

CHAPTER 3

STRATEGIES AND PROCEDURES FOR WATER SUPPLY AND SANITATION AT BOIKETLONG INFORMAL SETTLEMENT

3.1 Introduction

According to Juuti *et al.* (2008:10), human existence is dependent on water, and all human culture and civilization is built on the use of water. Water is life, and human existence cannot be sustained without water. However, one challenge that people face in many countries is the lack of access to safe water and sanitation (Juuti *et al.*, 2008:4). The focus of this study is on strategies which the residents of informal settlements use to have access to safe water and sanitation.

Tempelhoff (2009:37) observes that the situation in most South African urban areas is that squatters invade open spaces close to well-established townships, to set up informal settlements. Huchzermeyer (2006) supports this view by stating that the phenomenon of informal settlement is essentially land occupation driven by human needs. The cause of such occupation of land, more often than not is driven by the migration of people from rural to urban areas in search of better prospects of employment, small business opportunities as well as education for the children (Huchzermeyer, 2006).

In most cases, these settlements are built up with salvaged materials such as wood, tin, corrugated iron and plastic. Cousins and Lagardien (2004:182) and Tshikotshi (2009:2) contend that informal settlements mostly lack proper indoor infrastructures, water supply, sanitation, drainage and waste disposal. The reality is that in most urban areas in South Africa, the situation of informal settlements is associated with people living below the poverty line. Tempelhoff (2009:37) is of the opinion that apart from unsanitary conditions experienced in informal settlements, unemployment and crime are also the order of the day. The high level of unemployment in such areas has a ripple effect on the culture of non-payment, and the local implementation of an indigent policy. In terms of access to improved provision of basic services such as water and sanitation in Boiketlong, the challenge will

forever increase, in that supply cannot meet the demand, due to new squatters constantly moving in. Marx (cited by Tshikotshi, 2009:2), maintains that informal settlement residents prefer to live in tactical and low-to-zero serviced areas with productive opportunities for survival. The residents of Boiketlong informal settlement are no exception. They rely on certain strategies to survive, despite the inadequate supply of water and unimproved sanitation prevalent in the area.

In order to address the issue of water supply and sanitation, local government has a constitutional obligation to render services to residents of both formal and informal settlements in their respective areas of jurisdiction. It is a sphere of government that interacts closest with communities, and has a responsibility to provide the services and infrastructure which is essential to the wellbeing of people, in an effort to eradicate imbalances of the past (Van der Walddt, 2007:48). In terms of the Municipal Structures Act, local government is mandated to ensure efficient, affordable and sustainable access to water services and sanitation for all consumers and potential consumers.

In support of the effective governance of municipalities insofar as provision of water and sanitation is concerned, the national government and DWAF funded the water sector to prepare and develop an extensive legislation, policy, strategy and guideline document to address the inordinate water and sanitation backlog inherited from the former apartheid government (Jeenes & Steele, 2010:7).

3.2 Boiketlong informal settlement zoning

Boiketlong informal settlement is situated next to Houtkop railway station, near Sebokeng's Zone 10 township. For the purposes of this study, Boiketlong informal settlement has been divided into three zone phases of residential areas. The zoning criterion is based on the age of the settlement, or the period of residence, as well as access to water and sanitation facilities. The situation of informal settlements in urban areas is the result of desperation for housing and better employment opportunities, education opportunities for children, and a better life, in terms of proximity to cities, towns and townships in South Africa. Boiketlong Phase 1 was occupied between 1996 and 2000. Boiketlong Phase 2 was occupied during the period 2001 to 2009 (MOA, M. Ntjama 15.05.2012). Boiketlong Phase 3 was occupied as of 2010.

At the time of conducting fieldwork for this study, Phase 3 was still mushrooming with shacks on an unserviced area next to the premises of the Vitro Company in Houtkop. According to a Metsi-a-Lekoa staff member, Mr Nyathi (MOA, C. Nyathi 12.08.2012), the area currently occupied by squatters is private land which the municipality has no plans to purchase for residential purposes. The situation is that the municipality is currently engaged in negotiations with the landowners of Phase 1 and Phase 2 Boiketlong. The actual number of houses to be built is around 250. The rest of the residents will have to relocate to the other side of Waterdal Road. Thus far, the manholes and taps installed in the area are only situated in Phase 1 and Phase 2, because that is the area the municipality intends developing for residential purposes for the people of Boiketlong (MOA, C. Nyathi 12.08.2012).

3.2.1 Boiketlong phase 1



Map 1: A map of Boiketlong informal settlement Phase 1. (Emfuleni Geographic Information System: Accessed 2009.09.25).

In 1996, less than a hundred households occupied Boiketlong Phase 1 (MOA, M. Ntjama 15.05.2012). The area subsequently started burgeoning, due to an influx of people from other parts of the country. Originally, the land formed part of a farm, on which the owner allowed only a few people to stay. However, as time went by the number of squatters significantly increased (MOA, M. Ntjama 15.05.2012).

Srinivas (s.a.) asserts that such areas develop without legal claims to the land, and as a result of their illegal or semi-illegal status, infrastructure and services are usually hopelessly inadequate. Despite unlawful occupation of land, from the year 2000 the area demarcated as Phase 1 had more than one hundred households.

In terms of water supply in the area, water was first collected from the well next to the train subway, as well as at the Houtkop railway station (MOA, P. Radebe 13.04.2012). Currently, there are 16 communal taps in Phase 1, and the majority of households rely on pit latrines. This is the most common type of sanitation available. Residents at Phase 1 are, as a rule, situated within a reasonable distance of local water taps – 200m or less. Those living on the periphery of Phase 1 have to fetch their water at a distance greater than 200m.

Another benefit of Phase 1 residents is that they are nearer Thabong Plaza, Sebokeng Plaza, the Sebokeng Mill Company, Zone 10 township and the main public transport route, Waterdal Road, that is mostly used by buses and taxis to Vereeniging and surrounding suburbs. Children from Boiketlong informal settlement attend school in Boiketlong and the nearby Zone 10 and Zone 17 townships.

On the opposite side of Waterdal Road is the local dumping site which residents use to dump refuse. The municipality's waste department does not service them. This is the section of Boiketlong informal settlement where Boiketlong Christian Primary School is situated. This section of the residence poses a serious health risk to the community, particularly to small children who play there sometimes.

3.2.2 Boiketlong Phase 2



Map 2: A map of Boiketlong informal settlement Phase 2. (Emfuleni Geographic Information System: Accessed: 2009.09.25).

Boiketlong Phase 2 was occupied between 2001 and 2009 (MOA, M. Ntjama 15.05.2012). Due to new squatters in the area, ELM used the Metsi-a-Lekoa water utility to supply the community with water from a water truck. Water supply to the community was discontinued in 2010, after 10 communal taps were installed in the area (MOA, C Nyathi 12.08.2012) The taps are situated in the middle of the informal settlement to ensure that residents travel a reasonable distance to collect their water supplies.

New squatter residents residing on the periphery of the informal settlement travel further than 200m to fetch water. In terms of sanitation facilities, residents use on-site pit latrines, although there appear to be some households without pit latrines. The current state of affairs compels residents either to share a pit latrine with a neighbour, or to resort to the veld at night.

3.2.3 Boiketlong Phase 3



Map 3: A map of Boiketlong informal settlement Phase 3. (Emfuleni Geographic Information System: Accessed 2009.09.25).

The occupation of Boiketlong Phase 3 started illegally on the private land, as of 2010. Most households are clustered next to Vitro Company at Houtkop. It must be indicated that ELM does not own the land where Phase 3 of Boiketlong is situated. Officially, Phase 3 is an unplanned and unserviced area (MOA, C. Nyathi 12.08.2012). The challenge of new arrivals is that they constantly create new unserviced informal settlements on the periphery of the existing informal settlement (ICMA, 2010:4). Local residents do not have communal taps, and they travel more than 200m to access water. The mode of transport they use for this includes wheelbarrows, grocery trolleys and self-made trolleys. Women and girls invariably carry water on their heads. Few households have on-site pit latrines, and those without pit latrines use the veld to relieve themselves.

3.3 Community self-help initiatives for water supply

In 1996, when Boiketlong was first occupied, water was not available at the informal settlement. The nearest sources of water for residents were the railway station, two local coal yards, Sebokeng Mill Company and the well (fountain) next to the railroad subway. According to Radebe (MOA, P. Radebe 13.04.2012), the two coalyards belonged to a lady known as Ma Tshabalala, and the other to a gentleman known as William. Ma Tshabalala's coal customers were allowed to collect water free of charge from her coalyard, whereas William charged R2.00 for a 25ℓ container. At one stage, officials of Spoornet prohibited local residents from trespassing on the premises of the local railway station. The authorities claimed that people's safety came under threat (MOA, P. Radebe 13.04.2012). The Sebokeng Mill Company also prohibited residents from accessing water on their premises. The only source of water available then was the well next to the train subway and the coalyards. Bosch, Hommann, Rubio, Sadoff and Travers (2001) remark that the poor invariably make their own, often inadequate, arrangements to meet basic survival needs. In 1998, residents of Boiketlong informal settlement contributed R10 per household towards a water connection from what was described as a 'manhole' next to the Sebokeng Mill Company (MOA, M. Ntjama 15.05.2012).



Illustration 1: A manhole where local residents of Boiketlong made a water connection. (Photograph: CT Musa).

Earle, Goldin and Kgomo (2005:14) assert that the right of access to water means that residents, as beneficiaries, have an obligation to use their available resources, in order to access such a right. To this end, residents of Boiketlong succeeded in their initiative to connect water from the manhole to a convenient point in their residential area. Despite the unequal distances travelled by residents to fetch water, they were relieved that they subsequently secured free access to water in their neighbourhood.



Illustration 2: The standpipe installed by residents in Boiketlong. (Photograph: CT Musa).

There were about 100 households in the area, so the twin taps installed on the standpipe shown in Illustration 2, above, constituted the only reliable source of water for the residents

(MOA, M Ntjama 15.05.2012). One can conclude that the residents' strategy worked for them to access safe water. However, the water connection was illegal, in that proper procedures were not followed and ELM did not authorise such a connection.

3.4 Current community strategy for water supply

The community currently relies on water from communal taps that had been installed by the local municipality water utility Metsi-a-Lekoa. In terms of the distribution pattern of the local communal taps, residents on the periphery of the settlement invariably travel longer distances, compared to those staying within the inner section of the settlement, to fetch water. Methods for conveying water vary. Some residents, particularly women and girls, carry water containers on their heads. This way of life is supported by the fact that, globally, women tend to have the primary responsibility for certain domestic tasks such as fetching water, collecting fuel-wood, cooking meals for their families and caring for children, the sick and elderly (World Bank, 2010:1) On the other hand, men and boys use wheelbarrows, self-made trolleys, water carts and grocery trolleys, assumed to have been stolen from the nearby Sebokeng Plaza or Thabong Plaza.

The situation presenting itself in Boiketlong demonstrates the fact that despite the available local infrastructure, the poor continue to rely on alternative sources of supply that come at a significant cost (Water and Sanitation Program (WSP), 2009:6).

The state of affairs in Boiketlong informal settlement, is that in respect of the distribution of domestic chores, seems to be unique and peculiar to the area. It is not only women and girls collecting water, but also boys and men participate in the onerous task of fetching water from communal taps for domestic use.

A significant number of those who use wheelbarrows, trolleys and self-made carts, reside far from communal taps. General observations by the researcher, in the area, revealed that most community members who are employed and stay at a considerable distance from the communal taps, resort to purchasing water from local water vendors. The vendors operate mainly in Boiketlong Phase 2 and Phase 3. A 25ℓ water container costs only R3. The water vendors use their own containers, or that of the consumers, to fetch water. Residents who pay for water incur hidden costs, in that they do not enjoy the free water policy like other residents who fetch water from communal taps for their households.

During peak hours, queues for water at some water points in Phase 2 are common. People usually fetch water when it is time to prepare the evening meal. They take sufficient

supplies for washing the next morning. The long queues are exacerbated by the fact that Phase 3 residents fetch water at Phase 2. The latter do not have access to any local water connection.



Illustration 3: Residents of Boiketlong informal settlement fetch water. (Photograph: JWN Tempelhoff).

From Illustration 3 it is evident that conditions in the environs of taps where water is collected, are unsatisfactory. Bricks placed at the bottom of the tap prevent the local collecting point from becoming inaccessibly muddy. The green pipe is attached to the tap to ensure that water does not spill due to the height of the tap. It is also attached to the communal tap because of the height. A natural drain flows downhill across a dust road that has become eroded by the constant stream of water from the water tap.

3.5 Rainwater harvesting

Some households collect and store water from the modern roof material during the rainy season. According to Morgan (1990:225), the practice of water collection from rain run-off roofs or other surfaces, is followed in many parts of the world. Placing a container below the roof, in which to catch rainwater, is the most common means of securing supplies. In many cases a gutter is used to direct the water to the storage tank. This is a practice commonly

used for domestic use in rural areas where roofing material is of corrugated steel, asbestos or even tiles (Morgan, 1990:225). From observations in the area, few households collect water in this manner. Those interviewed said they use the harvested water primarily for gardening or washing purposes. It appears as if they are distrustful of the quality of rainwater for drinking and cooking.

3.6 Household sanitation

Whenever humans gather, their waste also accumulates (Anon, 2010:1). It is therefore the responsibility of every household to ensure that its sanitation needs are met. The president of the African Ministers' Council on Water (AMCOW), Jean-Richard Itoua, was quoted in *Water Wheel* (Van Vuuren, 2008a:17) to have highlighted the fact that the provision of sanitation is a key developmental intervention; without it, ill health dominates, and a life without dignity is perpetuated. One can conclude that every person needs some form of sanitation facility for survival. In Boiketlong informal settlement, the sanitation facilities used are conventional pit latrines consisting of a rudimentary top structure, built over a pit which collects waste (SERI, 2011:9).

A resident without a sanitation facility survives by either sharing a facility temporarily with a neighbour, or by going into the veld, particularly at night. This situation is not safe at all in an informal settlement, as it exposes women and girls to molestation. Men, in turn, are subject to attack by thugs, for money or any valuable possessions they might have on them.

Building a pit latrine is not an easy task; hence some residents resort to seeking assistance from people who are skilled at constructing these essential facilities. In terms of the African culture of *Ubuntu*, a household may brew African beer and then invite two or three local men to erect a pit latrine for them. When the job is done, the people who were working will then enjoy home-brewed beer. In some households, there are people who are known to have skills in building shacks and erecting sturdy pit latrines. At the moment, the prices charged for such construction projects vary. According to Radebe (MOA, P. Radebe 13.04.2012), some people charge R100 for the construction of a pit latrine, whereas others might charge R150. Radebe also indicated that she paid R150 for her pit latrine. When the pit latrine is full, a new one will invariably be constructed at a safe distance from the house. In most cases, residents in Boiketlong informal settlement prefer pit latrines that are built behind the shacks, for health reasons (MOA, P. Radebe 13.04.2012).



Illustration 4: On-site pit latrines constructed with salvaged material. (Photograph: JWN Tempelhoff).

3.7 The role of ward committees on water supply and sanitation

According to the Municipal Systems Act, 32 of 2000, section 74 (a)), ward committees play a crucial role as a bridge connecting the citizens to the government. Boiketlong residents do have ward committees that take community concerns and problems to ELM on matters of water supply and sanitation. According to the area councillor Nkomo (MOA, S. Nkomo 29.08.2012), the ward committees try their level best to give the community feedback on progress in terms of the local authority's plans for water and sanitation service delivery. However, one of the challenges ward committees experience, is the poor attendance at meetings.

Nkomo also indicated that the Ward 36 committee, with the assistance of ELM, managed to secure portable chemical toilets from the Gauteng provincial government (MOA, S. Nkomo 29.08.2012). Then, at the time of a feedback session on the portable toilets, which the province intended to deliver, the residents of Boiketlong informal settlement rejected the offer. They cited experiences of residents from other informal settlements under the

jurisdiction of ELM, who were provided with portable toilets by the province. The major problem was that, ultimately, no one was accountable for waste removal.

The residents of Zone 20 Extension 2 currently use portable chemical toilets provided by a service provider called Moreki Sanitation. According to Makefane (MOA, N. Makefane 26.03.2014), there are 58 family shacks in the area, and two families share a chemical portable toilet. They were relocated to the area on 2 February 2011. At the time, they were given the undertaking that they would only need to stay in the area for three months. These people are still, in 2014, resident in the same place. Their sanitation services seem to be properly in place. The service provider makes a collection every Thursday. The workers take out a bucket and connect a pipe, which draws human excretion from the bucket to the septic tank of the sanitation truck (MOA, N. Makefane 26.03.2014). In terms of drinking water in Boiketlong, the community does not take care of the taps provided by ELM (MOA, S. Bonkoro 30.08.2012). The challenges in the area with regard to water supply are illegal connections, leakages, theft and dysfunctional taps. All instances of damaged or leaking taps are reported to Metsi-a-Lekoa for immediate attention and repair (MOA, S. Bonkoro 30.08.2012).

3.8 ELM initiatives for water supply at Boiketlong

ELM introduced prepaid water cards for the community in 1998, and they installed six metered taps as sources of water for the community. According to Ndindwa (MOA, J. Ndindwa 15.04.2012), ELM introduced the prepaid water as a pilot project for water supply in informal settlements. The rationale for the project was to sensitise the residents about the value of water. They also wanted to encourage residents to use water sparingly. The procedure was that each household had to register at the office before a meter card was issued. Squatters without the stand number were not allowed to purchase prepaid water cards. Ndindwa (MOA, J. Ndindwa 15.04.2012) indicated that some residents were using one prepaid water card for more than one household as prescribed by ELM.

According Ndindwa (MOA, J. Ndindwa 15.04.2012), more than 40% of residents registered, and they were provided with meter cards. Residents used to buy water from the office at a cost of R5 or more. For R5 one was entitled to 125ℓ and 500ℓ for R10 (MOA, J. Ndindwa 15.04.2012). The procedure for accessing water from the metered tap was to swipe a card at a linked meter. After swiping, the meter reflected the amount of water one was entitled to,

and then the tap would automatically allow water to run through. Once the quantity of water was used, then, even if the card was swiped, no water would run through. The culture of non-payment remains endemic in townships (MOA, J. Ndindwa 15.04.2012). Ndindwa is of the opinion that the Boiketlong informal settlement ward committee should inform people of the fact that whatever service is provided by ELM, involves a cost. It is also imperative for the ward committees to educate the community in their wards about using water sparingly (MOA, J. Ndindwa 15.04.2012). The other issue is with regard to the indigent policy grants, for which, it is believed, the majority of residents qualify.

Ntjama (MOA, M. Ntjama 15.05.2012) remarked that it was ironic that ELM only came with their prepaid water pilot project after the community took the initiative of making their own water connection. If the prepaid system did not work in other informal settlements, why did they target Boiketlong informal settlement? The prepaid water system came as an imposition from ELM on the residents. Ntjama also argued that it was not acceptable to buy water in 'no man's land', and exclaimed:

Nobody, not even the ELM, takes our needs into consideration. We sometimes suspect that the ward councillor is a puppet of the municipality because many people in this area are not working (MOA, M. Ntjama 15.05.2012).

Councillors for many informal settlements have been accused of being arrogant, and insensitive to the needs of the community (COGTA, 2009:37). The aim of ELM is to get money by introducing prepaid taps (MOA, M. Ntjama 15.05.2012). Ntjama is of the opinion that the community felt that they would rather resort to their own way of accessing water, than buying while other people could gain access to free water. One thing which the ELM officials overlooked, was the fact that the residents knew that they qualified for free water. In the event of damaged taps, some members of the community with plumbing skills repaired such taps, so that water could be accessed at any time of the day (MOA, M. Ntjama 15.05.2012).



Illustration 5: A prepaid meter box and a tap installed by ELM. (Photograph: CT Musa).

In 1999, the community demonstrated their discontent with prepaid water by damaging four of the six metered taps installed in the area. Residents of Phiri, in Soweto, in 2007 also rejected prepaid meters (Tempelhoff, 2009:37). Despite the prevalent culture of non-payment for services, Tempelhoff (2009:38) maintains that poverty seemed to play the bigger role. It must be indicated that conditions for poverty are prevalent in Boiketlong informal settlement.

3.8.1 The role of ELM in water and sanitation

ELM plays a crucial role in terms of water supply and sanitation. According to Maboya (MOA, M. Maboya 02.09.2012), the pipeline which provides bulk water from Rand Water has been connected and manholes have already been built by ELM. At the moment, a huge

water reservoir is under construction, with the aim of providing the area with potable water for consumption and sanitation, once conventional houses have been built. All this is being done to comply with the Constitution, but the reality is that it is impossible for ELM to provide proper infrastructure on private land (MOA, M. Maboya 02.09.2012). In 2010, ELM started with the construction of a reservoir on a hill next to Sonland Park, in preparation for a newly planned local water supply system. Maboya (MOA, M. Maboya 02.09.2012) highlighted the fact that once the purchase of land was proclaimed, the Department of Housing would start building houses, and the area would enjoy access to water supply and improved sanitation.

3.8.2 Water supply by ELM

In terms of section 152 of the Constitution (1996), local government must provide services to communities in a sustainable manner that promotes a safe and healthy environment. ELM complies with the Constitution in that it does provide 6kl free basic water to all residents in its area of supply. The challenge facing the municipality remains with accounting for the 6kl of free basic water provision in previously disadvantaged areas, because of non-metering and the existing flat rate. This situation is mitigated by the non-payment for services in these areas, which results in these residents, in turn, receiving more than 6kl of free basic water (ELM, 2007:32). The ELM tried to come up with a measure of control for water consumption, by installing six taps in Boiketlong informal settlement, but the unfortunate part was that the residents finally rejected the prepaid meter taps and destroyed four of them. From informal discussions with community members, it emerged that some community leaders instigated the residents to reject the prepaid meter taps. The prepaid water system seemed to be an unsuccessful strategy for ELM. This was also the case with the residents of Phiri, in Soweto (Tempelhoff, 2009:40).

Subsequent to the rejection of prepaid meter taps, the ELM, through the water utility, Metsi-a-Lekoa, installed taps in the area. The communal taps are placed at positions that allow community members to travel over distances of less than 200m to fetch water. It must be indicated that Boiketlong Phase 1 was the first area of the informal settlement to enjoy water from communal taps. Due to the uncontrolled expansion of the informal settlement, Phase 2 of Boiketlong was provided with water from a truck by Metsi-a-Lekoa. In Phase 2 of Boiketlong, the water truck stopped providing water when the last tap was installed at the periphery of Phase 2 (MOA, C. Nyathi 12.08.2012). At the moment there are 26 communal taps in the area (MOA, C.Nyathi 12.08.2012).

The challenge faced by ELM, with regard to water supply in the area, is that there are about ten illegal water connections to households. The pipe pressure is not programmed for additional connections. Phase 3 of Boiketlong does not have any taps, as it is situated on private property which ELM does not have plans to purchase (MOA, C. Nyathi 12.08.2012). According to Nyathi (MOA, C. Nyathi 12.08.2012), Phase 1 and Phase 2 are still not owned by the municipality, hence the Housing Department cannot start building houses, and ELM is unable to provide proper services as expected (MOA, C. Nyathi 12.08.2012). However, there is hope that ELM will succeed in securing the land from the owners, and, subsequent to that, the housing and infrastructure plan will proceed. Phase 3 residents, meanwhile, travel longer distances to fetch water from Phase 2. This is the section of Boiketlong where water vendors have a very active market for their supplies.

3.8.3 Boiketlong Christian Primary School water supply and sanitation

Boiketlong Christian Primary School is situated in Phase 1 of Boiketlong informal settlement, and has been operating since 2001. One striking feature about the school is its motto, which is displayed at the main entrance, and reads: “Enter to Learn and Leave to Shine.”

In terms of the demarcation of the Gauteng Department of Education districts, the school is in District 7 (Sedibeng West/Vereeniging). The school has 820 learners and tuition is offered from grade R to Grade 7. Between 2001 and 2010, the school used septic tanks for water supplies. At the end of 2010, ELM connected the school to the water supply system. Currently, there are six taps on the premises, and, in terms of sanitation services, there are conventional flush toilet facilities. The boys have six toilets and the girls have eight. There are a further two toilets for 20 educators, two administration staff members and nine general workers. The deputy principal, (MOA, T. Hlongwane 14.09.2012) indicated that the school pays for the municipal water supply from ELM. All the toilets and water taps are functional and in good condition. She further indicated that in the event of sanitation or water problems, they usually report to Metsi-a-Lekoa, and that the authorities are prompt in their response (MOA, T. Hlongwane 14.09.2012). She also alluded to the fact that they teach their learners to use water sparingly and to wash their hands with soap after using the toilet. One can conclude from the school motto, that learners practise the knowledge they have acquired from lifeskills, and also cascade the message home. The general staff ensure that the entire school premises, and the toilets, are kept clean on a daily basis. In

the event of blocked urinals or dysfunctional toilets, learners have been taught to report such that the damage is immediately attended to (MOA, T. Hlongwane 14.09.2012).

In response to awareness of sanitation and hygienic behaviour, the deputy principal indicated that the school has a role to educate learners on water management and hygiene. One activity which invariably takes place at school is to organise a cleaning day, where learners clean the school premises, their classrooms and the toilets (MOA, T. Hlongwane 14.09.2012). According to Hlongwane (MOA, T. Hlongwane 14.09.2012), in 2007, officials of Rand Water once came to the school to teach children about water treatment, to use water sparingly and to report any leak or damage to the educators or parents at home. She further stated that they also sensitise learners about water, during the National Water Week in March each year. The challenge currently faced by the school is that of older girl learners, who need sanitary towels, so that their health can be enhanced. The school provides bins in the toilets for keeping used sanitary towels. She further indicated that the school asks for donations either in form of money or tangibles such as sanitary towels (MOA, T. Hlongwane 14.09.2012)

Illustration 6 shows the type of taps used at Boiketlong Christian Primary School. Illustration 7 shows functional toilets with running water, supplied by Metsi-a-Lekoa, the local water utility of ELM. Hlongwane (MOA, T. Hlongwane 14.09.2012) indicated that learners are encouraged to drink water during break time, to wash their hands after using a toilet, to wash their hands before they touch food, and to ensure that they do not wet themselves with water. The wall has been built, so that learners can use taps from one side. The structure has a drain which captures water, to avoid the formation of streams of muddy water which may be detrimental to the health of learners. This was built solely for hygienic purposes, as well as a measure for water management. We also ensure that at all times the area is clean, and there are no papers which can block the drain (MOA, T. Hlongwane 14.09.2012).



Illustration 6: Functional water taps at Boiketlong Christian Primary School. (Photograph: CT Musa).



Illustration 7: Conventional flush toilets at Boiketlong Christian Primary School. (Photograph: CT Musa).

3.8.4 ELM's achievements and challenges in water supply and sanitation

As part of its obligation, ELM is working with a limited budget, to render services to residents of both formal and informal settlements in the area under its jurisdiction (MOA, M Maboya 02.09.2012). Boiketlong informal settlement is located on private land that the ELM is currently negotiating to finalise procurement processes, with the owners. Despite all the challenges faced by the municipality to provide for the increasing population of the area, some achievements have been registered for water supply and sanitation (MOA, M Maboya 02.09.2012).

Some of the striking achievements of ELM are that the local government has been able to provide 75 873 households (40%) with water supply within their yards, in its area of jurisdiction (ELM, 2007:31). The most striking fact is that 7% of the population relies on water from natural springs, dams, pools, stagnant water, river/streams and water vendors. The following table shows different sources of water for the residents:

Table 1: Source of water supply.

Main Water Supply	No. of Households	Percentage / %
Piped water to the dwelling	94 036	50.27507
Piped water inside yard	75 873	40.56447
Piped water to community stand < 200m	7 688	4.110285
Piped water to community stand > 200m	7 420	3.967002
Borehole	343	0.18338
Spring	4	0.002139
Rainwater tank	69	0.03689
Dam/pool/stagnant water	53	0.028336
River/stream	22	0.011762
Water vendor	201	0.107462
Other	1 334	0.713205
Total	187043	100

Source: Stats SA (2001), cited by ELM IDP (2007/2012:n.p.).

3.8.5 Sanitation provision by ELM

In 1998, the then MMC for infrastructure, electricity, water and sanitation, Johnny Thabane, provided the community with slab toilets. The slab toilets formed part of the bucket system that ELM collected and cleaned on a weekly basis (MOA, M. Ntjama 15.05.2012). The community felt that there was no improvement in their sanitation condition, and as a result, they rejected the provision of such toilets (MOA, M. Ntjama 15.05.2012). The community still use the pit latrines as a form of sanitation facility. On the basis of the community

concerns put forward by the ward committees, in terms of sanitation, the provincial government promised to provide VIP toilets, but they were also rejected. The concern of the community is that the province invariably supplies VIP toilets without ensuring that the local municipality removes the waste (MOA, S. Nkomo 29.08.2012). There are areas within Sedibeng District Municipality, where the province has supplied VIP toilets but no one is responsible for waste removal.



Illustration 8: Example of a slab toilet that local residents rejected in 1999. (Photograph: CT Musa).

In terms of sanitation, the table below depicts that 84% of the households are connected to sewage. Only 1.5% of households use septic tanks, while 9% of households are using pit

latrine toilets without ventilation (ELM, 2007:32). The following table shows different types of sanitation systems in Emfuleni's municipal area:

Table 2: Types of sanitation system.

Toilet facility	No. of Households	Percentage / %
Flush toilet (connected to sewerage)	158 312	84.63891
Flush toilet (with septic tank)	2 818	1.506597
Chemical toilet	773	0.413272
Pit latrine with ventilation (VIP)	1 418	0.75811
Pit latrine without ventilation	17 918	9.579564
Bucket latrine	1 952	1.043605
None	3 853	2.059943
Total	187044	100

Source: Stats SA (2001), cited by ELM IDP (2007/2012:n.p.).

3.9 Implementation of "Batho Pele" principle by ELM

"Batho Pele" is a government policy that compels people in public services to consider "people first". The principle is a government strategy to ensure effective service delivery, in accordance with the needs and aspirations of people (White Paper on Transforming Public Service Delivery, 1997). According to Maboya (MOA, M. Maboya 02.09.2012), ELM is ensuring that the needs of the residents are met by capacitating staff to deliver services effectively and efficiently. He further stated that in every office at ELM they have made it a point to have a flyer on the wall or the bulletin boards as an indication of ELM's commitment to its clients (MOA, M. Maboya 02.09.2012).

Maboya (MOA, M. Maboya 02.09.2012) is of the opinion that the good service which they are trying to render will increase the community's trust in ELM, and make its staff members happy in terms of doing their work effectively. ELM, as the local sphere of government, upholds "Batho Pele" principles, which serve as the cornerstone for effective services for all citizens resident in the area under its jurisdiction (MOA, M. Maboya 02.09.2012). ELM is striving to operate in accordance with a specific set of principles, as enshrined in the White Paper on Transforming Public Service Delivery (1997). The principles are discussed in detail below.

3.9.1 Consultation

Citizens should be consulted about the level and quality of the public services they can expect to receive (White Paper on Transforming Public Services, 1997). It is also imperative for residents to be given a choice about the services offered. Various structures and mechanisms are used to reach the citizens of ELM.

3.9.2 Service Standards

Citizens should be told what level, quality, quantity and frequency of public services they will receive, so that they are aware of what to expect (White Paper on Transforming Public Services, 1997). It is also imperative for the citizens to know where, when, how and why they will receive the services.

3.9.3 Access

All citizens should have equal access to the services to which they are entitled (White Paper on Transforming Public Services, 1997). The services should be within a reasonable distance from where they live and work.

3.9.4 Courtesy

Citizens should be treated with courtesy and consideration, irrespective of social or economic background (White Paper on Transforming Public Services, 1997). Citizens should receive a sympathetic and positive response to all complaints and queries.

3.9.5 Information

Citizens should be given full, accurate information on the public services that they are entitled to receive (White Paper on Transforming Public Services, 1997). Citizens should further receive public information which affects their rights to citizenship, so that they can make informed choices (White Paper on Transforming Public Service, 1997). ELM has initiated community newspapers such *The Vaal Vision*, *Sedibeng Ster* and *Emfuleni Eye*. These are serialised on a monthly basis, to ensure that residents do receive information. It would, however, be more relevant, if some parts of the Vaal newspaper were in the dominant African languages – for example, Sesotho and IsiZulu.

3.9.6 Openness and transparency

Citizens should be told how national, provincial and local governments are managed, how much services cost, and who is in charge for the delivery of such services (White Paper on

Transforming Public Service, 1997). Openness and transparency will minimise protests and the level of mistrust between residents and the municipality.

3.9.7 Redress

If the promised standard of service is not delivered, citizens should be offered an explanation and apology. Speedy and effective resolutions should be reached in the event of complaints being lodged (White Paper on Transforming Public Service, 1997).

3.9.8 Value for money

Public services should be provided economically and efficiently, in order to give citizens the best possible value for money (White Paper on Transforming Public Service, 1997).

3.10. Conclusion

The residents of Boiketlong informal settlement, as with any citizens of South Africa, took it upon themselves to ensure that they have access to water and sanitation, irrespective of the situation in which they found themselves. Self-help schemes have been initiated, in order to enhance the inadequate services provided by ELM. On the other hand, ELM adhered to its constitutional mandate to provide basic services to communities of both formal and informal settlements within its jurisdiction. Despite the rejection of VIP toilets by Boiketlong residents, the achievement of the ELM is that 26 communal taps have been connected, and manholes have been built. The next chapter, Chapter 4, will focus on the perceptions of residents on water supply and sanitation in their residential area, and how they think the situation can be improved upon. The chapter will present findings on the perceptions of residents on water supply and sanitation.