

An overview of the relevant literature on water supply

2.1 Introduction

In this chapter an overview of the relevant literature on water supply is provided. Information on the challenge of people who lack access to clean water is provided. Included also is the information regarding people who have died as a result of water-borne diseases, and the lack of sanitation. This chapter also presents the constitutional perspective; legislation and policies on access to water, Batho Pele (People-First) principle, obligations of the State, progress achieved in providing water to poor South Africans, the challenges in water provisions to the poor in South Africa, the challenges in accessing water for poor people, developmental principles, modernisation theory, capabilities in the spheres of government and other institutions, and court cases, to clarify the right of access to potable water.

2.2 The literary perspective

Around the world, over one billion people – including men, women and children – live in extreme poverty. Their poverty is multifaceted: They have limited access to education, health facilities like clinics and hospitals; and they are vulnerable to external hazards, like droughts and economic crises. Moreover, they lack access to clean water. Most of these people live in developing countries like South Africa (Moriarty, Butterworth & van Koppen, 2004: 243; Elimeleck, 2006:3-8; UNICEF/WHO, 2004: 36; United Nations Development Programme, 2006:1).

Unsafe water and poor sanitation have been primary casual factors in the vast majority of water-borne diseases, especially diarrheal ones. Every year 1.6 million children die globally because of unsafe water and the lack of basic sanitation (UNICEF/WHO, 2006:41). The intention of this literature review is to identify the weaknesses and to seek solutions to address the challenges faced by Ugu District Municipality in securing accessible clean water for the local residents.

Amongst other literature reviewed, attention was given to:

- 2.2.1 Relevant South African legislation, government policies and international guidelines, such as the Millennium Development Goals (MDGs) that have any bearing on water-service delivery.

A critical review of the international and local literature is presented in this dissertation. Moreover, the methodology and solutions presented in the literature are discussed. Recommendations based on the study of the literature will be presented, with the aim of assisting the Ugu Municipality to address the challenge of providing access to clean water for all the people in this district.

2.3 The right to an environment which is not harmful

- 2.3.1 The right to an environment, which is not harmful, as outlined in the Constitution of South Africa (Act 108 of 1996, chapter 2, s 27), is a key piece of legislation. It can be used when considering the right of all citizens to have access to clean water. There are vast numbers of people around the world who still live in poverty, and also in a harmful environment. The majority of these people do not have access to potable water (Moriarty, Butterworth & Van Koppen, 2004:243; and ISRDS, 2008:8).

South Africa is facing a similar situation, where a large number of people are poor, affected by malnutrition, morbidity, the high mortality rate of children; and they have no access to clean water, according to WIN (2009:3), SASA, (2007:22), Maggie and Elimeleck, (2007:18). It is, therefore, imperative that the State should develop strategies and funds for the purpose of addressing potable water access for all its citizens.

Thomson (2006:146) states that it is not the duty of the State to provide water for all purposes. However, section 27 (b) of the South African Constitution differs from this statement. The constitution declares that everyone has a right to have access to clean drinking water, thereby implying that the State has such a duty. This can only be achieved through the State delegating this duty to the Department of Water Affairs (DWA), whereby the latter would oversee this process of water supply to all its citizens. The local municipalities would be responsible for ensuring that there is an equitable supply of water for domestic and industrial purposes.

The statement of Thomson (2006:146) contradicts subsection (c) of the South African Constitution, which compels the State to support those citizens who are unable to support themselves. For this reason, it may be concluded that the State is infringing the rights of the poor people, since many of them are still without clean water.

2.4 Legislation and policies on access to water

To further elaborate on the right of people to have access to clean water, the South African Parliament gave effect to the above constitutional injunction by passing the Water Services Act (108 of 1997). Section 1, read with section 3(1) of the Act and National Health Act No 61 of 2003, concur that everyone has the right to an environment that is not harmful to his/her health. The regulation to the Act, therefore, prescribes that the basic quantity and minimum standard of water supply should be 25 litres per person per day (ℓ/p/d).

Furthermore, regulation 3 states that the minimum standard of water supply service is

- 2.4.1 A minimum quantity of potable water of 25 ℓ/p/d or 6Kℓ per household per month;
- 2.4.2 At a minimum flow rate of not less than 10ℓ per minute.
- 2.4.3 Within 200 metres of a household;
- 2.4.4 With its effectiveness being such that no consumer is without adequate water supply for more than full seven days in a year.

The stated water regulations support the notion that the State has a duty to oversee getting basic services, such as water to citizens. This further means that the State, through the agency of the Department of Water Affairs (DWA) is required to do the necessary planning, to ensure that sufficient water supplies are in place for future needs.

The National Water (Act 36 of 1998) differs from the Water Services Act in that it mainly regulates access to water resources, in order to support livelihoods and to establish a system of licensing, to secure the sustainable use of the water resources. The Government Gazette (22355 2001) Regulation 5 concurs with section 9 of The Water Services Act in requiring that the Water Services Authorities (WSAs) implement quality monitoring programmes to monitor, improve and report on drinking water service delivery. This is the responsibility of municipal health officials.

The aforementioned officials are organized in rural areas, in their district municipalities, where they work in conjunction with the Provincial Department of Health to coordinate their activities. This means that for the government to provide adequate clean water for all citizens, and in order to be able to meet the target of the Millennium Development Goals by 2014, for all people to have access to clean drinking water, the relevant expertise is needed in municipalities.

2.5 The Batho Pele (People-first) Principles

The white paper on Local Government, (1998:71), provides eight principles, which are intended to build a culture and the practice of good customer service. The word “customer” means a person who buys goods and/or services (Cambridge Dictionary, 2011). The customer, in this instance, means a person who is a South African, or a foreigner who is a resident in the country.

Moreover, a customer is potentially any person making use of goods and services, either as a ratepayer or taxpayer, or as an ordinary person who occasionally, or constantly requires the use of goods or services.

Eight of the Batho Pele principles emphasise good customer service; two of them state:

2.5.1 Water users should be consulted about the level and quality of service they receive... (stated in Government Gazette No 22355, 2001).

2.5.2 All water users should have equal access to the services to which they are entitled (the National Water Act No 36 of 1998).

The legislation and policies suggest that everyone has a right to be provided with basic services, such as water, in particular, without discrimination.

2.6 Obligations of the State

In considering the State’s obligation to provide water to its citizens, the (World Health Organization (WHO), 2005 & 2011) states that it is imperative to bear in mind that human beings are also responsible for themselves and their own wellbeing. Moreover, human rights do not automatically involve a great deal of government intervention.

However, current international human rights legislation systematically obliges the State to act in a responsible manner towards the persons under its jurisdiction. It suggests that, ultimately, it is the State that is responsible for the provision of water to all its citizens.

Secondly the (WHO, 2011) asserts that the State has an obligation to refrain from interfering directly or indirectly with the enjoyment of the right to have access to water. This means that, as it is stipulated in law, water facilities may not be damaged during armed conflict (Frederick & Lorenz, 2006:1). This does not only apply to the State, but also to individuals themselves. Therefore, the State has an obligation to step in and protect an individual's right of access to water against any threat of vandalism to the water infrastructure, or any violation of the right to clean water.

2.7 Progress achieved in providing potable water to poor South Africans

In recent years, the South African Government has made visible progress on poverty alleviation. To substantiate this point, the President, during his state-of-the-nation address of 2009, pointed out that with regard to water and sanitation: “[A]ccess to potable water improved from 52% in 1996, to 93% in 2010” (Muller, 2011). This fact paints the picture that the South African government is committed to fulfilling the Constitutional mandate, of giving everyone access to clean water.

Secondly, the government has innovatively developed effective mechanisms to address the water access challenge. One example in this context is the introduction in 2001 of free basic water services, for the benefit of those who cannot afford to pay for water. This process has been part and parcel of the indigent register policy adopted by government at municipal level. It was succinctly outlined in the documentation on the court case between the City of Johannesburg and the people who were unable to pay for services (City of Johannesburg and others v Lindiwe Mazibuko and others, 2009).

The indigent policy compels municipalities to identify households that are eligible to receive free basic services in their area of jurisdiction. This is the reason why (Presidency. 2008:35) it was reported that out of the estimated 5, 5 million indigent households in the country, more than four million (73%) were registered on municipal databases and were receiving free basic water.

This achievement, made possible by the government, proves that it is working hard to provide basic services to all people, particularly to the poor in this country. Moreover, since 1994, access to basic water supply services has improved from 59% in 1994, to 93% in 2010 (DWA, 2010:32). However, water service providers still need to supply water to the remaining 7%. They

also need to investigate challenges that could hinder the process of supplying water, and to find possible solutions to address such challenges.

2.8 The challenges in water provision to the poor in South Africa

Globally, there is a growing awareness of water scarcity and the lack of access to clean drinking water, particularly in rural areas (Elimelech, 2006:3). Therefore, an instrument is needed to determine whether all South Africans have been equitably supplied with water, specifically the rural areas. Research by Statistics South Africa has indicated that it is difficult to reach the poorest municipal districts, informal settlements, and farm workers in terms of water service delivery (SSA, 2007).

Despite the availability of researched information from institutions, such as SASA, there is reason to believe that strategic institutions like local municipalities, as well as provincial and national government do not have accurate data on the needs of those in rural areas without any access to potable water. In other words, this would indicate that, despite the progressive improvements of services to the poor by government, there are still reasons for concern.

An example that supports this point is the following: In 2005, half of all poor households still had no piped water and electricity on site. According to the State, this placed an additional burden on women and girls, who continue to undertake most household work (The Presidency, 2008).

2.9 Challenges in accessing water for poor people

Despite the fact that there are still some challenges in accessing water by poor people, there are also challenges that hinder the provision of water to them. Some of these are listed below.

2.9.1 The lack of funding: This is the first challenge faced by the Ugu District Municipality in its attempt to provide water on an equitable basis to its people (UGu District Municipality Integrated Development Plan Review- (2nd Draft 2011/2012:55).

2.9.2 Corruption: The second reason is corruption in the government departments, where officials and politicians are trying to get the tenders for themselves. There are many examples in the media of transgressions of this nature. Foul (2011, 8) reported that two companies were awarded the same tender of R300 million to provide boreholes and piped water in the Northern Cape Province. However, after eight months of legal and political battle over who had won the

massive tender, 30 communities, numbering 20 000 people, had been left without water as their basic right.

2.9.3 Ineptness: Statistics released by Nombembe Terrence, the Auditor General, confirm suspicions that municipalities are inept and corrupt (De Waal, 2011). The report further pointed out that of the 283 Metros, district municipalities and local municipalities audited, only seven had received a clean bill of health.

Moreover, the report showed that 84% of all SA municipalities did not meet the regulatory requirements for audits; 65% did not supply meaningful information for audits; 48% did not have evidence to support information required for audits; and 24% did not submit their information in time.

2.9.4 Economic and Population Growth: The average economic growth of the Ugu District Municipal area is 2% per annum. This is derived from tourism, farming and other industries in the area. The development of this district, as outlined by the Integrated Development Plan of Ugu Municipality, suggests that some areas will be turned into townships, due to the influx of people from the Eastern Cape and other provinces – including the foreign nationals in search of job opportunities.

Eventually, this will lead to a further shortage in the water supply, as a result of increased water demand. Population growth would also force the municipality to upgrade the water infrastructure in urban areas to meet the demands of the population growth; and this is again an expensive exercise, which in turn would financially hinder the supply of water to rural areas.

2.9.5 The deterioration of water supply and sanitation infrastructures. The greatest challenge in the provision of water to the poor, more particularly in the rural areas, is the deterioration of the water supply and the sanitation infrastructure. Internationally, agencies of the United Nations, such as UNESCO-IHP and UNESCO-IHE, (2007:11) maintain that there is a general tendency in respect to this problem.

Experts are of the opinion that the deterioration of the water infrastructure and sewer systems negatively impacts on the ability of the State to provide safe drinking water and essential services for current and future generations. This means that substantial amounts of money should be spent on fixing ageing pipelines and purification plants, or even on building new purification plants.

2.9.6 Disaster management plans are essential to prevent the unnecessary use of State funds. Schipper and Pelling (2006:21) state that one year after the flooding of 1998 in Bangladesh, the government borrowed \$309 million for the purpose of disaster relief and a reconstruction programme.

Disasters are costly. Furthermore, Benson and Clay (2004 in Schipper and Pelling, 2006:21) substantiate this fact by stating that disasters cause diversions in national budgets. They cause movement away from capital expenditure towards relief and rehabilitation programmes.

In reality, the State has a responsibility to protect its citizens against natural phenomena that might cause environmental degradation, as these could lead to unnecessary hazards, as stated by Peru (2009:7). Peru based his argument on the Hyogo Declaration, where he noted that government authorities "...have the prerogative to protect people and the property on their territory from hazards; thus, it is essential to prioritise disaster-risk reduction in the national policy, consistent with the capacities and resources available to them".

This means that the organs of State should also have a disaster-management plan in place. The plan would assist the municipality to minimize disaster occurrences, and to enhance the municipality's objective of using its budget for service delivery to provide essential services, like water, to its people.

2.10 Development principles

The World Commission on Environment and Development (1987) defined sustainable development as "development that meets the needs of the present without compromising the ability of the future generations to meet their own needs" (Brundtland, 1987:56).

In essence, for the State to fully achieve this desired development, the citizens should have food security, health security, political security, economic security, personal security, community security and environmental security, as Regan (2002: 33) also concurs.

2.11 Modernisation theory

In ancient times, southern Africa's Stone Age people, the San people (Bushmen), relied on women to do all the work related to the management of water. They used ostrich eggs to carry water and a reed measuring about two feet in length to draw water from the sand, as stated by Tempelhoff (2010: 39). This was a primitive way of getting access to water that sustained the life of their communities.

However, modernization theorists define modernization as the social transition of a traditional society to a modern society – by simply using new methods of technology (Coetzee *et al.*, 2001: 27).

Currently, people use more advanced strategies and means to procure water than the San of former times. They would typically get water from standing pipes, which are at a distance of about 200 metres from their dwellings, as stated in the white paper on water supply and sanitation (1994:35). Some might even have their homes connected to piped water, or even have tankers delivering water to places where there is no water connection. This is how modernization theorists view a developed society. This should also be the case in rural communities as regards potable water supply.

Modernization theory, therefore, is relevant because a number of rural communities are still using primitive ways of exploiting natural resources. They have to obtain water from wells, rivers and springs, which they share with animals, frequently resulting in water-related diseases like Cholera, and the consequent ill health and death of children and adults (De Beer & Cornwell, 2004:92).

2.12 Capacity in the spheres of government, non-profit organizations (NPOs) and community leaders

The literature reveals that the government has developed innovative mechanisms, such as the Indigent Scheme, to provide free water to destitute people, for the purpose of providing water access to all South Africans.

The question, however, remains as to whether municipal officials are capable and skilled enough to understand these government innovations, including policies. Do councillors, church leaders and other community leaders have this information at hand, so that they can demand from the municipality the provision of basic services, like water and sanitation to needy people? Recently, municipalities have been faced with a number of service-delivery protests. This seems to indicate that municipalities do not have the necessary capacity to ensure that these services are delivered to the people.

Many organizations, including government departments, have failed to grow, or to provide services to customers. One example is Mpumalanga Province's service-delivery protest, over lack of service delivery that erupted at Siyathemba Township in Balfour, where angry residents burned tyres and barricaded roads with logs and rocks (Nhlapho, 2010).



Illustration2: A protest over service delivery in Balfour. Photographer: V. Nhlapho. Source: Sowetan.

2.13 Summary

The literature has revealed that poor people in particular lack access to potable water. The legislation and policies stipulate that access to clean water is a basic human right. The government developed the Batho-Pele (people-first) principles to advance service delivery, such as water. This is the reason why the State has the duty to fulfil the constitutional mandate to provide all people with access to clean water.

The literature also indicated the progress made by the South African government on poverty alleviation, sanitation and access to clean water (Muller, 2011). The literature has highlighted the challenges in water provision and in accessing water for the poor people. The literature looked at the developmental principles and the modernisation theories, including court cases, in trying to indicate the importance for all people of having access to potable water. Lastly, the literature looked at the capacity of the officials in the spheres of government, in order to ascertain whether are they capable of addressing the challenge of supplying water to all people.