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Free Basic Sanitation Services – South African experience

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Access to a basic sanitation service as a human right is enshrined in the Constitution of South Africa (1996). Municipalities have an obligation to provide basic sanitation services to the poor. They are faced with a challenge of balancing the eradication of the basic sanitation infrastructure backlog with the provision of free basic sanitation services to households already provided with infrastructure in an environment of limited sanitation budgets. The aim of this study was to investigate the approaches used by municipalities to provide free basic sanitation services. The study analyzed eight case studies of municipalities representing large metros, district and local municipalities spread over seven provinces. It focused on assessing policies used to provide free basic sanitation services, funding arrangements, integration of health and hygiene education, poverty reduction, operation and maintenance plans for dry on-site sanitation systems and methods used to target the poor. The study found that most municipalities are implementing free basic sanitation services as part of a package of free basic services provided to the registered indigent households. A few municipalities are providing free basic sanitation services to all households that are connected to sewer networks irrespective of their socio-economic status. The funding sources for free basic sanitation services include cross-subsidies and an equitable share grant from the national fiscus. Health and hygiene education is provided during the implementation of basic sanitation infrastructure and only a few municipalities are providing health and hygiene education as a service. Most municipalities are installing VIP toilets on a large scale without any plans for emptying the pits when the toilets are full and this is posing a threat to the long-term sustainability of free basic sanitation services. However, a few municipalities showed innovation in their approach to the planning of sustainable basic sanitation services for poor rural communities. The study concluded that the provision of free basic sanitation services to all households connected to the sewer networks is not financially sustainable because of poor cost recovery. The majority of the poor are not benefiting from free basic sanitation services because they lack access to basic sanitation infrastructure.

Introduction

The South African democratic government has prioritized the provision of basic services to millions of households that had been denied access to these services under the apartheid government. The right of access to basic sanitation services is enshrined in the Constitution of South Africa (Republic of SA,1996); in terms of Section 24(a) 'everyone has a right to an environment that is not harmful to their health or well-being.' Access to a basic sanitation service as a human right is one of the policy principles of the SA White Paper on Basic Household Sanitation policy (Department of Water Affairs & Forestry, 2001). Municipalities have a constitutional obligation to provide free basic sanitation services to poor households who cannot afford to pay for these services. This responsibility is enforced by the Municipal Systems Act No.32 of 2000; Section 73(1c) obliges municipalities to give effect to the provisions of the Constitution and to ensure that all members of the local community have access to at least the minimum level of basic municipal services. Section 74(2c) of this Act states that special tariffs or life-line tariffs for low-level use of services should be imposed to provide basic services to poor households (Department of Provincial and Local

Government, 2000). In terms of the legislation, poor households who cannot afford to pay for basic sanitation services must not be excluded from benefiting from improved sanitation services. The free basic sanitation services should include basic sanitation infrastructure, health and hygiene promotion and support for operation and maintenance (DWAF, 2004).

The implementation of free basic sanitation services has been slow due to a lack of national free basic sanitation policy guidelines and the need to prioritise the delivery of basic sanitation infrastructure provision to millions of people that still have no access to basic sanitation facilities. In 2004 the Department of Water Affairs &Forestry (DWAF) developed a draft Free Basic Sanitation Strategy; to date this strategy has not been approved by Cabinet. Most municipalities have not waited for the approval of the national free basic sanitation strategy; they have started to provide free basic sanitation services in fulfilment of their constitutional obligation. However, rural municipalities that have a huge basic sanitation infrastructure backlog have decided to prioritize the provision of basic sanitation facilities to households without access to these basic facilities. In March 2008, the basic sanitation infrastructure backlog for South Africa was estimated at 3.31 million households or 13.38 million people (DWAF Water Services National Information System, 2008). Unlike free basic water which was set at a limit of 6KL per month per household, basic sanitation has been difficult to implement because there was no policy definition of an acceptable basic sanitation technology to be used to provide free basic sanitation services. Municipalities have interpreted the free basic sanitation service to mean anything from a Ventilated Improved Pit (VIP) toilet to full waterborne sanitation system.

The authors of the paper argue that the free basic sanitation services are not benefiting the poorest households because municipalities are providing free basic sanitation services to households that are connected to the sewer networks and most poor households do not have access to full waterborne sanitation systems.

The aim of this study was to investigate approaches used by municipalities to provide free basic sanitation services focusing on successes, challenges and innovative approaches. The findings of this study have highlighted policy aspects that must be reviewed in order to ensure that the poorest households are the major beneficiaries of free basic sanitation services as intended by national policy and legislation.

Box 1: Definition of a basic sanitation service

'A basic sanitation service is the provision of a basic sanitation facility which is easily accessible to members of a household, has the necessary operational support for the safe removal of human waste and black and/or grey water from the premises where this is appropriate and necessary, and communication of good sanitation hygiene and related practices.' (DWAF, 2003)

Methodology

The analysis of the case studies of free basic sanitation addressed the following elements:

- Free Basic Sanitation (FBSan) policy of the municipality
- Job creation and poverty reduction
- Integration of health and hygiene
- Funding arrangements
- Operation and maintenance plans for VIP toilets.

The selected municipalities represented three different categories of municipalities, namely, Metros, Local Municipalities (LM) and District Municipalities (DM) which are responsible for several small local municipalities.

Table 1: Characteristics of selected municipalities

Municipality	Number of households (DWAF 2008)	Household sanitation backlog figures	Description
City of Cape Town	920 000	56 369	Metro, close to eradication of the backlog
City of Tshwane	680 000	120 000	Metro with a huge backlog in dense informal settlements
Amathole DM	240 000	120 000	DM with a large poor rural population without basic sanitation
Ugu DM	170 000	31 011	84% of the population is rural and poor
Vhembe DM	300 000	180 000	94% of the population is rural and poor
Breede Valley LM	35 008	1567	Small LM with urban population and commercial farmers
Mbombela LM	130 000	59 082	Biwater concession- WSP for Nelspruit , mixture of urban and rural population
Maluti A Phofung LM	97 957	32 869	LM with a history of management contracts, mixture of urban and poor rural population

Methods used to collect data

Face-to-face and telephonic interviews were conducted with municipal officials responsible for water and sanitation services and with financial managers. Relevant municipal policies and documents were analyzed to obtain detailed information on approaches followed by the municipalities in the provision of free basic sanitation services.

Analysis of the findings

Free Basic Sanitation Policy

It was found that three municipalities were providing a free basic sanitation service to all households connected to the sewer networks up to an equivalent of 6 KL of water supplied per month except Mbombela LM which had a limit of an equivalent of 12KL of water. Three municipalities were providing a free basic sanitation service as part of a package of free basic services under the indigent support policy and only registered indigent households qualified for free basic services. Ugu DM and Breede Valley LM provided a 100% rebate on the monthly sanitation bill for registered indigent households. Vhembe and Amathole DMs were not providing any free basic sanitation services because they were focusing on the eradication of the basic sanitation infrastructure backlog.

The following table provides details of the free basic sanitation policy of the selected municipalities:

Table 2: Free basic sanitation policies for the case-study municipalities

WSA	FBSan Policy	
City of Cape Town	All households connected to sewer networks received FBSan service up to an equivalent of 6KL of water per month. Households in dense urban informal settlements were provided with communal sanitation facilities.	
City of Tshwane	From 2001 to June 2007 the City of Tshwane used to provide FBSan service to all households connected to the sewer networks. From July 2007, a political decision was taken to limit FBSan service to registered indigent households up to an equivalent of 6KL of water per month. Households in dense urban informal settlements were provided with VIP toilets and communal chemical toilets.	
Ugu DM	FBSan service is part of a package of free basic services provided to registered indigent households connected to the sewer networks and users of conservancy tanks. Free VIP toilets were provided to rural households without access to basic sanitation infrastructure.	
Vhembe DM	No FBSan service was provided to households Free VIP toilets were provided to rural households without access to basic sanitation infrastructure	
Amathole DM	No FBSan service was provided; Amathole was focusing on the provision of free VIP toilets to rural households without access to basic sanitation infrastructure	
Mbombela LM	All households connected to sewer networks received FBSan service up to an equivalent of 12KL of water supplied and households that exceed 6KL paid a fixed monthly sanitation charge. Households exceeding 12KL paid a rising-block tariff in addition to the fixed monthly charge.	
Breede Valley LM	Indigent support policy was used to provide free basic sanitation services as part of a package of free basic services. Registered indigent households, users of VIP toilets and communal waterborne sanitation facilities did not pay any sanitation charges.	
Maluti A Phofung LM	All households connected to sewer networks received an FBSan service up to an equivalent of 6KL of water supplied and registered indigent households exceeding this limit received a 100% rebate on their sanitation monthly bill.	

Integration of health and hygiene education into the delivery of free basic sanitation services

The majority of case-study municipalities only provided health and hygiene education to beneficiaries during the implementation of basic sanitation infrastructure projects. The City of Cape Town provided ongoing H&HE under a programme called 'Raising Citizens Voice' which was a pilot initiative supported by DWAF and other key role players. Amathole DM had a Sanitation Resource Centre which provided communities with sanitation, health and hygiene education and a sanitation promotion officer was responsible for raising awareness of sanitation and hygiene practices on an ongoing basis. An annual sanitation week was hosted by Amathole to raise hygiene awareness and to disseminate H&HE information. Vhembe DM in its strategy for basic sanitation service delivery made provision for the appointment of community health workers who were responsible for conducting house-to-house visits to educate households about health and hygiene practices.

Targeting the poor

It was found that the free basic sanitation services were benefiting poor households living in formal, urban residential properties because they had access to full waterborne sanitation systems. Households living in backyards, dense urban informal settlements and rural areas were not considered for registration as indigent households, and therefore did not benefit. All rural households received free VIP toilets and dense urban informal settlements were provided with wet or dry communal sanitation facilities; this was an interim measure while they were waiting to be granted subsidized low-cost houses. The monthly household income limit was used by most municipalities to target subsidies to poor households and the qualifying monthly income limit varies from R1 100 for Vhembe and Amathole DMs, R1 700 for City of Tshwane Metro, R1 740 for Breede Valley LM and R2 000 for Ugu DM. Households registered as indigents qualified for a rebate on their basic municipal services account (free basic water, sanitation, electricity and refuse removal services, etc.). The municipalities that were providing free basic sanitation services to all households up to an equivalent of 6KL of water supplied relied on recovering the costs through using a rising-block tariff for households exceeding the free basic sanitation component.

Linkage of free basic sanitation to job creation and poverty reduction

All case study municipalities trained and employed local people in the implementation of sanitation infrastructure projects. The City of Tshwane Metro had an exit programme for assisting registered indigent households to escape from the poverty trap. Members of these households were prioritized for employment in public infrastructure projects and scholarships were provided to the youth who had successfully completed high school education to obtain tertiary education qualifications which would help them to secure permanent employment. The City of Cape Town (CCT) trained community facilitators and community development workers and on completion of the course they were employed by CCT in the programme for 'Raising Citizens Voice'. Amathole DM trained the local people as community health workers and employed them to promote good hygiene and health practices in their communities. Local people were trained and employed by Amathole DM to manufacture the movable light-weight superstructure for VIP toilets. Vhembe DM trained local entrepreneurs to make bricks and toilet pedestals and it also assisted them to set up facilities for manufacturing bricks and toilet pedestals which they supplied to the sanitation infrastructure projects.

Sources of funding for free basic sanitation services

The main sources of funding for free basic sanitation services were the equitable share grant from the national fiscus and local municipal revenues from user charges, property taxes and levies. Poor municipalities with limited or no local income depended entirely on the equitable share grant to fund free basic sanitation services. The equitable share grant is allocated to municipalities from the national fiscus to cover the costs of providing free basic services to the poor households. It is an unconditional grant and municipalities can use their discretion in the utilization of the grant and there are no funds ring-fenced for free basic sanitation services. The City of Tshwane used cross-subsidies to fund the free basic sanitation services for the registered indigents because of their ability to generate more income from high-level consumers. The City of Cape Town and Mbombela LM were using a combination of cross-subsidies and equitable share grant to fund free basic sanitation services. All municipalities were faced with a problem of poor cost recovery which threatened long term sustainability of free basic sanitation services.

Sanitation tariff structure

A comparison of the sanitation tariff structure for the selected municipalities showed that most municipalities were using the volumetric sanitation charge which was based on the volume of water supplied to the households; however, there were differences in the methods used to calculate the equivalent of wastewater discharged, for example, the sanitation tariff for City of Tshwane was based on the assumption that 98% of the first 6KL was discharged as wastewater and the percentage of wastewater was reduced on a sliding scale up to 42KL of water supplied. On the other hand, the City of Cape Town based its sanitation tariff on the assumption that 70% of the water supplied to the household was discharged as wastewater. The City of Cape Town charged a fixed sanitation tariff for flat-dwellers and households living in cluster developments and this was much higher than the rising-block tariff for households living in single residential units. The sanitation tariffs for Mbombela and Maluti A Phofung LMs included a fixed monthly sanitation charge in addition to the rising-block tariff for consumption. Ugu DM charged a fixed sanitation tariff per KL of wastewater discharged and this was the highest rate when compared to the rest of the case study municipalities. The sanitation charge for Breede Valley LM was based on the cost of providing the sanitation service and a higher sanitation tariff was charged for households living in single formal residential houses and flat-dwellers were charged a lower rate.

The following table presents details of the sanitation tariff structure for the 8 case study municipalities:

Table 3: Comparison of sanitation tariffs for the selected municipalities

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WSA	Monthly tariff	FBSan limit
City of Cape Town	70% of water consumption to a maximum of 35KL wastewater (70% of 50KL) R3.78/KL for >4.2 - 8.6KL R8.04 for >8.6 - 14KL R8.79 for >14-28KL R9.23 for >28-35KL Single tariff of R9.10/KLfor flats and cluster developments	First 4.2 KL of wastewater was free for all households. Additional R30 monthly rebate provided to registered indigent households with property valuation of <r200 000<="" td=""></r200>
City of Tshwane	98% of the first 6KL of water supplied R2.54 for 0-6KL of water R3.44 for 7-12 KL R4.44 for 13-42 KL	First 5.88KL wastewater was discharged free for registered indigents
Amathole DM	Rising-block tariff varied for the different LMs R1 and R1.10/KL for 0-6KL of water consumption Above 51 KL, the tariff varied from R2 to R5/KL	No free basic sanitation services
Ugu DM	A fixed rate of R13.85 per KL of wastewater discharged	100% rebate for registered indigent households
Vhembe DM	Not available	No free basic sanitation services
Breede Valley LM	Fixed monthly sanitation charge of R95.00 for formal residential houses and R85.00 for flat- dwellers	100% rebate for registered indigent households earning less than R1 740 and the rebate decreased on a sliding scale to 20% for households earning R2700 per month.
Maluti A Phofung LM	Availability charge ranged from R30.45 to R65.63 depending on the area. Consumption charge linked to water supplied ranged from R4.20 to R5.78/KL depending on the area	Equivalent of 0-6KL of water was provided free to all households with waterborne sanitation. 100% rebate for registered indigent households exceeding 6KL of water.
Mbombela LM	Fixed monthly charge of R24.12 for water consumption above 6KL. Consumption charge linked to water supplied: 0-12KL no charge >12-20KL at R5.80 per KL >20 – 40KL at R6.15 per KL	FBSan service applied to the first 12KL water consumption for all households with full waterborne sanitation and no fixed monthly charge for households consuming 0-6KL of water

Operation and maintenance (O&M) plans for VIP toilets

The majority of the case study municipalities did not have O&M plans or budgets for the emptying of sludge from full VIP toilets. Some of the municipalities were still investigating suitable options for emptying full pits or building replacement VIP toilets where pit emptying was not feasible. Vhembe and Amathole DMs which was installing a large number of VIP toilets to the rural households had included O&M plans for VIP toilets in their sanitation strategies. Vhembe was promoting double VIP toilets as a technology of choice for rural households to ensure long-term sustainability. Amathole DM was testing a light-panel superstructure which could be relocated to a new pit when the VIP toilet was full. There were no plans for the safe disposal of pit sludge where pit emptying was proposed as a solution for dealing with full VIP toilets.

Discussion

The South African Government approved a policy of free basic municipal services as part of the strategy for alleviating poverty, with poor households as the primary target group to receive free basic services (DWAF, 2001). The question addressed by this study was whether the free basic sanitation services were benefiting the poorest households. Most municipalities interpreted the free basic sanitation policy as the free basic sanitation services for households that were already connected to the sewer networks; consequently, the majority of beneficiaries were the middle class and well-off households. The poorest households that lacked access to waterborne sanitation infrastructure were not benefiting. This finding concurred with the report by Komives et al (2005) which showed that utility subsidies benefited the 'haves', not the 'have-nots'. Brook

and Smith (2001) argued that cross-subsidy arrangements did not benefit the poorest households because they were not connected to sewer networks. They believed that the rising-block tariff also had limited success in benefiting the poor because it was designed for single family units whereas several poor families tended to live together in one household; this negated the benefit of a life-line tariff. Gowlland-Gualtieri (2007) argued that the Free Basic Water (FBW) limit of 6 KL per household per month set by the South African government actually penalized the poor people that were members of large households or backyard dwellers. According to Brook and Smith (2001) the options that limited the subsidy to low-cost service options were more appropriate for ensuring that only the poorest households would benefit from the free basic sanitation services.

This study found that there was no common definition of poverty and the case-study municipalities used different monthly household income limits to identify indigent households. It could not be established how these limits were established except for the City of Tshwane which based the qualifying household monthly income limit on an equivalent of two old-age state pension grants. There was a need for national guidelines for setting the poverty line for the different local contexts to ensure that all the poor households could enjoy similar benefits. In poor areas there was a prevalence of backyard dwellers and these families were excluded from benefiting from free basic sanitation services because the municipalities recognized a residential stand as one household unit. In addition, households living in dense urban informal settlements did not benefit from the free basic sanitation services because they lacked basic sanitation facilities and they were not provided with wastewater disposal facilities thus forcing them to live in an environment of squalor that posed a threat to their health and well-being. The metro municipalities were providing communal sanitation facilities to households living in dense urban informal settlements; this was considered adequate provision for meeting the constitutional obligation of access to a basic sanitation service as a right.

The municipalities used two methods to implement the free basic sanitation services; those that provided free basic sanitation services to all households that were connected to the sewer networks used the rising block tariff which was linked to the volume of water supplied and the first block was free for all households. This option was considered less costly to administer because it did not require any targeting of the poor households. All households that exceeded the free basic sanitation component were charged a rising-block tariff based on their consumption. The second option used by municipalities was the targeted subsidies that were only provided to registered indigent households. According to Foster et al. (2000), this option was considered to be costly to administer. However, the costs of administration were reduced when the indigent households were provided with a package of free basic services because the cost of administering the indigent register was spread across the different departments within the municipality (water, sanitation, electricity, refuse removal, etc.) and most case study municipalities were following this approach.

The majority of case study municipalities were using a quantity-targeted subsidy and this took the form of a rising-block tariff with the unit charge increasing for high-level consumers. According to Komives et al. (2005) this type of subsidy performed better in targeting the poor households where a high percentage of the poor households were connected to the sewer networks. The findings of this study showed that quantitytargeted subsidies did not perform well in reaching the poor households in South Africa because most of them were not connected to the sewer networks. Komives et. al. (2005) argued that there was a problem with the quantity-targeted subsidies because they were based on the assumption that there was a difference in the consumption patterns of the poor and the non-poor households, especially between the poor and middle class households. They suggested that accurate data on the correlation between consumption pattern and household income should be used to determine the limit for free basic sanitation services. The 6KL set by the South African government as a limit for free basic water was not based on a thorough assessment of the needs of poor households with high levels of water service; it was based on 25litres of water per capita per day required to meet the basic human needs. Gowlland-Gualtieri (2007) argued that the Free Basic Water limit of 6KL per month for a family of eight that was adopted by the South African government in 2001 to meet the needs of the poor was inadequate to meet the basic human needs of urban households with full waterborne sanitation systems. Although the government policy did not restrict municipalities to the 6KL limit of free basic water, most of them continued to use this as a benchmark. No studies have been undertaken to measure the impact of the free basic sanitation services on the lives of the poor households.

All case study municipalities recognized the importance of prioritizing the eradication of the basic sanitation infrastructure backlog for rural areas because this was a first step towards the provision of free basic sanitation services. However, very few of them had plans for emptying pits of full VIP toilets and safe disposal of pit sludge where it was not feasible or practical to transport sludge to the wastewater treatment plants. It was estimated that by 2010 there would be 2.5 million VIP toilets in South Africa and currently there was no government policy for safe disposal of the pit sludge from the full VIP toilets. However, it was encouraging to see that the poorest District Municipalities such as Vhembe and Amathole had plans in place for ensuring long-term sustainability of VIP toilets. The decision to promote the use of double VIP toilets and lightweight superstructure to facilitate the relocation of the superstructure to a new pit when the VIP toilets were full was considered to be innovative. These approaches were feasible in these municipalities because rural stands were usually large enough to accommodate a new replacement VIP toilet. However, these solutions were not appropriate for dense urban informal settlements because the stands were too small for a replacement VIP toilet.

The lack of O&M planning for VIP toilets by the majority of case study municipalities was a great concern because there was evidence that VIP toilets that were constructed between 1994 and 2003 were already filling up (DWAF 2005). The neglect of O&M planning for VIP toilets could potentially create a second generation of basic sanitation infrastructure backlog if government did not urgently put in place policy guidelines, financial and technical resources for the emptying of full VIP toilets and safe disposal of pit sludge.

The interpretation of free basic sanitation services as a benefit for households already connected to sewer networks raised the issue of equity because the households provided with VIP toilets only received a once-off subsidy for basic sanitation infrastructure, while households with full waterborne sanitation systems were receiving the monthly subsidy for free basic sanitation services. Some municipalities were charging fixed sanitation tariffs for certain categories of households, for example, in the City of Cape Town flat-dwellers and households living in cluster developments were charged a fixed sanitation tariff per KL of water supplied and this was higher than the rising-block tariff charged for households living in single residential units. Municipalities with a small percentage of urban households were forced to charge above-average sanitation tariffs in order to cover the cost of providing the sanitation service and this could threaten long-term financial sustainability of these municipalities such as Ugu DM because of the heavy financial burden placed on the paying households. The study identified a weakness in the manner in which the equitable share grant was allocated to municipalities; the allocation was based on the number of the poor population in a municipality and did not take into consideration the cost of providing the sanitation services in different local contexts and this approach disadvantaged the municipalities with a small urban population when compared to their urban counterparts.

Generally, the definition of a free basic sanitation service was poorly interpreted by the case study municipalities; most of them did not integrate the health and hygiene component into the delivery of free basic sanitation services and wastewater disposal for non-sewered dense urban informal settlements was also neglected. This could have a negative effect on the health of the poorest households who live in these dense urban informal settlements. The constitutional right of these vulnerable and marginalized groups to an environment that is not harmful to their health is being violated on a continuous basis.

Conclusions

The following conclusions have been made from the analysis of the case studies of FBSan services:

- The majority of the beneficiaries of free basic sanitation services are not the poorest households because
 municipalities have interpreted the free basic sanitation services as a benefit for households that are
 connected to sewer networks.
- Integration of free basic sanitation services into a package of free basic services provided to registered
 indigent households under the indigent support policy is a more effective method of ensuring that the
 poorest households are the beneficiaries of free basic sanitation services.

- The definition of a basic sanitation service provided in the Strategic Framework for Water Services
 (DWAF, 2003) that does not make reference to a sanitation service level has created a challenge for
 municipalities because urban households are demanding full waterborne sanitation systems and rejecting
 the dry on-site sanitation systems.
- Most case study municipalities are using the quantity-targeted subsidy to provide free basic sanitation services and this approach does not reach the poorest households because they are not connected to the sewer networks.
- The monthly household income limit used to identify the indigent households does not take into
 consideration the number of people in a household, and backyard dwellers are excluded from the benefit
 because the municipality considers a stand as a household unit that qualifies for free basic sanitation
 services.
- The majority of the case study municipalities did not integrate the health and hygiene component into the free basic sanitation service delivery; H&HE was only provided as a once-off intervention during the implementation of basic infrastructure projects. This was posing a health threat to poor households living in dense urban informal settlements with poor or no access to basic sanitation infrastructure.
- The municipalities that had a huge basic sanitation infrastructure backlog took a decision to prioritize the
 eradication of the basic sanitation infrastructure backlog before considering the provision of free basic
 sanitation services to households that already have access to basic sanitation services.
- Most case study municipalities that are installing large numbers of VIP toilets do not have O&M plans for dealing with full VIP toilets and this could potentially create a second generation of basic sanitation infrastructure backlog
- The sanitation tariffs used by some municipalities are not equitable because certain categories of
 households are being charged a higher rate, for example, City of Cape Town is charging a higher
 sanitation tariff for flat-dwellers and households living in cluster developments. Breede Valley LM on the
 other hand charges a reduced sanitation tariff for flat-dwellers. Other municipalities charge the same
 sanitation tariff for all types of residential units.
- A comparison of the sanitation tariffs shows that some municipalities are charging very high rates because
 they serve a small urban population and the equitable share grant is based on the number of poor people;
 it does not consider the cost of providing sanitation services under the different local contexts.
- Cross-subsidization is not a viable option for funding free basic sanitation services because its success
 depends on charging high sanitation tariffs for high-level water consumers and this cannot be sustained in
 the long term because of the poor culture of payment for municipal services and poor debt collection
 experienced by all municipalities
- The majority of the case study municipalities adhered to the government policy of ensuring that the implementation of basic sanitation infrastructure contributed to job creation and poverty reduction. They provided local people with accredited training in all skills required and they were employed to perform most of the jobs created by the sanitation projects. Some municipalities trained local people to make bricks and toilet pedestals which they supplied to the sanitation projects. Local people were trained and employed as Community Health Workers to provide health and hygiene to their communities as part of the free basic sanitation services in some municipalities.
- The metro municipalities have a greater degree of flexibility in funding options for free basic sanitation services because they have the capacity to generate revenue from user charges, property taxes and levies. The rural municipalities on the other hand do not generate any revenues; they rely entirely on national transfers to fund free basic sanitation services.
- The provision of a 100% rebate on the monthly sanitation bill for the registered indigent households practised by some municipalities could lead to a perverse incentive for the poor households because they do not have an incentive to use water efficiently.
- The City of Tshwane has an exit programme for assisting registered indigent households to escape from
 the poverty trap. This is considered to be innovative because the municipality creates opportunities for
 the indigent households to improve their socio-economic status through job creation and provision of
 bursaries for young people.

Recommendations

The following recommendations are made based on the findings of the study:

- The approach followed by some municipalities of including the free basic sanitation services in the package of free basic municipal services should be encouraged because this will ensure that the poor households are the primary beneficiaries.
- The definition of a basic sanitation service within the context of free basic sanitation services must be reviewed to provide guidance on the minimum standards for a basic sanitation service level that meets the constitutional right to basic sanitation for the poor.
- Policy guidelines must be developed to guide municipalities with pit-emptying and safe disposal of pit sludge.
- National guidelines for setting sanitation tariffs are needed to protect certain categories of consumers from being overcharged.
- The approach followed by the City of Tshwane to help indigent households to escape from the poverty trap should be considered for replication in other municipalities; members of these households are prioritized for employment in infrastructure projects and bursaries are provided for the youth. The objective of this support to ensure that poor households do not remain in the indigent register permanently.
- The allocation of the equitable share grant should not only be based on the number of the poor but must
 consider the costs of providing basic sanitation services in different local contexts. Funds should be ringfenced for emptying pit toilets and safe disposal of pit sludge.
- The practice of training and employing community health workers should be supported as part of integrating health and hygiene into the delivery of free basic sanitation services for the poor households, especially those living in dense urban informal settlements and rural areas.
- Monitoring bodies should be established at the local government level to monitor progress in the delivery of free basic sanitation services to the poorest households.

Lesson learned

- The current approaches followed by municipalities in the delivery of free basic sanitation services have failed to reach the poorest households that live in dense urban settlements because of the difficulties of providing sanitation services to these settlements. VIP toilets are not suitable for these unplanned dense settlements because of poor ventilation and difficulty in the emptying of full pits due poor access for vacuum tanker services. The communal sanitation facilities provided to these areas although not ideal should be encouraged as a temporary sanitation solution for the poor households.
- The use of the indigent register to target basic services to the poor ensures that only poor households can benefit from the free basic sanitation services, however, its limitations include high administrative costs of registering the indigents and a need for municipal officials to pay regular visits to indigent households to monitor compliance with the qualification criteria for indigent status.
- The linkage of the free basic sanitation service to the free basic water limit of 6KL of water per household
 per month reduces the benefit for large poor households and backyard dwellers because the 6KL of
 water is not adequate to meet the basic human needs and it does not make provision for full waterborne
 sanitation systems. The free basic sanitation component for the poor households could be improved by
 increasing the free basic water limit to 12KL.
- The free basic water and sanitation service model used by most municipalities in South Africa can only be sustained by metros that generate income and have a large customer base that can cross-subsidize the poor households. The poor municipalities that do not have capacity to generate local income would continue to struggle to provide free basic sanitation service to the poor households. Poorer countries without the capacity to provide government funding for free basic sanitation services cannot replicate the South African model of free basic water and sanitation services for the poor.
- It is important to plan for the operation and maintenance costs of VIP toilets during the planning phase of large scale VIP projects to ensure long-term sustainability of basic sanitation services.
- The development of free basic sanitation policy must be informed by the real needs of the poor in order to make sure that it benefits the majority of the poor households.
- The integration of health and hygiene education into the free basic sanitation services continues to be a huge challenge for most municipalities.

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References

Brook P and Smith W (2001) *Improving access to infrastructure services by the poor: Institutional and policy response*. (Background Paper for the Private Sector Development Strategy). World Bank, Washington, DC

Department of Provincial and Local Government (2000) Municipal Systems Act No.32.

Pretoria, South Africa.

Department of Water Affairs & Forestry (2001) White Paper on Basic Household Sanitation. Pretoria, South Africa.

Department of Water Affairs & Forestry 2001 Free Basic Water: Implementation Strategy Document, Pretoria, South Africa

Department of Water Affairs & Forestry (2003) *Strategic Framework for Water Services*. Pretoria, South Africa.

Department of Water Affairs & Forestry (2004) Free Basic Sanitation Strategy.

Pretoria, South Africa (not approved by cabinet).

Department of Water Affairs & Forestry (2005) Nationwide Sustainability Audit of Sanitation Facilities Implemented by Sector Departments from 1994-2003. Pretoria, South Africa.

Department of Water Affairs & Forestry (2008) *Water Services National Information Systems* - Basic Sanitation Backlog Figures. Pretoria, South Africa. Available at http://www.dwaf.gov.za/dir_ws/wsnis/default.asp

Foster V.; Gomez-Lobo, A. and Halpern, J. (2000) *Designing direct subsidies for water and sanitation services: Lessons from Panama*. (Policy Research Working Paper). World Bank, Washington DC.

Gowlland-Gualtieri, A. (2007) *South Africa's Water Law and Policy Framework – Implications for the right to water*. (International Environmental Law Research Centre, Working Paper 2007-03). Geneva, Switzerland.

Komives, K.; Foster, V.; Halpern, J. and Wodon, Q. (2005) *Water, Electricity and the Poor: Who Benefits from Utility Subsidies?* World Bank, Washington DC.

Republic of South Africa (1996) Constitution of South Africa. Pretoria, South Africa.

Notes

I US\$ = approximately 8 South African Rands

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