Republic of South Africa. Page 1.

Joubert, J. J. (2015). Widespread dearth of rainfall set to hit food prices hard. Worst Drought in Decades. South Africa's Water Crisis. Used as Background Reading. November 15. Sunday Times. Johannesburg. Republic of South Africa. Page 13.

Ka' Nkosi, S. (2015). Threat of total collapse of South African crop production. Sunday Independent. Sunday Times. November 8. Johannesburg. Republic of South Africa. Page 12.

Bega, S. (2015). Water for mines, but not humans: Drought adding strain to the supply. The Star. November 17. Used as Background Reading. Johannesburg. Republic of South Africa. Page 11.

Lisa Steyn (2015) Mauled economy seeks a way out. Mail and Guardian. Business. November 13 to 19. Johannesburg. Republic of South Africa. Page 1.

Mahlangu, A. (2015). 'No panic' yet as maize prices edge upwards. Used as Background Reading. November 8. Sunday Times. Business Times. Johannesburg. Republic of South Africa. Page 3.

Maimane, M. (2015). So little water, so much poor management of it. Sunday Times. November 15. Johannesburg. Republic of South Africa. 9.

Mbangeni, L. (2015). Gauteng to wield the big saving stick. The Star. November 17. Used as Background Reading. Johannesburg. Republic of South Africa. Page 1.

Mbangeni, L. Mabotja, K. Monama, T. and African News Agency (2015). The Star. November 17. Johannesburg. Republic of South Africa. Page 1.

Mokhema, T. (2015). Farmers to kill more cattle due to drought. Business Report. November 17. Johannesburg. Republic of South Africa. Page 18.

Molathwa, O, and Goba, N. (2015). Water supply spends dries up. The times. November 12. Johannesburg. Republic of South Africa. Page 7.

Molathwa, O. (2015). Close the taps. The Times. November 10. Johannesburg. Republic of South Africa. Page 1.

Moraka, W. (2015). Water shortage must help us mitigate against disaster. The Star. November 17. Used as Background Reading. Johannesburg. Republic of South Africa. Page 11.

Muller, M. (2015). Give us water penalties, please. Mail and Guardian. Comment and Analysis. November 6 to 12. Johannesburg. Republic of South Africa. Page 25.

Reuters. The Times. El Nino sows death, destruction in Africa. Used as Background Reading. November 12. Johannesburg. Republic of South Africa. Page 2.

SABC News (2015). Drought Perils. November 15. Johannesburg. Republic of South Africa.

SABC News (2015). The Plight of the People. November 12. Johannesburg. Republic of South Africa.

Savides, M. (2015). Dust Clouds, carcasses, prayers _ _ _ what crisis? Used as Background Reading. November 15. Sunday Times. Johannesburg. Republic of South Africa. Page 13.

Sihlobo, W. and Kapuya, T. (2015). Drought – resistant maize key to food security. Mail and Guardian. Business. November 6 to 12. Johannesburg. Republic of South Africa. Page 4.

Sipho Kings (2015). Drought: How govt failed South Africa, it's simply too late to avert. Mail and Guardian. November 6 to 12. Johannesburg. Republic of South Africa. Page 1 – 2.

Sipho Kings (2015). Theft drains urban water supplies. Mail and Guardian. Environment. November 13 to 19. Johannesburg. Republic of South Africa. Page 17.

South African Cities Network Report (2015). Municipal Water Infrastructure. Durban and Pretoria. Republic of South Africa.

The South African Media. (2014 and 2015). Looming Drought. August 19 and November 17. Johannesburg. Republic of South Africa.

The Times (2015). Editorial. When you're No 2 to No 1 you are just an also – ran. November 18. Johannesburg. Republic of South Africa. Page 12.

Tshandu, P. V. (2015). Drought's blight spreads from farmer to customer. Sunday Times. Business Times. November 8. Johannesburg. Republic of South Africa. Page 3.

Water Stewardship Council Report. (2015). South Africa Bleeds: The Water Crisis. Pretoria. Republic of South Africa.

SABC Prime Time News (2015). News from the South African Parliament. 19 November. Johannesburg. Republic of South Africa.