REVIEW OF SANITATION POLICY AND PRACTICE IN SOUTH AFRICA FROM 2001-2008

Report to the
Water Research Commission

by

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EXECUTIVE SUMMARY

Background and motivation

The South African Democratic Government has prioritised the provision of basic water and sanitation services to the poor because of the perceived high impact of these services in the reduction of poverty. In 2001 an estimated 57.6% of the population had access to basic or higher level of sanitation services and 42.4% lacked access to a basic sanitation service level (Census 2001). Between 2001 and 2008, approximately 73% of the population had access to basic sanitation services and the basic sanitation backlog was reduced to 27% (DWAF, 2008). This represented significant progress in the eradication of the basic sanitation infrastructure backlog. The 2010 target for the eradication of the basic sanitation infrastructure backlog set by the Strategic Framework for Water Services in 2003 has forced all spheres of government to allocate more resources to support the acceleration of basic sanitation infrastructure delivery to all those households who currently lack access to these services. In spite of all these efforts, there were, however, still millions of households that lacked access to a basic sanitation service level.

A study conducted by DWAF (2005) to audit the sustainability of the sanitation projects implemented from 1994-2003 found that a significant number of these projects were not sustainable. This problem of poor sustainability could be due to a lack of common understanding and interpretation of the national sanitation policy by municipalities and other implementing agents. The Water Research Commission initiated this study to examine the understanding and interpretation of the national sanitation policy and programme by municipalities and to identify aspects of the policy that were poorly understood and/or misinterpreted and to make recommendations for bridging the gap between policy and practice.

The study used the definition of a basic sanitation service provided in the Strategic Framework for Water Services (2003): *"a basic sanitation service is the provision of a basic sanitation facility which is easily accessible to a household, the sustainable operation of the facility, including the safe removal of human waste and wastewater from the premises where this is appropriate and necessary, and the communication of good sanitation, hygiene and related practice."*

Questions have been raised on the appropriateness of a single national sanitation policy for the different settlement types (formal urban, dense urban informal and rural settlements). Our working hypothesis was that the sanitation policy principles of the 2001 White Paper on Basic Household Sanitation were appropriate and relevant to formal urban, dense urban informal and rural settlements; the only variable was how these principles were interpreted under the different local contexts.

Objectives

The main objectives of the study were the following:

- To investigate the understanding of current sanitation policy and programmes relating to the subsidy, ownership of infrastructure, responsibility for O&M, responsibility for monitoring issues of new pits, etc. amongst:
    - National government departments;
    - Local government;

- Service providers;
- Communities.

- To provide recommendations for bridging understanding on policy, responsibilities and practice.
- Compilation of information pamphlets for each stakeholder group that provide a common approach to the issues of ownership, responsibility for O&M and dealing with full pits (for VIPs, Urine Diversion and other on-site latrines).

Achievement of objectives

The study has achieved the objectives of the study and it produced the following research outputs:

- A research report with recommendations for bridging the gap between policy and practice.
- Sanitation policy recommendations – Information booklet for sanitation policy-makers (Appendix A).
- Turning sanitation policy into practice – A guide for municipalities and sanitation service providers (published as a separate brochure).

Methodology

i) Desktop analysis

- Literature review of international and national experience was conducted to identify international best practice in the provision of pro-poor sanitation subsidies.
- The examination of the understanding and interpretation of the sanitation policy and programme was based on the analysis of the White Paper on Basic Household Sanitation (DWAF, 2001) and the Strategic Framework for Water Services (DWAF, 2003).

ii) Stakeholder engagement – Face-to-face interviews were conducted with sanitation sector stakeholders and a survey of 17 District Water Services in three provinces was undertaken to assess the understanding and interpretation of the sanitation policy by municipalities.

iii) The recommendations for bridging the gap between sanitation policy and practice were made based on international best practice on sustainable sanitation services and inputs from sanitation sector stakeholders.

iv) The findings from the study were used to prepare the information booklets for sanitation policy-makers and municipalities.

Key findings from the research

International experience of pro-poor sanitation policies

The literature review identified improvement in health, affordability, environmental sustainability and management of sanitation services at the lowest appropriate levels as four fundamental principles of sustainable sanitation programmes.

International experience of subsidized sanitation programmes showed that supply-driven sanitation delivery approaches led to unsustainable sanitation services because they focused on toilet construction without considering hygiene education, community mobilisation and meeting sanitation demands of the beneficiary communities. Adoption of a Community Led Total Sanitation (CLTS) approach resulted in a rapid increase in sanitation coverage in South Asia and India after decades of failed supply-driven toilet construction programmes. The success of this approach was possible because the local communities took the lead in ensuring that their villages were 'open defecation free' and they used peer pressure to enforce compliance by all households.

An international review of successful case studies of pro-poor sanitation subsidies showed that good water and sanitation pro-poor subsidies were characterized by genuine need, accurate targeting of the poor, administrative simplicity, preservation of economic incentives and coverage.

An analysis of case studies of the implementation of the national sanitation policies in Uganda and Zimbabwe demonstrated that good policies were not enough to achieve sustainable sanitation coverage in the absence of capacitated local government institutions.

Analysis of the understanding and interpretation of the national sanitation policy
The study identified the following aspects of the sanitation policy that were misunderstood and/or misinterpreted by the municipalities:
Access to basic sanitation service as a human right – There was no common approach to the interpretation of this principle; some municipalities were providing free basic sanitation (FBSan) services to all households connected to the sewer networks while others were limiting FBSan services to registered indigent households.
Targeting the poor with sanitation subsidies – There were no national guidelines for identifying the poorest households; municipalities were using different methods to target FBSan services to the poor households.
Integration of health and hygiene education into basic sanitation services There was too much focus on toilet construction with limited attention paid to the health and hygiene education component and limited or no budgets were allocated to this component.
Grey water management in dense settlements – Although the definition of a basic sanitation service included wastewater disposal, in practice municipalities were not providing facilities for safe disposal of wastewater in dense urban informal settlements without connections to sewer networks.
Solid waste disposal – The 2001 White Paper on Basic Household Sanitation includes refuse removal in its definition of a minimum acceptable basic level of sanitation but in practice refuse removal was not included as a component of basic sanitation.
Long-term sustainability of ventilated improved pit toilets – Most municipalities did not have O&M plans for emptying full pits of VIP toilets and disposal of human waste; this could pose a threat to long-term sustainability of VIP toilets.
Integration of water conservation and water demand management – There was no enforcement of the use of water efficient technologies when full waterborne sanitation systems were provided to meet the basic sanitation needs of poor households.

Monitoring and evaluation – Monitoring and evaluation of progress in the implementation of the sanitation policy and its impact on the lives of poor households was limited to the counting of toilets and number of jobs created. There was no monitoring of behavioural change and evaluation of the impact of improved sanitation infrastructure on the quality of life and health of the beneficiary communities.

Sanitation policy gaps

The following sanitation policy gaps were identified:

- Lack of sanitation policy guidelines for basic sanitation service delivery to dense urban informal settlements.
- No sanitation policy guidelines for the provision of basic sanitation services to severely marginalized groups such as people with physical disabilities, elderly, women, children, HIV/AIDS infected individuals and child-headed households.
- Lack of policy for operation and maintenance of VIP toilets and other on-site sanitation technologies, especially the emptying of full pits and safe disposal of pit sludge.
- Sanitation policy guidelines for the integration of water conservation and water demand management strategies into the delivery of basic sanitation infrastructure and development of economic and legal instruments for enforcing compliance.
- Policy guidelines for solid waste management in all types of settlements, especially the settlements that were currently neglected.
- Sanitation policy for institutional sanitation including public toilets for urban and rural areas.

Recommendations

The following actions are recommended for improving the understanding and the interpretation of the national sanitation policy by municipalities and other implementing agents:

- The sanitation policy must be reviewed and the current contradictions in the 2001 White Paper on Basic Household Sanitation and 2003 Strategic Framework for Water Services (SFWS) must be resolved in order to provide municipalities with clear guidance.
- Development of a single holistic sanitation policy that includes basic, intermediate and higher levels of sanitation service in order to facilitate sector regulation.
- Policy guidelines must clarify the household responsibility for operation and routine maintenance of dry on-site sanitation systems and the municipalities' responsibility for pit emptying and disposal of human waste from full VIP toilets and construction of replacement VIP toilets where emptying is not feasible.
- There is a need for national standards for minimum acceptable level of a basic sanitation service that meets the requirements of constitutional right to basic sanitation for all.

- Compliance with community participation in all basic sanitation projects must be enforced and adequate budgets must be allocated to fund community involvement to promote community buy-in and ownership of sanitation services.
- Effective governance systems must be put in place to make water service providers accountable to the communities they serve.
- Integration of hygiene awareness and education in the delivery of free basic sanitation service must be enforced and the water services sector regulator must enforce compliance.
- Adequate resources must be allocated to municipalities to support long-term planning of operation and maintenance of VIP toilets and other on-site dry sanitation systems.
- The shortage of technical and management skills in municipalities must be addressed to ensure that sanitation projects are managed by competent personnel.
- Compulsory national standards must be set for both dry on-site sanitation and waterborne sanitation service levels to support sector regulation.
- Municipal by-laws should include all aspects of a basic sanitation service as stated in the policy definition of a basic sanitation service such as H&HE, grey water disposal in dense urban informal settlements, refuse removal, etc.

Conclusions

The following conclusions were made from the findings of the study:

- The national sanitation policy framework provides an enabling environment for municipalities to deliver sustainable sanitation services, but the problem lies in the interpretation of the policy, such as too much focus on toilet construction without paying enough attention to the other important aspects of sanitation such hygiene awareness, behavioural change, operation and maintenance, community involvement, solid waste disposal and grey water management.
- Although access to basic sanitation is a human right enshrined in the Constitution of South Africa, there were no clear policy guidelines for prioritizing the provision of basic sanitation services to the severely marginalized groups such as poor households living in dense urban informal settlements, people with physical disabilities, HIV/AIDS infected people and other vulnerable groups.
- The international experience on sustainable sanitation services showed that supply-driven sanitation delivery model that focused on toilet construction without community involvement and hygiene education were not sustainable because they did not achieve the goal of improving human health.
- Community-Led Total Sanitation approach contributed to the rapid increase in rural sanitation coverage in South Asia and India. Its success was due to the shift from the subsidy-led toilets for individual households to the emphasis on behavioural change for the whole community.

Capacity building
Raymond Nenzhelele was introduced to sanitation research.

Knowledge dissemination

- The preliminary findings from the study were presented to the DWAF National Sanitation Summit held in Sandton Convention Centre on 26/5/2008.
- A paper to be prepared for submission to Water SA
- A paper has been accepted for presentation at the 2010 WISA conference in April 2010
- Opportunities will be sought to present the findings to suitable sanitation conferences.
- A guide for municipalities been prepared to disseminate the findings of the study.

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LIST OF ACRONYMS

CLTS	Community-Led Total Sanitation
DEAT	Department of Environmental Affairs & Tourism
DM	District Municipality
DOH	Department of Health
DPLG	Dept of Provincial and Local Government
DWAF	Dept of Water Affairs & Forestry
Eco-san	Ecological Sanitation
FBSan	Free Basic Sanitation
H&HE	Health & Hygiene Education
HIV/AIDS	Human Immuno Virus/ Acquired Immunodeficiency syndrome
IDP	Integrated Development Plan
IRC	International Centre for Water and Sanitation
KZN	KwaZulu-Natal
M&E	Monitoring and Evaluation
MIG	Municipal Infrastructure Grant
NGOs	Non-Governmental Organisations
O&M	Operation and Maintenance
RDP	Reconstruction and Development Programme
SAHRC	South African Human Rights Commission
SFWS	Strategic Framework for Water Services
UDS	Urine Diversion Sanitation System
VIP	Ventilated Improved Pit toilet
WDM	Water Demand Management
WHO	World Health Organisation
WIN-SA	Water and Information Network for South Africa
WRC	Water Research Commission
WSAs	Water Services Authorities
WSDP	Water Services Development Plans
WSP	Water and Sanitation Program

1. INTRODUCTION

1.1 Background

International experience has shown that an improvement in access to safe water and adequate sanitation services was necessary to achieve sustainable health improvement and poverty reduction (UNDP, 2006). In order to address poverty and under-development, the Democratic Government of South Africa has prioritised the provision of basic water and sanitation services to the poor because of the perceived high impact of these services on the lives of the poor. In 2001 an estimated 57.6% of the population had access to basic or higher level of sanitation services and 42.4% lacked access to a basic sanitation service level (Census 2001). Between 2001 and 2008 an estimate of 73% of the population had access to basic sanitation services and the basic sanitation backlog was reduced to 27% (DWAF, 2008). This represented significant progress in the eradication of the basic sanitation infrastructure backlog. The 2010 target for the eradication of the basic sanitation infrastructure backlog set in the Strategic Framework for Water Services in 2003 has forced all spheres of government to allocate more resources to support the acceleration of basic sanitation infrastructure delivery to all those households who currently lack access to these services. However, in spite of all these efforts, there were still millions of households that lacked access to a basic sanitation service level.

There is a growing concern that some of problems experienced by municipalities with the acceleration of the delivery of basic sanitation services could be due to the lack of a common understanding and interpretation of the national sanitation policy. This study was initiated to investigate the understanding and interpretation of the national sanitation policy and programmes by municipalities and other sanitation sector stakeholders in order to identify problem areas. The expected outcome of this study was the identification of policy aspects that were misunderstood and misinterpreted by those responsible for the implementation of the sanitation policy at local level and recommendations for bridging the gap between policy and practice.

Questions have been raised on the appropriateness of a single national sanitation policy for all settlement types (urban formal, dense urban informal and rural settlements). The working hypothesis was that the sanitation policy principles of the 2001 White Paper on Basic Household Sanitation were relevant to urban, rural and informal settlements; the only variable was how these principles were interpreted under different local contexts. The study examined the interpretation of sanitation policy principles in sanitation related policies, strategies and guidelines.

1.2 Objectives of the study

The objectives of the study were the following:

- To investigate the understanding of current sanitation policy and programmes relating to the subsidy, ownership of infrastructure, responsibility for O&M, responsibility for monitoring issues of new pits, etc. amongst:
  - National government departments;
  - Local government;
  - Service providers;
  - Communities
- To compile information pamphlets for each stakeholder group that provide a common approach to the issues of ownership, responsibility for O&M and dealing with full pits (for VIPs, Urine Diversion and other on-site latrines);

- To provide recommendations to bridge understanding on policy, responsibilities and practice.

1.3 Scope

The study has focused on the analysis of the national sanitation policy for the delivery of basic sanitation services to the poor households. It did not investigate the delivery of higher levels of sanitation services. The examination of the understanding and interpretation of the sanitation policy focused on the 2001 White Paper on Basic Household Sanitation and the 2003 Strategic Framework for Water Services. The analysis was guided by the sanitation policy principles of the White Paper on Basic Household Sanitation (DWAF, 2001). These policy principles were selected because they are based on international best practice for sustainable sanitation programmes.

1.4 Structure of the report

Chapter 1 presents background and motivation for the study, outlines objectives and scope of the study.
Chapter 2 provides a description of the methods used to conduct the research.
Chapter 3 presents a summary of international and national literature review of experience on the delivery of basic sanitation services to the poor including lessons learned from implementation of pro-poor sanitation subsidies.
Chapter 4 presents a summary of the issues identified from the examination of sanitation policy aspects that were misunderstood and /or misinterpreted by those responsible for implementing the sanitation policy.
Chapter 5 presents a summary of stakeholder perceptions of sanitation policy and practice.
Chapter 6 presents a discussion of key findings and recommendations based on the outcome of the study.
Chapter 7 presents a summary of main conclusions from the study.
Appendix A: Sanitation policy recommendation – This document provides a summary of policy issues that should be addressed in order to improve the understanding and interpretation of the sanitation policy.
Appendix B: Literature review report – the focus of the report is on pro-poor sanitation policy and practice.
Appendix C: Report on the analysis of the understanding and interpretation of the sanitation policy and programme.
Appendix D: Stakeholder consultation report.

2. METHODOLOGY

The study was divided into the following phases:

Phase 1: Desktop analysis

A desktop review of international and national literature on pro-poor sanitation programmes was undertaken to identify global trends and challenges in the delivery of sustainable sanitation services to the poor. These global trends guided the analysis of the understanding and interpretation of the national sanitation policy and programmes. The sanitation policy principles of the 2001 White Paper on Basic Household Sanitation (DWAF, 2001) formed the basis for the analysis of the sanitation policy understanding and interpretation.

The following methods were used to examine the understanding and interpretation of the national sanitation policy and sanitation programme:

- A thorough analysis of the White Paper on Basic Household Sanitation (DWAF, 2001) and the Strategic Framework for Water Services (DWAF, 2003) was conducted to identify areas of misalignment and policy gaps;
- Analysis of the sanitation-related policies, strategies, guidelines, municipal by-laws, indigent policies, norms and standards was conducted with a focus on their alignment with the sanitation policy principles (DWAF, 2001);
- Sanitation policies of selected municipalities were assessed to evaluate their interpretation of the sanitation policy principles;
- Analysis of a sample of Water Service Development Plans was undertaken to assess how municipalities were allocating budgets to the sanitation components (H&HE, O&M and sanitation infrastructure);
- Identification of sanitation policy aspects that were misunderstood and/or misinterpreted by analysing reports on the evaluation of sanitation programmes and documented case studies of sanitation projects;
- Identification of policy gaps based on the outcome of the analysis of all the relevant policy documents, legal framework and other sanitation reports.
- A consolidated report was prepared to summarize key issues identified from the desktop analysis.

Phase 2: Stakeholder engagement

The consolidated report from phase 1 was used as a discussion document to engage sanitation sector stakeholders to assess their perceptions of the sanitation policy issues that were not well understood and/or misinterpreted by those responsible for implementing the sanitation policy and programmes. The interviews targeted policy-makers, municipalities, sanitation practitioners and researchers. A stakeholder workshop was held with representatives from national sanitation sector Departments, NGOs, SALGA and municipalities to validate the findings from the desktop analysis and stakeholder interviews.

Phase 3: Recommendations for bridging the gap between sanitation policy and practice

Based on the findings from phases 1 and 2, a final report with recommendations for bridging the gap between the sanitation policy and practice was prepared.

Phase 4: Compilation of information booklets for policy-makers and municipalities

Sanitation policy recommendations were summarized in an information booklet for national sanitation policy makers (Appendix A)

A guide was prepared for municipalities with information on sanitation policy aspects that were misunderstood and/or misinterpreted by municipalities and international best practice on the delivery of sustainable sanitation services to the poor (separate publication).

3. REVIEW OF INTERNATIONAL AND NATIONAL EXPERIENCE

This chapter provides a summary of the literature review of international and national experience on the implementation of pro-poor sanitation policies.

3.1 International experience

3.1.1 Policy principles for sustainable sanitation programmes

Mara et.al (2007) identified the following four fundamental principles of sustainable sanitation programmes:

Human health – Access to sanitation services must contribute to the improvement in human health and must not create conditions that are harmful to human health.

Affordability – Sanitation services must be affordable to the users; this consideration is very important when delivering basic sanitation services to the poor households.

Environmental sustainability – Sanitation services should not have negative impacts on the environment such as pollution of water sources from disposal of untreated human excreta and wastewater

Institutional appropriateness – Sanitation service delivery should be managed at the lowest appropriate level. Households and the beneficiary communities should be involved in all decision-making processes on the selection of sanitation technology options, operation and maintenance of the sanitation facilities.

3.1.2 Models for sanitation service delivery

The following models of sanitation delivery were identified from the literature review (Wootton, undated):

Hardware solution – In this model a large percentage of subsidy funding for water and sanitation were allocated to hardware (pipes and plants) and a small percentage of the budget was allocated to health and hygiene education for the beneficiaries. No budgets were allocated to support the institutional capacity building, specifically, governance and technical expertise needed to ensure proper operation and maintenance of the new infrastructure.

Community-led approach – This approach focused on building the capacity of the beneficiary communities so that they could make all the decisions on sanitation technology choices based on the available local resources and affordability to the households.

The 'No aid' approach – This approach was based on the school of thought which argued that offering a full subsidy led to unsustainable projects. It supported payment by all households including the poor to ensure that the sanitation services were well managed and maintained. This approach could lead to the exclusion of the poorest households.

The 'aid' development approach – This approach ensured that the poor households were not excluded from benefiting from improved sanitation services. This was based on the findings of several studies that showed that improvement in access to clean water and adequate sanitation contributed to health improvement and this translated into economic growth, for example, a yard tap was shown to increase hand-washing and thus contributed to 30% reduction in the incidence of diarrhoea.

Technological approach – Wootton (undated) argued that the challenges faced by the urban areas of developing countries were similar to challenges faced by developed countries during the 19th century. These countries started with basic water and sanitation technologies which later evolved to full waterborne sanitation

technology. Developing countries were not being encouraged by donors to focus on appropriate sanitation technologies; they were funded to provide households with full waterborne sanitation systems without taking affordability and water availability into consideration.

Privatisation approach – The privatisation of water services was advocated as a solution to the inefficient water services delivery by public sector institutions. However, experience showed that private sector providers were not keen on extending services to the poor; they only provided improved services for those already connected.

3.1.3 Supply-driven sanitation delivery: India's experience

The experience of the Government of India in delivering sanitation service over two decades demonstrated that provision of a generous sanitation subsidy led to an increase in coverage but it did not motivate people to use toilets; the toilets were often abandoned or used for other purposes. A state wide sector assessment conducted in India by the Water and Sanitation Program (2007) found that most people continued to defecate in the open despite having access to toilets because they lacked awareness of health risks associated with their unhygienic behaviour. This assessment showed that toilet usage was highest amongst households who had paid for the construction of their toilets.

The following Box 1 provides a summary of the Indian experience of implementing the sanitation policies.

Box 1: Supply driven sanitation delivery in India (WSP 2007)

In 1986 the Indian government building on its success with the implementation of the water policy through the use of one standard quality controlled hand pump design known as Mark 11 decided to apply the same approach in the implementation of sanitation policy, namely, one standard design for rural and urban on-site sanitation toilet. A 100% subsidy was provided by Central Government for the Rural Sanitation Programme targeting scheduled castes, scheduled tribes and landless labourers and the subsidy for other groups were decided at a state level. The 100% subsidized rural sanitation programme failed to improve coverage and use of sanitation facilities because of too much focus on construction, no demand creation , no user participation with regards to the location of the toilet, design and maintenance requirements. It was found that 50% of the toilets were not used or in some cases were used as storage facility.

In 1992 the Indian Government reduced the subsidy to 80% and only targeted subsidies to households below the poverty line and households had a choice of four toilet options with different cost levels. The government allocated 10% of subsidy to the promotion of health and hygiene awareness and the implementation of the sanitation projects was driven by external agencies.

In 2001 the sanitation policy guidelines were changed to a 'Total Sanitation Campaign' which put emphasis on informing and educating rural households about the importance of having sanitation facilities. Households could apply for a flat subsidy depending on type of sanitation facility selected. The implementing agencies were responsible for setting up sanitation marts where households could buy materials required to build the toilets. Limited success was achieved with this approach because of the lack of guidance and training of the local communities. Some implementing agencies lacked expertise in gender and poverty sensitive promotion. Deficiencies were also found in organizations responsible for allocating funding and monitoring of implementation of the sanitation programme.

The experience of the Indian Government demonstrated the importance of creating a demand for sanitation through appropriate H&HE, involving households in the selection of sanitation options, training of local people, establishment of local suppliers of building materials and credit arrangement for households who could not afford to pay cash for building materials.

3.1.4 Community-Led Total Sanitation (CLTS)

In recognition of the failure of the supply-driven approaches in motivating people to use their toilets, South Asia adopted the community-led total sanitation approach (WSP, 2007). This approach is a shift from the subsidy-led toilets for individual households to the emphasis on behavioural change for the whole community. The objective of the CLTS approach is to reduce the incidence of sanitation-related diseases and to manage the public risk associated with poor disposal of human excreta at a community level. The ultimate goal of this approach is to achieve 'open defecation free villages'.

According to WSP (2007), the Community-Led Total Sanitation (CLTS) was based on a principle of triggering collective behavioural change. Communities were assisted to take a collective action to adopt safe sanitation and hygienic behaviour and to ensure that all members of the community had access to safe sanitation facilities. Communities were helped to understand and realize the negative impacts of poor sanitation and they were also empowered to collectively find solutions for improving their sanitation facilities.

The CLTS was first piloted in Bangladesh in 2001 by the Village Education Resource Centre, a local NGO and WaterAid Bangladesh to achieve total sanitation coverage. As a result of this intervention, the community achieved a total ban on open defecation within the village without any external subsidy. Communities established their own committees, developed innovative low-cost sanitation technologies, monitored progress and ensured that all households adopted safe and hygienic defecation practices.

In 2004 the Government of Bangladesh allocated 20% of the annual development budget to local government for the promotion of the CLTS approach and also instituted an incentive scheme. The CLTS approach has resulted in over 70 million people adopting safe sanitary practices in a short time, and Bangladesh expected to achieve 100% sanitation coverage by 2010 ahead of 2015 MDG target.

The CLTS approach has been adopted by other districts in India; Maharashtra State modified the approach by bringing local government as partner and the CLTS approach was linked to the state reward scheme for communities that achieve 100% sanitation coverage. Based on the success achieved in Bangladesh and Maharashtra, the Indian government revised the national sanitation guidelines to include the concept of CLTS. A national reward scheme was launched in 2004 for rewarding local governments and local communities for achieving 'open defecation free areas'. The CLTS approach helped Maharashtra State to achieve sanitation coverage for 5 million households in 2006 and the state government set a target of an 'open defecation free environment' for its rural population of 50 million by 2008. Pakistan, Nepal, Indonesia and Cambodia were also adopting CLTS approach.

What makes the CLTS approach successful?

WSP (2007) identified the following critical success factors of the CLTS approach:

Support for the collective behavioural change at scale – The success of CTLS depended on government support for capacity building at a local level and the availability of committed local NGOs with the capacity to facilitate community mobilization.

Addressing the needs of the poor – The CLTS approach required the participation of all households including the poor. This implied that sanitation interventions also took into consideration the affordability for the poorest households. Information on different sanitation technology options for the various socio-economic groups was provided. Communities cross-subsidized the poorest households and microfinance arrangements were established where cross-subsidization was not adequate or possible in order to achieve 'open defecation free environment.'

Overcoming physical constraints – The CLTS approach showed that once communities were motivated to achieve 'open defecation free environment', they were able to find solutions to problems of water scarcity and adverse hydro-geological conditions.

Creation of a supply chain – The success of the CLTS approach required the establishment of an effective system for meeting the demand for building materials for the different sanitation technologies. For example, in Bangladesh and Maharashtra State, the local entrepreneurs in partnership with the local government brought building materials to the villages to facilitate easy assess for households.

Ensuring sustained behavioural change – Peer monitoring at local level was an important component of CLTS approach; it ensured that villages remained free from open defecation. Communities enjoyed a sense of pride when their villages were officially declared 'open defecation free areas'. The rewards awarded by the national government for the best performing villages brought a sense of pride and a strong desire to maintain the status. This motivated all members of the community to monitor each other to make sure that their status was maintained.

3.1.5 Pro-poor sanitation subsidies

The UN Human rights system differentiates between "the right to water" and the "right to free water". The right means that nobody should be denied access to adequate water and sanitation because of inability to pay (WHO, 2003). The Government of South Africa in its Bill of Rights has adopted the UN definition of right to basic water services (Constitution of South Africa, 1996).

Box 2: Summary of the historical evolution of the right to basic services:

The WHO (2003) outlines the following historical evolution of the water and health-related human rights:

The 1946 Constitution of WHO enshrined the right to the highest standard of health and this right was recognized in article 12.1 of the International Covenant on Economic, Social and Cultural Rights. The right includes all the underlying determinants of health, central among these are safe water and adequate sanitation services. The UN Universal Declaration of Human Rights of 1948 guaranteed all people a right to a standard of living adequate for their health and well-being. In 2000, the United Nations Committee on Economic, Social and Cultural Rights adopted a General Comment that interpreted the right to health as access to safe drinking water, adequate sanitation, sufficient supply of safe food, housing, healthy occupational and environmental conditions and access to health-related education and information.

What does the right to basic sanitation services mean for national governments?

The national governments have a responsibility for taking concrete steps to respect, protect and fulfil the right to sanitation and ensure that all the relevant stakeholders at all levels play their roles in ensuring realisation of the right. Governments have a responsibility of ensuring universal access to a basic level of water and sanitation services. Systems must be put in place to regulate and monitor access to these services by all people in an equitable and non-discriminatory manner consistent with the human rights standards (WHO, 2003).

Why subsidize basic sanitation services for the poor?

The first rationale for subsidising basic sanitation services was to make the services affordable to the poor with the aim of achieving universal access to basic services. A second rationale was based on a social policy perspective which used subsidies to address poverty and inequality. Subsidies were used as an alternative to provide transfers in kind to poor households instead of cash transfers which were more difficult to administer (Komives et.al 2005).

Brook and Smith (2001) argued that cross-subsidy arrangements did not benefit the poorest because they only benefited households that were connected to the water and sewer networks; they believed that cross-subsidies were not a suitable instrument for providing water services to the poor. Increasing block tariffs also has limited success in benefiting the poor because these tariffs were designed for single family household whereas several poor families tended to live together in one household unit; this negated the benefit of the lifeline tariff. The options that limited the subsidy to low-cost service options would make sure that only the poor could benefit. Brook and Smith (2001) cited the Chilean model of pro-poor subsidies where the cost of subsidy administration was reduced by providing a subsidy across several services instead of sector specific subsidies.

A World Bank Report (Komives et.al, 2005) concurred with Brook and Smith (2001) that subsidies benefited the 'haves' not the 'have nots' based on the observation that in developing countries the poorest of the poor were unlikely to be connected to the water and sewer networks; therefore any subsidy that only targeted poor households that were connected to the water and sewer networks excluded the majority of the poor households. This report suggested that the best way to benefit the poor would be to subsidize connection charges for the poor households and to use more targeted approaches to subsidise service delivery to the poorest households.

Regulation of pro-poor subsidies

Brook and Smith (2001) suggested that the development of a pro-poor regulatory strategy should be based on the needs and priorities of the poor and proper channels of communication must be used to engage the poor in a consultative process. They cautioned against the adoption of subsidy models that have worked well in developed countries because these were usually not appropriate for developing countries where the majority of the poor were not connected to sewer networks. The South African experience showed that providing free basic sanitation services to those already connected to sewer networks limited subsidy funds available to eradicate the basic sanitation infrastructure backlog for millions of poor households (Mjoli & Bhagwan, 2008).

Characteristics of good sanitation subsidies

The following characteristics of good subsidies were identified from the literature review (Mehta (2003) :

Genuine need – A thorough assessment of the need for subsidies should be undertaken; this should include the level of tariff needed to ensure financial sustainability for the service providers and the minimum level of usage by the poor should be determined. Genuine need should be based on the level of demand and willingness to pay by the different consumer groups. This was particularly important when cross-subsidy was being considered as an option for funding pro-poor sanitation subsidies.

Accurate targeting of the poor – The subsidy should be based on accurate targeting of the poor in order to minimize the cost of the subsidy and maximize benefits for the poor.

Administrative simplicity – Simple subsidy administration procedures should be developed in order to make sure that most of the budgets allocated to the subsidy for the poor actually benefited the poor households.

Preservation of economic incentives – Full subsidies were not encouraged because they could lead to perverse economic incentives for households. The subsidy should be capped at the level that forced the poor households to pay a minimum fee linked to the usage of the service. For example, in Chile, the direct subsidy covered 85% of the water bill and the subsidy was only paid when there was proof that the poor household had paid its share (Foster, Gomez-Lobo and Halpern, 1999).

Coverage – The design of the subsidy should be based on the total number of the target population so that the service coverage could reach most people over a specified period.

Issues to be taken into consideration in the design of pro-poor sanitation subsidies

Mehta (2003) identified the following key issues that must be taken into consideration in developing subsidy options:

- There must be a clear distinction between the subsidy for access to sanitation infrastructure and consumption of the service; where the majority of poor households lacked access to the sanitation infrastructure, the subsidy must focus on increasing the coverage.
- Potential sources of funding for subsidy could include internal cross-subsidization where the service provider charged a higher tariff for rich customers and used some of collected money to subsidize the poor (consumption subsidy) or allocation from government to cover the subsidy for the poor and a third option would be a surcharge levied by government to create a subsidy fund for the poor.
- The subsidies were necessary when a significant number of citizens did not have resources to access basic services due to a mismatch between the cost of services and affordability. Subsidies may be necessary where the cost of providing a basic service was beyond the reach of most households, for example, in rural areas where water resources were scarce or there were problems with the quality of water. Subsidies may be necessary to enable poor households to access minimum service levels
- Subsidies could be provided in two ways: the subsidy could be paid directly to the poor households; this required accurate targeting of the poor. A second option would be to pay the subsidy to the service provider and the service

provider made responsible for developing systems and processes for efficient implementation of the subsidy.

Table 1 shows examples of pro-poor subsidy options

Subsidy instrument	Description
Partial capital for access to rural sanitation	Partial capital grant ranging from 25%-95% funded by the World bank under the demand responsive approach
Demand promotion for sanitation and hygiene	Subsidy for support of the costs of staff responsible for demand promotion initiatives such as hand washing, village rewards for sanitation improvement or provision of toilets in some countries such Burkina Faso and India
Social connections for the urban poor	Subsidies to private service providers to provide connections to the water supply networks for the urban poor (Cote d'Ivoire and Senegal)
Cross-subsidies	Water services providers use different tariffs for the different consumer categories in order to raise funds for subsidizing the poor customers.
Direct subsidies for consumption	Direct subsidies paid to utilities to meet the costs of providing services to identified poor consumers (Chile and Panama – the poor households pay 15% of the water bill)
Village rewards	The Indian government is awarding rewards to villages that have achieved 100% sanitation coverage

Source: Table adapted from Mehta M (2003) – Meeting the financing challenge for water supply and sanitation, World Bank-Water and Sanitation Program.

3.1.6 African case studies of implementation of national sanitation policies

The following lessons are based on documented case studies of implementation of national sanitation policies in Uganda and Zimbabwe.

The national sanitation policies of Uganda were strong in concept and were based on principles of sustainability but at local government level the implementation of the policies was weak and consequently they had limited impact on the increase in the sanitation coverage because of lack of targeted funding.

Lessons learned from the experience of Zimbabwe included the following:

Scaling-up decentralized service delivery was complex and it took time

The decentralization of sanitation service delivery to local government institutions should be preceded with the investment in the building of local institutional capacity.

Effective co-ordination required participation of all relevant stakeholders

Sustained participation of all sanitation sector stakeholders in the co-ordination of sanitation service was necessary for successful sanitation service delivery.

Households were willing to invest in sustainable systems

Rural households in Zimbabwe demonstrated their willingness to invest in the improvement of their wells and Blair latrines without the need for large government subsidies.

3.2 South African experience

A review of national literature on the evaluation of sanitation projects highlighted the following issues:

3.2.1 Sustainability of sanitation services

A DWAF Report (2005) on the sustainability audit of sanitation facilities implemented by sector departments between 1994 and 2003 in the nine provinces found that 28% of the sanitation projects were not sustainable when evaluated against the following sustainability criteria:

Governance – Most surveyed municipalities were familiar with the national sanitation policies and guidelines, but only 48% had developed their own sanitation by-laws.

Institutional capacity – Sanitation was not a high priority in a significant number of municipalities, for example, only 60% of the municipalities had a dedicated sanitation unit and 65% of municipalities had inadequate technical capacity to implement and manage large sanitation infrastructure projects. Hemson (2004) identified the problem of lack of capacity at the municipality levels to manage water and sanitation budgets. This was caused by high staff turnover in rural municipalities due to the difficult working conditions in these rural areas.

Operation and maintenance (***O&M***) – There was inadequate capacity for O&M of sanitation systems in most municipalities, for example, 73% of municipalities only performed reactive maintenance and 78% of the municipalities did not have any O&M plans for VIP toilets.

Social aspects – The study found that 35% of households were not satisfied with the quality of toilets provided and there was also inadequate involvement of communities in the planning and implementation of the sanitation infrastructure projects in most municipalities. The households indicated that they were provided with inadequate education on proper O&M of on-site sanitation facilities.

Health and hygiene education – Although the main objective of sanitation service delivery was the improvement of health, the DWAF study found that 66% of the households did not receive any sanitation, health and hygiene education during the implementation of sanitation infrastructure.

Technical aspects – The study found that only 44% of the sanitation projects were preceded by an environmental impact assessment. There was also a problem of poor adherence to technical specifications for VIP toilets, for example, 34% of the toilets had top structures that were not designed to withstand strong wind forces thus leading to the damage of toilets during strong windy storms. The design of most VIP toilet slabs did not make provision for pit emptying and the superstructure was also not designed to facilitate relocation to a new pit when the VIP toilet was full.

Hemson (2004) identified the following weaknesses in the delivery of water and sanitation services:

Municipal strategies for sanitation infrastructure delivery – the strategies for spending sanitation budgets were often driven by personal agenda when funds were limited thus leading to the spreading of limited sanitation budgets over many villages, for example, funding for 100 VIPs was spread among 20 villages in order to satisfy all Councillors who wanted to be seen to be delivering services to their constituencies. This approach showed a lack of understanding of the importance of sanitation coverage for the whole community in the improvement of health.

Equity – Funds allocated to municipalities that lacked capacity to implement sanitation projects could be re-allocated to municipalities that had capacity to spend the funds. This could lead to further marginalization of the under-resourced municipalities in the poor areas with huge sanitation backlogs.

3.2.2 VIP toilet as a basic sanitation technology

The definition of a basic sanitation facility as a well-constructed VIP toilet has led to the promotion of this technology as a solution for meeting the basic sanitation service needs of households without basic sanitation infrastructure. Austin and van Vuuren (1999) argued that the VIP toilets were not suitable for all conditions, for example, geotechnical conditions such as rocky ground could preclude the selection of a VIP technology. According to Eales (2005) pit emptying was not adequately acknowledged by municipalities as an essential component of sustainable sanitation service provision.

3.2.3 Alternative sanitation technologies

The Urine Diversion Sanitation (UDS) Technology was first piloted in the Eastern Cape by the CSIR in 1997 (Austin & van Vuuren, 1999). eThekwini Municipality has selected this technology as a preferred sanitation technology option for its rural areas. About 15 000 UDS toilets were implemented in Northern Cape as a replacement for the bucket sanitation system. Other municipalities were also piloting the UDS technology.

An evaluation of user perceptions of the UDS technology conducted by Matsebe and Duncker (2005) in North West, Northern Cape and KwaZulu-Natal provinces highlighted the following:

- The owners of UDS toilets were not willing to handle human faeces and they were also not prepared to use human waste as a fertilizer for their crops.
- All users liked the UDS toilet superstructure because it was well built but they did not like the technology because they considered it to be second class technology.
- In all three provinces, the local municipalities were leading the implementation of UDS and the users were not involved in the selection of this sanitation technology.

These findings highlighted the importance of involving the beneficiary communities in decision-making processes on appropriate sanitation technologies in order to promote acceptance and ownership of the sanitation facilities by all households.

3.3 Summary

The literature review identified the following issues that were critical to sustainable sanitation services for the poor:

Principles of sustainable sanitation programmes

Improvement in human health should underpin all sanitation improvement programmes and environmental sustainability should not be compromised. Affordability and involvement of households or representative of beneficiary communities are fundamental requirements for long-term sustainability of sanitation services.

Supply-driven versus demand-responsive approaches to sanitation service delivery

The India's experience provided an example of failed supply-driven approach and the success of the Community Led Total Sanitation approach in South Asia demonstrated the importance of creating a demand for sanitation by focusing on behavioural change for the whole community and allowing the households to take the lead in construction of sanitation facilities. It was also shown that government and non-

government organizations had important roles to play in facilitating the process and funding hygiene awareness and community mobilization.

Pro-poor sanitation subsidies

Pro-poor sanitation subsidies must be based on genuine need and a thorough understanding of the needs of poor communities and accurate targeting mechanisms must be selected to ensure that the subsidies benefit the majority of the poorest households. There should be a distinction between subsidy for sanitation infrastructure and consumption subsidy. Where a large percentage of the population still lacked access to basic sanitation infrastructure, allocation of the subsidy to sanitation infrastructure should be prioritized. A strong pro-poor regulatory framework was very important for regulating access to the subsidies by the poorest households. The literature review highlighted the importance of taking local context into consideration in the design of pro-poor sanitation subsidies, for example, providing free basic sanitation services to households with waterborne sanitation systems worked well in developed countries where the majority of households had access to waterborne sanitation systems but in countries like South Africa where there was still a significant number of households without access to basic sanitation infrastructure this approach excluded the poorest households.

Decentralization

International experience showed that successful decentralization of service delivery to local government must be preceded by training and capacity building for local government institutions and a regulatory framework was required to achieve sustainable services delivery.

Sustainability of sanitation services

The evaluation of sanitation projects implemented in South Africa from 1994 to 2003 highlighted weaknesses in governance, institutional capacity, O&M, lack of community involvement and neglect of hygiene education and awareness as threat to the long-term sustainability of sanitation services. There was also too much focus on VIP toilets and waterborne sanitation systems without paying enough attention to other alternative sanitation technologies thus limiting technical choices available to households.

The overall conclusion drawn from the literature review was that the involvement of the beneficiary communities in decision-making processes on appropriate sanitation technologies was central to the achievement of community acceptance and household ownership of the sanitation facilities.

4. ANALYSIS OF THE UNDERSTANDING AND INTERPRETATION OF THE SANITATION POLICY

The examination of the understanding and interpretation of the sanitation policy was guided by the sanitation policy principles of the 2001 White Paper on Basic Household Sanitation (DWAF, 2001) and findings from the literature review.

4.1 Access to basic sanitation service as a human right

The right of access to basic sanitation services is enshrined in the Constitution of South Africa (1996), Section 24(a), states that '*everyone has a right to an environment that is not harmful to their health or well-being'*, and municipalities have an obligation to ensure the realisation of this right.

4.1.1 Definition of a basic sanitation service

The following are definitions of a basic sanitation service from the two national sanitation policies:

Definition #1

'The minimum acceptable level of basic sanitation is: a) appropriate health and hygiene awareness and behaviour; b) a system for disposing of human excreta, household waste water and refuse, which is acceptable and affordable to the users, safe, hygienic and easily accessible and which does not have an unacceptable impact on the environment; and c) a toilet facility for each household.' (DWAF 2001, p14)

Definition #2

'Basic Sanitation Service – the provision of a basic sanitation facility which is easily accessible to a household, the sustainable operation of the facility, including the safe removal of human waste and wastewater from the premises where this is appropriate and necessary, and the communication of good sanitation, hygiene and related practices.' (DWAF 2003, p45)

The main difference between the two definitions was the emphasis on appropriate health and hygiene awareness, inclusion of refuse removal and one toilet per household in definition #1. Another difference was the reference to sanitation as a service and the Water Services Authorities were allocated the responsibility for providing the services in definition #2. This discrepancy in the two sanitation policies has led to the interpretation of the White Paper on Basic Household Sanitation as a policy for rural households with WSAs responsible for providing a basic sanitation facility and households responsible for O&M of the VIP toilets including pit emptying.

The Strategic Framework for Water Services (DWAF, 2003) definition of a basic sanitation service does not include the safety which is important for women and children, especially where communal toilets are provided as basic sanitation service level.

The SFWS and Municipal Infrastructure Grant (MIG) policy regard the waterborne sanitation system as a basic sanitation level of service for urban areas and dry on-site sanitation systems for rural settlements. Consequently, urban households provided with VIP toilets or UDS toilets were willing to accept these technologies as a short-term solution while they waited for upgrade to the full waterborne sanitation systems. The reality that South Africa was a water scarce country has not been factored in the planning of sanitation programmes. These policies did not put

emphasis on the use of water efficient technologies when providing households with waterborne sanitation infrastructure.

According to DWAF Guidelines for compulsory national standards and norms (2002) the water services institutions are required to support the viability and sustainability of sanitation services for the poor by providing basic sanitation services such as pit-emptying service for the poor at a low cost or free where this is not affordable. This was necessary to protect the public health and to prevent unsafe disposal of human excreta into the environment or streams. On the other hand, the SFWS allocated the responsibility for emptying of the full VIP toilets to the households. This contradicted the definition of a basic sanitation service provided by the SFWS.

4.1.2 Targeting basic sanitation subsidies to the poor

The SFWS states that the primary beneficiaries of free basic sanitation services are the poor but there is no national policy definition of poverty.
Municipalities have taken different approaches to the interpretation of the free basic sanitation policy. Some were using the indigent policies to provide subsidized basic municipal services to registered indigent households and free basic sanitation was part of a package of free basic municipal services. However, the methods of identifying the poor varied.
The following were some examples of methods used to target subsidies:
Municipal property valuation – Automatic qualification to receive free basic services based on the municipal valuation of the property and a system of rising block rebates was provided to households with properties valued above the automatic qualification valuation limit.
Monthly household income limit – an equivalent of two state welfare pension grants: Households whose monthly income did not exceed more than two state welfare pension grants, who did not own more than one property could apply and provide proof of income to be registered as indigent households. The policy also made provision for child-headed households to qualify for free basic services if the household income did not exceed R2136 per month (Msunduzi LM).

The problem with these approaches was that they excluded poor households living in backyards because the municipality recognized a stand as a household unit and multiple family households were also not catered for because their joint household income would exceed the monthly household income limit for qualifying for indigent status.

4.1.3 Sources of funding for free basic sanitation services

Municipalities were using three financing mechanisms to fund the free basic sanitation services for the poor households:

- *Cross-subsidisation* – The high water services consumers were charged a higher tariff which included a subsidy for the poor households;
- *Subsidies from general revenue* – transfers were made from the general municipal revenue account to the income account for water services to compensate for the income lost to free basic sanitation services;
- *Equitable share allocation* – transfers based on the DPLG formula to the municipality from the fiscal budget.

4.1.4 Assessment of progress in the realisation of the right to basic water services

The South African Human Rights Commission report (2004) on the evaluation of progress made in the realisation of the right to free basic water services highlighted the following issues on the right to free basic water services.

- The poor and marginalised households continued to face poor or no access to basic water and sanitation services.
- Free basic water and sanitation services were benefiting those who already had access to water and sanitation infrastructure while the poor who lived in urban informal settlements and rural areas continued to have no access to these services.
- There were no programmes in place for prioritizing water and sanitation service delivery to the vulnerable groups such as people with physical disabilities and HIV/AIDS infected people and their households.

4.2 Community participation

The principle of public participation in all spheres of government is enshrined in the Constitution of SA; Section 151(e) –"*obliges municipalities to encourage the involvement of communities and community organisations in local government*." The 2003 SFWS supports the active involvement of civil society in the provision of sustainable and affordable water services. However, in practice there was very limited or no community involvement in most sanitation projects evaluated by the DWAF (2005). Case studies of rural sanitation projects demonstrated that involving local people in the implementation of sanitation projects contributed to the creation of the demand for sanitation and community ownership of sanitation facilities (WIN-SA, 2006). International experience showed that poor involvement of local communities in the planning of basic sanitation projects was the major cause of failure of sanitation project as seen in the supply-driven approach used in India (WSP, 2007).

4.3 Gender mainstreaming

The SFWS emphasizes the importance of gender mainstreaming in water services delivery, but reports on the evaluation of the sanitation programme (Masibambane, 2007) showed that municipalities lacked an understanding of the meaning of gender mainstreaming. It was interpreted as gender quotas in project related employment. Most municipalities cited the support of national women's day and 16 days of activism against violence on women and children as their contribution to gender mainstreaming.

4.4 Integration of health and hygiene into sanitation service delivery

Health and hygiene awareness and promotion – The White Paper on Basic Household Sanitation includes appropriate health and hygiene education and awareness as an integral component of a basic sanitation level. The municipalities were required to allocate adequate budgets for H&HE for the beneficiary communities, but in reality most municipalities allocated limited or no budget to this component.

DWAF (2005) and Duncker et.al (2007) assessed the integration of hygiene education in basic sanitation services delivery and found that most households did not receive any H&HE during the implementation of basic sanitation infrastructure and most VIP toilets provided did not have hand-washing facilities next to them.

4.5 Financial sustainability of sanitation services

The sanitation policy puts emphasis on the importance of ensuring that the selection of sanitation technology options is based on affordability of O&M costs. The MIG Guide (2005) also stresses that WSAs must have adequate financial and institutional capacity to operate and maintain the complex sewerage systems before opting for waterborne sanitation as a basic sanitation service level. However, in practice, municipalities were neglecting the maintenance of sanitation infrastructure. A Masibambane evaluation report (2007) showed that the large capital investments in sanitation infrastructure were not matched with adequate budgets for routine maintenance of the assets. This was leading to the deterioration of infrastructure that was implemented before 1994. The WSAs were allocating their equitable share grant to the reduction of the sanitation infrastructure backlog without allocating any funds to O&M of existing sanitation infrastructure.

4.6 Environmental integrity

The 2001 White Paper on Basic Household Sanitation puts great emphasis on the need to adopt an integrated environmental management approach in the location, selection, design, construction and operation of all sanitation works with special reference to sewage treatment plants and solid waste disposal sites. Environmental education for the general public was recommended so that the public could participate in monitoring pollution. Both the 2001 White Paper on Basic Household Sanitation and SFWS (2003) allocated the responsibility for enforcing compliance with environmental policies to the Department of Environment Affairs and Tourism (DEAT). No reports were found on the extent to which DEAT was enforcing compliance.

Environmental management at local government level

Although the Integrated Development Planning (IDP) process identified the environment as a cross-cutting issue that must be incorporated in all aspects of municipal planning, there was limited guidance on how this should be done (DEAT, 2004) and the quality of environmental planning was not assessed for compliance with environmental legislation. A DEAT study (2004) revealed that environmental management was not listed as local government matter in Schedule 4b and 5b of the Constitution of SA (1996), consequently, the environment was given low priority by municipalities and limited human and financial resources were allocated to it.

Grey water management

The policy definition of basic sanitation service includes the "*safe removal of human waste and wastewater from premises where it is appropriate and necessary*" (SFWS, 2003), but in practice, municipalities were not paying any attention to grey water disposal in dense urban informal settlements provided with dry on-site sanitation systems. These communities were forced to live in squalid conditions that put their health at risk. According to a WRC Report (Cadern et.al , 2007), there was an ongoing debate at local government level on whether grey water was storm water or a sanitation issue and this report noted that there were no municipal by-laws on the use and disposal of grey water in areas without connection to sewer networks.

4.7 Operation and maintenance of sanitation systems

Although the sanitation policy and strategy stress the importance of selecting sanitation technology options based on availability of financial and technical capacity for proper O&M of the sanitation systems, in practice, most municipalities were implementing large numbers of VIP toilets without any O&M plans for emptying full

pits and safe disposal of pit sludge. Some municipalities were of the opinion that pit emptying was the responsibility of households. The design of most VIP toilets did not make provision for emptying and the superstructure was also not suitable for relocation to a new pit (DWAF, 2005).

4.8 Monitoring and evaluation of sanitation services

The White Paper on Basic Household Sanitation (DWAF, 2001) identified broad areas of sanitation service delivery that should be monitored to assess progress in the implementation of sanitation policy. The responsibility for sanitation M&E was allocated to all three tiers of government and DWAF as the sector leader has a responsibility for the regulation of water services delivery. The Strategic Framework for Water Services only refers to monitoring; it does not make any reference to the evaluation of the impact of the basic sanitation services.

A Masibambane evaluation report (2007) identified the following weaknesses in M&E for water services:

- The focus of M&E for MIG funded water and sanitation projects was on the expenditure, number of days of employment for women, youth, people with disabilities, etc; the impact of sanitation on health improvement and environment was not considered.
- There was no monitoring of the quality of assets provided and proper operation and maintenance of the provided infrastructure.
- DPLG did not monitor the quality and ongoing use of assets funded under MIG; the municipalities were given the responsibility of quality assurance for the infrastructure provided but due to the lack of capacity this task was neglected.

Other weaknesses in the sanitation M&E included lack of processes within DWAF for measuring the performance of WSAs and there were also no mechanisms for making WSAs to be accountable to the communities they serve (Jones and Williamson, 2005). A lack of information on the quality of the sanitation services provided by the WSAs was identified as a weakness (SAHRC, 2004).

4.9 Summary

The key findings from the examination of understanding and interpretation of the sanitation policy and programmes are summarized below:

Access to basic sanitation as a human right – There was no common approach to the interpretation of access to a basic sanitation service as a human right.

Targeting the poor households – There were no national guidelines for targeting free basic sanitation services to the poor households.

Definition of basic sanitation service – There were major differences in the definition of basic sanitation level by the two national sanitation policies.

Community participation – The adoption of supply-driven approach to deliver basic sanitation infrastructure has led to the neglect of community involvement which was very important to the acceptance and ownership of sanitation infrastructure by beneficiary households.

Gender mainstreaming – Municipalities lacked an understanding of the meaning of gender mainstreaming within the context of basic sanitation service delivery.

Integration of H&HE – There was poor integration of H&HE in the delivery of basic sanitation service due to the lack of prioritization of this component of basic sanitation service by municipalities.

Financial sustainability – The pressure to meet the basic sanitation infrastructure delivery targets was forcing municipalities to neglect allocation of budgets to the operation and maintenance of existing sanitation infrastructure. Poor municipalities were not able to provide free basic sanitation services to poor households due to lack of funding.

Environmental integrity – There was too much focus on building of toilets without paying any attention to grey water management, solid waste disposal and environmental impact assessment; this had a negative impact on the environmental quality.

Operation and maintenance of on-site sanitation systems – Most municipalities did not have O&M plans for emptying full pits and safe disposal of human waste.

5. STAKEHOLDER PERCEPTIONS OF SANITATION POLICY AND PRACTICE

Sanitation sector stakeholders were interviewed to assess their perceptions of the sanitation policy and practice. This chapter presents a summary of sanitation policy issues identified by the stakeholders.

5.1 Misunderstood aspects of the sanitation policy

The participants identified the following aspects of the national sanitation policy framework that were misunderstood by those responsible for the implementation of sanitation policy:

Basic sanitation service level

- The contradictions in the definition of basic sanitation between the 2001 White Paper on Basic Household Sanitation and the 2003 Strategic Framework for Water Services have created problems for municipalities. The 2001 White Paper on Basic Household Sanitation sets the minimum acceptable basic level of sanitation as appropriate health and hygiene awareness and behaviour, a system for disposing human excreta, wastewater and refuse and a toilet facility for each household. On the other hand the SFWS does not provide any minimum standard for an acceptable basic sanitation service level. Policy guidance was needed on the definition of a minimum acceptable basic sanitation service as opposed to appropriate sanitation.
- Municipalities were faced with a challenge of urban households that were refusing to accept dry on-site sanitation systems because the 2003 SFWS 2003 states that waterborne sanitation system was considered to be the basic sanitation service level for urban areas.
- MIG Project Business Plan Technical Report did not require the completion of the life cycle operating and maintenance requirements for on-site sanitation projects because the expectation was that households would be responsible for O&M. This was not in line with SFWS definition of a basic sanitation service which allocates the responsibility for safe disposal of human waste to the Water Services Authorities.

Health and Hygiene Education

There was a need for structured hygiene education guidelines for implementing agents. These guidelines should provide a clear distinction between hygiene education, awareness and promotion and guidance should be provided on when it was appropriate to use health and hygiene promotion or awareness or education. Although the sanitation policy recognizes the importance of hand washing, the hand washing facility was not included as compulsory component of the basic sanitation infrastructure for households without access to water supply on-site.

Community involvement

The 2001 White Paper on Basic Household Sanitation states clearly that households should contribute to the construction of their basic sanitation facilities, on the other hand, the 2003 SFWS states that provision of the basic sanitation service is the responsibility of the WSA and it does not make any reference to the need for the households to contribute to the construction of their toilets. This contradiction in the two policies has led to a situation where households were reluctant to contribute anything to the construction of their toilets and even those that dug their pits demanded payment for their labour. Meaningful involvement of the communities in the selection of the sanitation technology options did not take place. Communities

were shown the various technology options or models of toilets but the final decision was taken by the WSA based on available budgets.

Responsibility for O&M of on-site was another area where the two policy documents were in conflict. Most rural District Municipalities believed that households should be responsible for the O&M of their VIP toilets. They argued that by providing a free basic sanitation facility, they had met the constitutional obligation of ensuring access to a basic sanitation service as a right. In terms of SFWS the definition of basic sanitation service goes beyond the provision of a basic sanitation facility; it includes safe disposal of human waste and wastewater.

5.2 Misinterpreted aspects of the sanitation policy

Implementation of H&HE

Although the sanitation policy stresses the importance of including H&HE in the delivery of a basic sanitation service, the WSAs were not prioritizing this component. Funds allocated for H&HE were used for other items because there was no monitoring of H&HE and compliance was not enforced. Specific issues relevant to H&HE such as availability of hand washing facilities next to the toilet, easy access to water and availability of soap for hand washing were not monitored. Most municipalities were implementing H&HE as a once-off intervention that was linked to the delivery of basic sanitation infrastructure. The Bucket Eradication Programme did not include any H&HE and user education was limited to households provided with alternative sanitation technologies. The assumption was that all households already knew how to operate and maintain their waterborne sanitation facilities.

Technical aspects of sanitation

- There was no quality assurance for sanitation infrastructure provided to ensure its compliance with the design standards such the size of pits, slab quality and superstructure quality.
- Households were not empowered to monitor the quality of their VIP toilets and to report poor quality to relevant government institutions.
- There were no mechanisms for ensuring that service providers were accountable to the households.
- Design of VIP toilets did not make provision for pit emptying.
- Decisions to provide waterborne sanitation services as a replacement for the bucket were not always linked with the assessment of water availability and adequate wastewater treatment plant capacity.
- Lack of regulation of the quality of effluent discharged in rivers for its compliance with the national effluent discharge quality standards.
- Cost of water was not taken into consideration when selecting waterborne sanitation systems for poor households.
- Water conservation and water demand management strategies were not integrated into basic sanitation service delivery. They were no municipal by-laws for enforcing use of water efficient technologies to reduce water demand.
- Most municipalities did not have O&M plans for basic sanitation infrastructure and there were also no plans for ensuring long-term sustainability of VIP toilets.

5.3 Weaknesses in the national sanitation policy

The following weaknesses in the sanitation policy were identified by the participants:

- Unrealistic targets set in the 2003 SFWS did not take into account the lack of capacity in some municipalities to implement large sanitation projects.
- Poor planning, poor decision-making and rushed projects without proper feasibility studies were responsible for some of the problems of poor sustainability.
- Provision of higher levels of sanitation service to poor households based on the reliance on fiscal transfers to cover operations and maintenance costs could pose a threat to long-term sustainability.
- Issues facing rural households and WSAs with respect to the on-site dry sanitation systems needed further clarification. Examples of these issues included the following:
    - Who should be responsible for servicing the dry on-site sanitation systems?
    - What systems and facilities were in place to dispose of human waste removed from the pits where it was not feasible to treat it in wastewater treatment works?
    - How could communities deal with neighbours that continued with open defecation despite having access to VIP toilets?
- It was necessary to find environmentally friendly ways of solid waste disposal in rural settlements and there was a need to educate rural communities about pollution caused by non-biodegradable solid waste. However, it was not clear who should be responsible for the environmental education of rural households.
- The sanitation policy did not address the provision of public toilets in both urban and rural areas.
- The pressure to meet the 2010 target for the eradication of sanitation backlog has led to an imbalance in resource allocation to new capital projects and ongoing O&M and refurbishment of existing sanitation infrastructure. The increase in the connection of households to bulk sewers has not been matched with increase in funding for the extension of the wastewater treatment plant capacity.
- Constructing VIP toilets in dense urban informal settlements without life cycle planning led to the neglect of planning for pit emptying. The suitability of VIP toilets for these settlements was questionable due to the difficulty in emptying full pits. It was suggested that alternative sanitation technologies should be considered for dense urban informal settlements.
- Households were not being informed about available institutional support for the emptying of full pit toilets and their responsibilities.
- There was a difference in sanitation focus between DPLG and DWAF; DPLG was focusing on building the toilets to meet the delivery targets with limited attention paid to long-term sustainability while DWAF as the sector regulator had a responsibility for ensuring compliance with the sanitation policy requirements.
- School sanitation – problems identified included dysfunctional toilets, blocked, broken, vandalised or used as storage for broken school furniture. In some schools the smelly toilets were kept locked so that children could not use them anymore.

5.4 Policy gaps

The following policy gaps were identified by the participants:

- The implementation of sanitation policy should not be limited to the construction of household toilets, but it should also consider the broader

aspects of sanitation such as wastewater treatment, solid waste disposal and prevention of water pollution.

- Compulsory national standards for both basic sanitation and waterborne sanitation service levels were needed – it was difficult to regulate without clear norms and standards. Current compulsory national standards were very limited and focused mainly on water issues (Section 9 of the Water Services Act of 1997).
- There was a need to align the SFWS with the sanitation policy principles of the White Paper on Basic Households Sanitation in the review and update of the sanitation policy.
- It should be emphasized that the primary target of the Free Basic Sanitation (FBSan) Strategy are the poorest households and other vulnerable groups such as people with physical disabilities, HIV/AIDS infected individuals, child-headed households, etc.
- Decentralisation of the FBSan policy formulation to the WSAs and provision of national policy guidelines was the recommended approach. The policy guidelines should acknowledge that municipalities were responsible for providing a convenient, safe and improved sanitation service for all.
- A single holistic sanitation policy that included basic, intermediate and higher levels of sanitation services was needed in order to facilitate sector regulation.
- Policy was needed for O&M of sanitation infrastructure and clarification of roles and responsibilities for the different role-players. There was a need to separate operation from maintenance of on-site dry sanitation systems, and households should be responsible for the operation and routine maintenance and major maintenance such as pit-emptying and safe disposal of pit sludge should be the responsibility of the WSAs. The policy should provide guidance on the subsidy arrangements for O&M of dry on-site sanitation systems.
- Sanitation policy for institutional sanitation including public toilets in urban and rural areas should be addressed.
- There was a need for the clarification of roles and responsibilities for H&HE between WSAs, DWAF and the Dept of Health.
- The policy must address responsibility for sanitation regulation at national and WSA levels.
- Realistic sanitation delivery targets should be set and clarity on budgets must be provided.
- There was a need for greater emphasis on the use of decentralised systems that lead to local re-use of wastewater and policy must make provision for wastewater recycling at a household level.
- There was a need for a policy on the use of human waste and the treated wastewater in agricultural production.
- A greater emphasis on the use of membrane technologies for wastewater treatment for pathogen removal should be supported.
- Funding policy was needed to achieve a balance between allocation of funds for new infrastructure and the refurbishment or upgrading of existing assets.
- Sanitation policy must make provision for enforcement of compliance with sustainability principles and managers must be rewarded for putting in place strategies for sustainable sanitation services.
- Policy for grey water management in dense urban informal settlements without connections to sewer networks was required; it should be integrated into basic sanitation service delivery.
- A sanitation policy framework should respond to the realities faced by municipalities. It must balance the need for municipalities to have maximum

flexibility and autonomy, with a framework of clear principles and norms that lay the foundation for effective sector regulation.

- The national sanitation policy should provide a flexible policy framework that recognized the needs and culture of the different target groups as well as the institutional capacity of the different categories of municipalities.
- The free basic sanitation policy must make provision for a separate grant for the pit emptying and disposal of human waste from VIP toilets because poor municipalities did not have funds for supporting this component of the basic sanitation supply chain.
- Municipal by-laws should include H&HE as a component of the basic sanitation service delivery.
- There was a need to standardize the criteria used to identify indigent households by the different sector departments (DWAF, MIG and Housing); currently the Department of Housing was using different criteria to identify poor households.
- Regular reviews of sanitation policies, strategies and guidelines were needed in order to ensure that the policies were aligned with the changing environment under which municipalities operate.

6. KEY FINDINGS AND RECOMMENDATIONS

The following chapter presents a discussion of the findings from the examination of the sanitation policy issues that were misunderstood or misinterpreted by municipalities and recommendations for improving the understanding and interpretation of the sanitation policy based on the desktop analysis and stakeholder inputs.

6.1 Access to basic sanitation services as a human right

The examination of the understanding and interpretation of the sanitation policy showed that the principle of access to basic sanitation service as a human right was not well-understood. It was not interpreted in a manner that prioritized the provision of subsidized sanitation services to the most vulnerable groups such as the poorest households, disabled people, HIV/AIDS infected individuals, child-headed households, women, children and other marginalized groups. The SAHRC (2004) in its evaluation of progress in the realisation of the right to free basic water and sanitation services also concluded that the most vulnerable groups were not benefiting from the free basic sanitation services. The three pieces of legislation, namely, the Constitution of SA (1996), Water Services Act of 1997 and Municipal Systems Act of 2000 provide a legislative framework for the right of access to basic water and sanitation services.

Recommendations

It is recommended that guidelines should be developed to assist municipalities in the interpretation of the principle of access to basic sanitation as a human right and minimum acceptable standards for a basic sanitation level should be determined. These guidelines should incorporate the provisions of legislation mentioned above. Sufficient funds should be allocated to the prioritisation of provision of free basic sanitation services to the most vulnerable groups.

6.2 Definition of a basic sanitation service

Although the policy definition of a basic sanitation service includes all the components of sanitation, the interpretation of the sanitation policy has focused on construction of toilets and limited or no attention has been paid to H&HE, grey water management and solid waste removal. The MDG definition of basic sanitation refers to the lowest cost option for sustainable access to safe, hygienic and convenient facilities and services for excreta and grey water disposal that provide privacy and dignity and ensures clean living environment at a household and neighbourhood levels (Van Norden, 2007). The national policy definition of a basic sanitation service does not refer to the lowest cost option and the neighbourhood aspects. The neglect of the neighbourhood aspect of basic sanitation limits the health benefits of improved access to sanitation infrastructure.

Recommendation

Policy guidelines for a minimum acceptable level of basic sanitation service that includes all the elements of an adequate sanitation service including the cost and neighbourhood aspects must be developed.

6.3 Provision of basic sanitation to dense urban informal settlements

The sanitation policy framework does not provide policy guidelines for the delivery of basic sanitation services to dense urban informal settlements; it focuses on rural settlements (DWAF, 2001) and formal urban settlements (DWAF, 2003). Municipalities were expected to develop their own policies for meeting the sanitation

needs of dense urban informal settlements and this approach has resulted in the neglect of basic sanitation service delivery to these settlements thus putting the health of households living in these settlements at risk because of the squalid conditions under which they live.

Recommendation
Clear policy guidelines for the provision of basic sanitation service to dense urban informal settlements must be developed. These guidelines should make provision for basic sanitation services that are easily accessible to the most vulnerable groups such as people with physical disabilities, elderly, HIV/AIDS infected people, women and children.

6.4 Free Basic Sanitation Policy

The Strategic Framework for Water Services (DWAF, 2003) includes the free basic sanitation policy and clearly states that the primary beneficiaries of this policy should be the poorest households. In practice there was no common interpretation of the free basic sanitation policy; some municipalities were providing the free basic sanitation services to all households that were connected to the sewer networks, while others were only providing the free basic sanitation service to registered indigent households. The poor municipalities were not providing any free basic sanitation services because of lack of adequate funding for subsidizing free basic sanitation services. The approach followed to implement the Free Basic Sanitation policy excluded the majority of the poor households who were not connected to sewer networks. This finding concurs with a World Bank report by Komives et.al (2005) which showed that pro-poor subsidies for poor households already connected to sewer networks excluded the poorest households without access to basic sanitation infrastructure. Komives et.al (2005) argued that this approach was not suitable for developing countries where most households were still without access to basic sanitation infrastructure.

Recommendations
The FBSan policy should prioritize the poorest households and other marginalized and those who can afford to pay for the service should not be provided with free basic sanitation services. A special FBSan fund should be considered for the poor municipalities that have high poverty levels and limited or no local revenue.

6.5 Gender mainstreaming

The sanitation policy refers to the importance of gender mainstreaming in sanitation delivery, however, it does not spell out any special policy provision for ensuring gender mainstreaming. Consequently, municipalities that provide communal toilet blocks in dense informal settlements do not make any special considerations for the safety and security of women and children using these communal sanitation facilities. Women as caregivers have a vested interest in ensuring easy access to sanitation facilities for children, disabled and sick members of the households, therefore, their involvement in the planning and implementation of basic sanitation facilities was very important to sustainable sanitation service delivery.

Recommendation
It is recommended that policy guidelines for the interpretation of gender mainstreaming within the context of basic sanitation service delivery should be developed so that municipalities can be guided in implementing gender sensitive sanitation programmes.

6.6 Targeting sanitation subsidies to the poor

The current approaches used by municipalities to target subsidies to the poor households were excluding many of the poorest because the minimum monthly household income limit required to qualify for free basic municipal services excluded multiple families living together in a single household unit. Backyard dwellers were also excluded because the municipality recognized a stand as one household unit. The literature review stressed the importance of accurate targeting of the poor to ensure that the majority of the beneficiaries of pro-poor subsidies were the poorest households and other vulnerable groups (Foster et.al. 1999 and Brook &Smith, 2001 and Mehta, 2003). Methods used by municipalities to target pro-poor sanitation subsidies were not based on a thorough understanding of the needs of the poor households (Mjoli et.al, 2009).

Recommendation

It is recommended that national guidelines for identifying poor households and other vulnerable groups should be developed and these guidelines should include the different poverty indicators that take into consideration the different contexts such as settlement types.

6.7 Community participation

Studies conducted to evaluate the implementation of sanitation programmes in South Africa showed that adoption of the supply-driven approaches has led to the neglect of community participation in most sanitation projects (DWAF, 2005). This situation has been further exacerbated by the pressure to meet the 2010 sanitation targets and this could pose a potential threat to the long-term sustainability of sanitation services. The success of Community-Led Total Sanitation (CLTS) approach in South Asia (WSP, 2007) demonstrated the power of community mobilisation in bringing about 100% sanitation coverage when communities were empowered to develop local sustainable solutions to improve sanitation coverage for the entire community. There were examples of South African case studies of successful community participation in sanitation projects (WIN-SA, 2006) where communities had played a leading role in the implementation of sanitation projects and demonstrated willingness to contribute their resources to the construction of their toilets. These case studies showed that poor communities were willing to contribute to the improvement of their sanitation facilities provided they were recognized as equal partners in the development process.

Recommendations

- There is a need to align the principle of community participation advocated in the White Paper on Basic Household Sanitation with the Strategic Framework for Water Services and adequate resources should be allocate to support community mobilization.
- More resources should be allocated to train local people to play a central role in the implementation of sanitation projects.
- Effective governance systems and processes must be developed to make WSAs accountable to the communities that they serve.
- Community participation in development projects should be used as a vehicle for empowering communities so that they could become self-reliant.

6.8 Integration of health and hygiene education into basic sanitation service delivery

Although the sanitation policy stresses the importance of integration of H&HE in the delivery of basic sanitation services, evaluation of sanitation projects found that most municipalities were providing health and hygiene education as a once-off intervention during the implementation of basic sanitation infrastructure; it was not included as a component of a basic sanitation service. The roles and responsibilities for ongoing health and hygiene education between the WSA and the Municipal Health Services were not clearly defined.

Recommendations

- Funding for hygiene education should be ring-fenced and roles and responsibilities for ongoing hygiene education and awareness should be clarified.
- The current focus on the counting toilets must be balanced by the evaluation of behavioural change such as hand washing at appropriate times.
- An M&E system for hygiene awareness should be developed and H&HE should be part of the water services regulatory framework.

6.9 Environmental integrity

Although safe disposal of human waste and wastewater from the premises is included in the definition of a basic sanitation service, there are no policy guidelines for grey water management for households living in non-sewered areas. Disposal of household refuse is included in the definition of a minimum acceptable basic level sanitation (DWAF, 2001) but there are no policy guidelines for solid waste disposal in poor areas; this has a negative impact on environmental integrity. Limited attention has been paid to compliance with groundwater protocol where VIP toilets are implemented on a large scale.

Recommendations

- Policy guidelines should be developed for the safe disposal of human waste, wastewater and household refuse with special focus on dense urban informal settlements and other areas that are currently neglected.
- Policy guidelines on re-use or recycling of wastewater must be developed to assist municipalities to improve their water use efficiency.
- Enforce compliance with the groundwater protocol in all large scale VIP toilet construction projects and proper disposal of wastewater from non-sewered dense settlements.

6.10 Operation and maintenance

All sanitation policies, strategies and guidelines emphasized the importance of considering the affordability of O&M when selecting the sanitation technology options, but evidence from evaluation of sanitation projects showed that many municipalities did not plan for this component when selecting dry on-site sanitation systems (DWAF, 2005, Mjoli et.al, 2009). The pressure to meet the sanitation delivery targets has led to the neglect of the maintenance of existing sanitation infrastructure for waterborne sanitation systems because municipalities were allocating most of their sanitation budgets to the eradication of the basic sanitation infrastructure backlog (Mjoli et.al, 2009). Municipalities lacked adequate funding for rehabilitation and upgrading of wastewater treatment works.

Recommendations

- The MIG must allocate funds that should be ring-fenced for O&M of sanitation infrastructure to ensure long term sustainability of sanitation services. Additional funds should be allocated for the rehabilitation and upgrading of wastewater treatment plants.
- Systems must be put in place to facilitate monitoring of proper O&M of sanitation infrastructure in all municipalities and enforcement of compliance must be undertaken by the water services sector regulator.

6.11 Integration of water conservation and water demand management into the delivery of basic sanitation services

Although management of water as a scarce resource was one of the sanitation policy principles, there was no evidence that this principle was integrated into basic sanitation infrastructure programmes, especially where waterborne sanitation systems were provided to poor households. The principle of 'moving up the water and sanitation ladder' advocated by the SFWS (2003) did not emphasize the use of water efficient sanitation technologies and other water demand management interventions.

Recommendations

- Policy guidelines are needed for the integration of water conservation and water demand management strategies into the delivery of basic sanitation services and the necessary economic incentives and legal instruments must be put in place to enforce compliance.
- Options of using recycled wastewater for irrigation of household gardens should be considered where feasible to improve water use efficiency.
- Research on innovative wastewater treatment technologies should be supported and successful technologies should be promoted to increase water use efficiency.

6.12 Sanitation technology innovation

The national sanitation policies did not promote sanitation technology innovation; there was too much focus on VIP technology and waterborne sanitation systems. Currently there were no incentives for municipalities to select other appropriate sanitation technologies and the subsidy allocation which was based on the cost of these two sanitation technologies did not encourage municipalities with limited or no local revenue to implement alternative sanitation technologies. Paterson et.al (2007) showed that low-cost sanitation technologies were usually rejected by the poor households because they were perceived to be inferior; they suggested that these technologies should be promoted for all types of settlements.

Recommendations

- Clear policy guidelines on the use of different sanitation technologies must be developed and appropriate incentives must be put in place to encourage municipalities to implement alternative sanitation technologies.
- Municipalities should be encouraged to include alternative sanitation technologies in their by-laws.

6.13 Monitoring and evaluation of sanitation services

The study found that there was too much focus on the quantity of toilets provided and households served but there was no evaluation of the quality of sanitation services provided to households. There was also no evaluation of the impact of the

sanitation policy and programmes on the improvement in health, behavioural change and quality of life for the beneficiary households. Evaluation of the sanitation programme was necessary to enable the policy-makers to identify problem areas in the sanitation policy so that they could make the necessary adjustments where there were problems.

Recommendations

- Simple M&E guidelines for sanitation must be developed and the required human and financial resources needed to implement M&E for sanitation services must be provided.
- The quality of the sanitation service provided to the households and environmental impacts should be evaluated on a regular basis.

6.14 Institutional and human capacity building

The problem of poor interpretation of sanitation policy was exacerbated by the lack of institutional capacity and shortage of competent technical staff. Evaluation of national sanitation projects (DWAF, 2005) found that sanitation was not a high priority in a significant number of municipalities and the majority of municipalities did not have adequate technical capacity to implement and manage large sanitation infrastructure projects.

Recommendations

- There was a need to focus on the strengthening of the institutional capacity and training of skilled management and technical staff with the ability to understand and interpret the sanitation policy.
- Adequate financial and technical resources must be allocated to sanitation service delivery in municipalities.
- To improve the understanding and interpretation of the sanitation policy, it is recommended that all new sanitation officials with no experience in sanitation should attend a sanitation policy induction course in order to develop a working understanding of the sanitation policy and where feasible mentors should be considered to support them.

6.15 Sanitation policy gaps

The study has identified the following policy gaps:

- There is a need for sanitation policy guidelines for the provision of basic sanitation service to dense urban informal settlements; the current sanitation policy does not address this issue.
- The sanitation policy does not address the special sanitation needs of severely marginalized groups such as people with physical disabilities, elderly, women, children, HIV/AIDS infected individuals, homeless people and child-headed households.
- Policy is required to guide municipalities with grey water management in non-sewered dense urban settlements provided with dry on-site sanitation systems.
- Sanitation policy guidelines for the integration of water conservation and water demand management strategies into the delivery of basic sanitation infrastructure and development of economic and legal instruments for enforcing compliance.
- Policy guidelines for solid waste management in all types of settlements, especially the settlements that are currently neglected.

- There is need for sanitation policy for institutional sanitation including public toilets for urban and rural areas.
- Policy guidelines were needed for re-use or recycling of treated human waste and wastewater for agricultural uses within the context of protecting human and environmental health.

7. CONCLUSIONS

This chapter presents a summary of main conclusions emanating from this study:

Community led total sanitation (CLTS) approach

After many decades of failed supply-driven toilet construction programmes in Asia, experience from South Asia and India showed that CLTS approach which is a shift from subsidy-led toilet construction for households to a focus on behavioural change for the whole community has led to the acceleration of sanitation coverage in these countries. In this approach development agents help communities to recognize the negative health impacts of open defecation and assist them to take collective action to clean up their community to become "open defecation free".

Success criteria for pro-poor sanitation subsidies

An international review of successful case studies of pro-poor sanitation subsidies showed that good water and sanitation pro-poor subsidies were based on genuine need, accurate targeting of the poor, administrative simplicity, preservation of economic incentives and coverage.

Decentralization and capacity building

Case studies of sanitation policies in Uganda and Zimbabwe demonstrated the importance of building capacity of local government institutions before devolving responsibility for sanitation service delivery to the local level.

Misunderstood and misinterpreted aspects of the sanitation policy

The following aspects of the sanitation policy were misunderstood and/or misinterpreted:

Access to basic sanitation as a human right – There was no common approach to the interpretation of access to a basic sanitation service as a human right.

Targeting the poor households – There were no national guidelines for targeting free basic sanitation services to the poor households.

Definition of basic sanitation service **–** There were major differences in the definition of basic sanitation level by the two national sanitation policies.

Community participation – The adoption of supply-driven approach to deliver basic sanitation infrastructure has led to the neglect of community involvement which was very important to the acceptance and ownership of sanitation infrastructure by beneficiary households.

Gender mainstreaming **–** Municipalities lacked an understanding of the meaning of gender mainstreaming within the context of basic sanitation service delivery.

Integration of H&HE – There was poor integration of H&HE in the delivery of basic sanitation service due to the lack of prioritization of this component of basic sanitation service by municipalities.

Financial sustainability – The pressure to meet the basic sanitation delivery targets was forcing municipalities to neglect allocating budgets to operation and maintenance of existing infrastructure. Lack of adequate funding made it difficult for poor municipalities to provide free basic sanitation services to the poorest households.

Environmental integrity – There was too much focus on building of toilets without paying any attention to grey water management, solid waste disposal and environmental impact assessment; this had a negative impact on the quality of water and the environment

Operation and maintenance of on-site sanitation systems – Most municipalities did not have O&M plans for emptying full pits and safe disposal of human waste.

Concluding statements

The national sanitation policy framework provides an enabling environment for municipalities to deliver sustainable sanitation services, but the problem lies in the interpretation of the policy, such as too much focus on toilet construction while neglecting other important aspects of sanitation such hygiene awareness, behavioural change, operation and maintenance, community involvement, solid waste disposal and grey water management.

The study has concluded that a single national sanitation policy framework was adequate for the different settlement types but it must be supplemented by policy guidelines that address policy issues specific to the different settlement types. The policy should create space for municipalities to design local sanitation policies that are aligned to their local context.

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9. APPENDICES

APPENDIX A

SANITATION POLICY RECOMMENDATIONS

1. BACKGROUND AND CONTEXT

These policy recommendations are based on two Water Research Commission funded sanitation policy projects with the following titles: K5/1741 – "*Examine* the *understanding and interpretation of the sanitation policy and programmes*" and K5/1743 –"*Free basic sanitation – Is it possible*".

The following definitions of basic sanitation guided the investigation of the understanding and the interpretation of the national sanitation policy by the institutions responsible for the implementation of this policy:

Definition #1

'The minimum acceptable basic level of sanitation is: a) appropriate health and hygiene awareness and behaviour; b) a system for disposing of human excreta, household waste water and refuse, which is acceptable and affordable to the users, safe, hygienic and easily accessible and which does not have an unacceptable impact on the environment; and c) a toilet facility for each household.' (DWAF 2001, p14)

Definition #2

'Basic Sanitation Service – the provision of a basic sanitation facility which is easily accessible to a household, the sustainable operation of the facility, including the safe removal of human waste and wastewater from the premises where this is appropriate and necessary, and the communication of good sanitation, hygiene and related practices.' (DWAF 2003, p45)

2. PURPOSE OF THE DOCUMENT

The purpose of the document is to highlight aspects of the sanitation policy that were misunderstood and/or misinterpreted by municipalities and other sanitation implementing agents. It presents policy gaps that were identified by the study and makes recommendations for bridging the gap between policy and practice. The document also provides a summary of key findings and recommendations from the evaluation the implementation of Free Basic Sanitation (FBSan) services in selected case-study municipalities.

3. MISUNDERSTOOD AND/OR MISINTERPRETED ASPECTS OF THE SANITATION POLICY

The following aspects of the sanitation policy were misunderstood and/or misinterpreted by municipalities:

Access to basic sanitation as a human right

There was no common approach to the interpretation of access to a basic sanitation service as a human right. The municipalities that were implementing free basic sanitation services were targeting urban households which were connected to the sewer networks while the poorest households living in dense urban informal

settlements and rural areas continued to suffer from lack of access to safe sanitation facilities.

Definition of a basic sanitation service

The broad definition of a basic sanitation service level as anything from a VIP toilet to waterborne sanitation systems seemed to be contributing to the poor understanding and interpretation of a basic sanitation service by municipalities. The Strategic Framework for Water Services did not set a minimum standard for an acceptable basic sanitation service level which meets the constitutional right to basic sanitation.

Integration of health and hygiene education and awareness into basic sanitation service delivery

Most municipalities were only providing health and hygiene education as a once-off intervention during the provision of basic sanitation infrastructure. Hygiene education and awareness were not included as a part of a free basic sanitation service by most municipalities. There were no monitoring and evaluation systems for hygiene education and its impact on the health of the poor. There was a lack of clarity on the roles and responsibilities for ongoing H&HE and institutional arrangements for the delivery of hygiene education at the municipality level were weak. There were also no dedicated budgets for Health and Hygiene education and awareness in most municipalities. Although the national sanitation policy recognized the importance of washing hands after using the toilet as an important intervention for reducing disease transmission, it was found that less than 30% of household VIP toilets had a hand-washing facility next to the toilet.

Wastewater disposal for areas not connected to sewer networks

Although the definition of a basic sanitation service includes wastewater disposal, in practice, municipalities were not providing facilities for safe disposal of wastewater in dense settlements without connection to sewer networks. This problem was more prevalent in dense urban informal settlement areas. Households living in these settlements were subjected to an unhealthy environment which put their health at risk.

Long-term sustainability of ventilated improved pit toilets

There was no policy for dealing with full VIP toilets and safe disposal of pit sludge. The Strategic Framework for Water Services (2003) states that water service providers would be unlikely to have capacity to empty or relocate full VIP toilets for rural households. This statement raises a concern on the long-term sustainability of rural sanitation because poor rural households will not be able to empty full pits without the support of WSAs and there was a danger that they could revert to open defecation when the VIP toilets were full. A sustainable sanitation system required inclusion of all the elements of the sanitation supply chain, namely, the toilet superstructure, collection system, transportation of human waste, treatment and disposal and re-use of sanitation products. Most municipalities did not have O&M plans for VIP toilets and there were also no budgets or plans for ensuring long-term sustainability of VIP toilets.

Lack compliance with VIP toilet design standards

There was poor compliance with the design standards for VIP toilets such the size of pits, vent pipes, slab quality and superstructure quality and the slabs did not have manholes for pit emptying.

Lack of integration of water conservation and water demand management strategies in the delivery of basic sanitation services

Although South Africa is a water scarce country, the implementation of the national sanitation policy did not embrace the use of water efficient technologies and there were no municipal by-laws to enforce compliance.

Monitoring and evaluation

The national sanitation policy makes provision for monitoring and evaluation of progress and impacts of the policy but in practice there was no comprehensive evaluation of the impact of the sanitation programmes against policy objectives. Monitoring was currently limited to the counting of toilets and number of jobs created by sanitation infrastructure projects.

3. SANITATION POLICY GAPS

The following sanitation policy gaps were identified by the sanitation sector stakeholders:

Lack of a sanitation policy guidelines for dense urban informal settlements

Rapid urban migration of people from rural areas and neighbouring countries has led to a massive growth of dense urban informal settlements around cities and big towns of South Africa. There were no national policy guidelines for helping municipalities to address the public health risk posed by these settlements without adequate sanitation services.

Lack of a sanitation policy for severely marginalized groups

The sanitation policy only referred to poor people, it did not provide policy guidelines for meeting the sanitation needs of the severely marginalized people such as people with physical disabilities, HIV/AIDS infected people, child-headed households, women, children, etc.

4. RECOMMENDATIONS FOR BRIDGING THE GAP BETWEEN POLICY AND PRACTICE

The following actions should be considered for bridging the gap between policy and practice:

- The approaches followed by municipalities in the delivery of free basic sanitation services must be reviewed so that the poorest households and other marginalized groups are the primary beneficiaries of subsidized sanitation services.
- National minimum standards for an acceptable basic sanitation service level that meets the constitutional right of access to basic sanitation service as a human right must be developed.
- Compliance with community participation in all basic sanitation projects must be enforced and adequate budgets must be allocated to fund community involvement so that households could play a central role in finding solutions to their sanitation challenges.

- Municipal by-laws must be developed to enforce the integration of water demand management strategies in the provision of waterborne sanitation services to households.
- Effective governance systems must be put in place to make water service providers accountable to the communities that they serve.
- Integration of hygiene education in the delivery of free basic sanitation service must be enforced and the water services sector regulator must ensure compliance.
- Adequate resources must be allocated to municipalities to support long-term planning of operation and maintenance of VIP toilets and other dry on-site sanitation systems.
- Delivery of basic sanitation services should include refuse removal for all settlement types.
- Free Basic sanitation services must be targeted to the poorest households and the most vulnerable groups.
- Monitoring and evaluation systems must focus on tracking progress in the eradication of the basic sanitation infrastructure backlog, behavioural change and improvement in the health of beneficiaries.

Recommendations for addressing the policy gaps

The following policy gaps should be addressed to achieve sustainable sanitation services delivery:

- National guidelines for targeting the pro-poor sanitation subsidies to the most vulnerable groups must be developed and appropriate poverty indicators for the urban and rural contexts should be developed.
- Definition of a basic sanitation service – There was a need to revisit the definition of a basic sanitation service within the context of access to a basic sanitation service as human right (Constitution of SA, Section 24(a), 1996).
- There was a need for national sanitation policy guidelines for basic sanitation service delivery to dense urban informal settlements in cities and towns of South Africa.
- Municipal by-laws must include hygiene education and awareness as a component of free basic sanitation service.
- Policy guidelines must be developed to deal with the problem of poor grey water management in dense formal and informal settlements provided with dry on-site sanitation systems in non-sewered areas.
- Policy guidelines for re-use or recycling of wastewater and human waste were required to assist municipalities to implement environmental friendly technologies for managing wastewater and human waste.
- Policy guidelines for sustainable O&M of VIP toilets must be developed and compliance must be enforced by the relevant regulatory body.
- Policy guidelines for supporting the integration of water conservation and water demand management strategies in the delivery of sanitation service

must be developed and the necessary economic incentives and legal instruments must be put in place to enforce compliance.

5. EVALUATION OF FREE BASIC SANITATION SERVICES

The following key findings and recommendations emanated from the evaluation of FBSan services in 8 case-study municipalities and financial modelling of free basic sanitation services (WRC Project No.1743).

5.1 Key findings

Importance of municipal context in the viability of free basic sanitation services
The metropolitan municipalities with a large revenue base such as City of Tshwane and City of Cape Town were able to cross-subsidize FBSan services and they had a greater level of autonomy in designing an approach to FBSan independent of guidance from DWAF. Poor municipalities such as Amathole and Vhembe could not provide any FBSan services because they have a limited revenue base and they were also faced with a huge basic sanitation infrastructure backlog for millions of rural populations.

Poor households were not benefiting from FBSan services
The municipalities that were providing free basic sanitation services to urban households with full waterborne sanitation systems were excluding the majority of the poorest households that were not connected to the sewer networks or lacked basic sanitation infrastructure. The use of Equitable Share to subsidise FBSan services for all households irrespective of their socio-economic status limited the subsidy amount available for the poorest households.

Lack of clarity on the responsibility for ongoing hygiene education and awareness
The majority of municipalities did not include ongoing hygiene education as a component of a free basic sanitation service. There was a lack of clarity on the responsibility for hygiene education and awareness between the WSA and Municipal Health Services.

Poor understanding of the purpose of FBSan strategy
Municipalities interpreted the FBSan strategy as a way of providing the basic sanitation infrastructure to eradicate the backlog; they did not see it as way of achieving ongoing sustainable sanitation service delivery to all households.

Importance of reliable data
Successful targeting of pro-poor sanitation subsidies required a substantial allocation of financial and human resources for the development of a thorough understanding of the needs of the poor households, their willingness to make a contribution, best approaches for targeting the subsidies to them and ways of minimizing the administrative costs of subsidy.

Too much focus on hardware subsidies
Municipalities were focusing on toilet construction without paying adequate attention to hygiene education and awareness which was essential for achieving sustainable improvement in health of the poor. Most municipalities were not allocating enough

resources to ongoing hygiene education and awareness as part of a free basic sanitation services.

Community participation
The implementation of FBSan policy was done in a top down manner with limited or no consultation of beneficiary communities, consequently, it did not respond to the needs of these communities.

Management of indigent register
The management of indigent register was a costly exercise for municipalities because of the need for social workers to visit indigent households regularly to verify and re-assess their indigent status.

Measurement of impact of FBSan services
Municipalities did not have systems for measuring the impact of FBSan services on the improvement in the quality of life for the indigent households.

Operation and maintenance
Most municipalities did not have any O&M plans for emptying full VIP toilets and safe disposal of human excreta or replacement of full VIP toilets where pit-emptying was not feasible.

Financing of free basic sanitation services
The national financial modelling of FBSan showed that the ability to fund the FBSan services was very sensitive to certain assumptions, such as the amount of equitable share available for basic sanitation services relative to overheads and other municipal services. This was of particular significance in municipalities without the ability to use cross-subsidies to fund services for the poor due to limited or no ability to generate local revenue. The poor municipalities would only be able to fund FBSan services for the poor if their equitable share grant allocation was increased substantially to meet the cost of providing the service. The current decline in economic growth could limit government's ability to sustain increased allocation of equitable share to poor municipalities. The study concluded that municipalities with high levels of poverty and low revenue base would not be able to provide FBSan services without massive increase in Equitable Share grant allocation from national government.

5.2 Recommendations for improving the provision of FBSan services

The following recommendations are based on the findings from the evaluation of the FBSan services in selected municipalities:

Change 'Free Basic Sanitation' to pro-poor sanitation subsidy

It is recommended that the term 'free basic sanitation' should be changed to 'pro-poor sanitation subsidy' because it does not capture the cost associated with the provision of basic sanitation service whereas 'pro-poor sanitation subsidy' clearly shows that there is a cost attached to the provision of the service and the beneficiaries are poor households.

Despite the ability of some municipalities to provide free basic sanitation services to all, it is recommended subsidies should be limited to poor households and other vulnerable groups.

Subsidy allocation rules

The allocation of the Equitable Share grant should not only be based on the number of the poor people but it must consider the costs of providing basic sanitation services in different local contexts. This is particularly relevant to municipalities with low revenue base and a huge number of poor households.

Integration of hygiene education and awareness into FBSan service delivery

A clear strategy for integration of H&HE into FBSan service delivery must be developed and roles and responsibilities should be clarified and specific budgets should be ring-fenced for ongoing H&HE.

Need for greater policy flexibility, but with the support of guidelines

The FBSan strategy must be flexible enough to allow WSAs to interpret and implement the strategy according to their local context. National guidelines should not be too prescriptive, but must offer support and guidance on recommended approaches. For example, different approaches to the implementation of FBSan services are needed in urban and rural areas. These national guidelines should acknowledge that municipalities are ultimately responsible for providing a convenient, safe and improved basic sanitation service for all.

Need for operational guidance

National guidelines for regulating sanitation tariffs are needed to protect certain categories of consumers from being overcharged, for example, some metros were charging higher sanitation tariffs for households living in flats, townhouses and cluster developments.

WSAs must be supported to maximise their local revenue collection through improved credit-control and debt collection.

FBSan strategy must be broader than a toilet construction programme

The FBSan strategy should not only focus on the construction of toilets, but should also consider the broader aspects of sanitation such as groundwater protocol, grey water management, removal and other environmental aspects.

Improve operational cost data

Detailed studies are required to investigate the actual operational costs of dry on-site sanitation systems, for example, the current costing assumptions should be tested, such as the validity of the assumed 5 to 8 year lifespan of a pit toilet.

Monitoring and evaluation of the impact of FBSan services

An effective monitoring and evaluation system should be developed to monitor progress and to evaluate the impact of FBSan services on the lives of the poor. Key performance indicators must be developed for monitoring behavioural change and impacts of FBSan on poverty reduction.

6. Concluding statement

The examination of the understanding and interpretation of sanitation policy identified several aspects that are not aligned with the sanitation policy principles. The evaluation of the implementation of FBSan policy showed that only poor households with full waterborne sanitation systems were benefiting while the poorest households without any basic sanitation infrastructure continued to be marginalized.

The financial modelling of free basic sanitation services for different categories of municipalities showed that FBSan services were viable in metros with high revenue base and low poverty rates, while poor district municipalities with limited revenue and high poverty rates were not able to provide FBSan services to the poorest households.

APPENDIX B

EXAMINATION OF UNDERSTANDING AND INTERPRETATION OF SANITATION POLICY

LITERATURE REVIEW REPORT

TABLE OF CONTENTS

LIST OF ACRONYMS

CBO	Community Based Organization
CEE/CIS	Central and Eastern Europe/Commonwealth of Independent States
CLTS	Community-Led Total Sanitation
CSIR	Council for Scientific and Industrial Research
CSOs	Civil Society Organisations
DWAF	Department of Water Affairs & Forestry
ESAs	External Support Agencies
IRC	International Centre for Water and Sanitation
IRWSSP	Integrated Rural Water Supply and Sanitation
LM	Local Municipality
MDGs	Millennium Development Goals
NGO	Non Government Organization
O&M	Operation and Maintenance
RDCs	Rural District Councils
RDP	Reconstruction and Development Programme
UDS	Urine Diversion Sanitation Technology
UNICEF	United Nations Children's Fund
VIP	Ventilated Improved Pit
WIN-SA	Water Information Network – South Africa
WSIS	Water Services Information Services
WSP	Water and Sanitation Program

1. INTRODUCTION

1.1 Background and context

With less than three years left before 2010 which is the target date for the eradication of the basic sanitation infrastructure backlog in South Africa, several questions are being raised on the feasibility of achieving this ambitious target that was set by the Strategic Framework for Water Services of 2003. Municipalities are under pressure to meet these sanitation delivery targets under difficult conditions of lack of adequate technical skills and weak institutional capacity. In addition, they have to deal with political demand for a higher level of sanitation service in situations where this is not affordable to households and municipalities. The study will address the following key questions:

- Does the current sanitation policy provide an enabling environment for municipalities to achieve the sanitation service delivery targets?
- Is there a common understanding of the basic sanitation service by all the stakeholders?
- How can we meet the sanitation targets in a sustainable manner?
- What is the accepted definition of the sanitation service backlog?
- Are we still focusing on achieving the goal of improving health through the improvement of sanitation services?
- Is a single national sanitation policy adequate for guiding the delivery of sanitation services to formal urban settlements, dense urban informal settlements, small rural towns and rural settlements?

It is important to ensure that the acceleration of the delivery of sanitation infrastructure does not exclude the health and hygiene awareness which is necessary to achieve the primary goal of improving health for all. According to Tipping et.al (undated) improvement in access to domestic water supply and sanitation leads to significant economic benefits at a household level due to reduced incidence of waterborne diseases and associated health care costs and households pay less for water compared to what water vendors charge. It is estimated that an additional investment in water and sanitation of US$11.3 billion per year at the global level could generate up to US$84 billion in total annual economic benefits and reduce the incidence of diarrhoeal disease by 10%.

Global sanitation backlog figures

According to the UNICEF Report Card on water and sanitation (2006) approximately 2.6 billion people did not have access to improved sanitation services in 2004. Improved sanitation facilities are defined as those that reduce the chances of people coming into direct contact with human excreta; such facilities should be private and not shared with other households. Progress in sanitation coverage has been very slow, coverage increased from 49% to 59% between 1990 and 2004 and this rate must be doubled to achieve the 2015 MDG target. Globally, it is estimated that 80% of urban residents and 39 % of rural people have access to improved sanitation facilities.

Table 1 shows the sanitation backlog figures for the different regions of the world:

Table 1: Global sanitation backlog figures in 2004

Region	People without basic sanitation services
West/Central Africa	225 million
Eastern/Southern Africa	215 million
Middle east/North Africa	96 million
South Asia	921 million
East Asia/Pacific	944 million
Latin America/ Caribbean	124 million
CEE/CIS	63 million

Source: UNICEF 2006: A Report Card on water and sanitation

South African sanitation backlog figures

There are currently two policy definitions of basic sanitation level that are guiding the delivery of sanitation services in South Africa (DWAF 2001, DWAF 2003):

'The minimum acceptable basic level of sanitation is: a) appropriate health and hygiene awareness and behaviour; b) a system for disposing of human excreta, household waste water and refuse, which is acceptable and affordable to the users, safe hygienic and easily accessible and which does not have an unacceptable impact on the environment; and c) a toilet facility for each household.' (DWAF 2001, p14)

'Basic Sanitation Service – the provision of a basic sanitation facility which is easily accessible to a household, the sustainable operation of the facility, including the safe removal of human waste and wastewater from the premises where this is appropriate and necessary, and the communication of good sanitation, hygiene and related practices.' (DWAF 2003, p45)

According to the Department of Water Affairs & Forestry – Water Services Information Services, the total number of households with inadequate sanitation or below RDP levels stood at 3 525 791 in April 2007. Table 2 below provides the basic sanitation infrastructure backlog figures for the nine provinces as at April 2007

Table 2: National sanitation backlog figures

Province	Sanitation backlog figure (no. of households)	Percentage
Eastern Cape	578 884	16%
Free State	266 256	8%
Gauteng	427 051	12%
KwaZulu-Natal	672 683	19%
Limpopo	711 734	20%
Mpumalanga	369 484	10%
North West	343 521	10%
Northern Cape	61 458	2%
Western Cape	94 720	3%
TOTAL	**3 525 721**	**100%**

Source: DWAF WSIS – www.dwaf.gov.za

1.2 Objectives of the study

The aims of the study are the following:

- To investigate the understanding of current sanitation policy and programmes relating to the subsidy, ownership of infrastructure, responsibility for O&M, responsibility for monitoring issues of new pits, etc. amongst:
  - National government departments
  - Local government
  - Service providers
  - Communities
- To compile information pamphlets for each stakeholder group that provides a common approach to the issues of ownership, responsibility for O&M and dealing with full pits (for VIPs, Urine Diversion and other on-site latrines).
- To provide recommendations to bridge understanding on policy, responsibilities and practice.

1.3 Purpose and scope of the literature review report

The purpose of the report is to provide a review of international and national experience of the implementation of sanitation policies and programmes with the intention of highlighting successful approaches and challenges. The literature report has focused on identifying global trends in the delivery of sanitation services using case studies to demonstrate successful approaches. The document forms a basis for the examination of the understanding and interpretation of the national sanitation policy and programmes within the context of documented successful approaches used in the international development arena.

2. INTERNATIONAL EXPERIENCE ON SANITATION POLICY AND PRACTICE

The chapter presents a summary of the review of international experience on the provision of sanitation services to the poor households. The focus is on successful approaches for providing sustainable sanitation services to the poor.

2.1 Key policy principles for sustainable sanitation programmes

Mara et.al (2007) identified the following four fundamental principles as key requirements for sustainable sanitation programmes:

- **Human health** – Access to sanitation service must contribute to the improvement in human health and must not create conditions that are harmful to human health.
- **Affordability** – Sanitation services must be affordable to the users; this consideration is very important when delivering sanitation services to the poor households.
- **Environmental sustainability** – Sanitation services should not have negative impacts on the environment such as pollution of water sources from disposal of untreated human excreta and wastewater.
- **Institutional appropriateness** – Sanitation service delivery should be managed at the lowest appropriate level. Households and the beneficiary communities should be involved in all decision-making processes on the selection of sanitation technology options, operation and maintenance of the sanitation facilities.

2.2 Elements of good national sanitation policies

Elledge (2003) identified the following elements of good national sanitation policies:

- **Political will** –This refers to support given to the national sanitation policies by politicians, government officials and other sanitation sector partners. This commitment should be demonstrated by the allocation of adequate human resources, budgets and the show-casing of sanitation projects in high profile events.
- **Involvement of stakeholders in the development of the sanitation policies** – Participation of all stakeholders in the process of developing the sanitation policies is necessary to ensure that the policies are based on the needs of target groups.
- **Legal framework** – The legal framework is necessary to give legitimacy to sanitation policies, therefore laws, legislative acts, decrees, regulations and official guidelines must be put in place. Absence of appropriate legal instruments can lead to the failure of the sanitation policies to achieve the policy objectives.
- **Population targeting** – The national sanitation policies must target the population groups without adequate sanitation services such as poor households living in dense urban informal settlements, small towns and rural settlements. Appropriate sanitation programmes with adequate budgets must be implemented for these different target groups. The sanitation programmes must respond to the sanitation challenges faced by the different target groups.

- **Gender and poverty dimensions of sanitation** – The national policies should make special provisions for the poor because they are usually overlooked due to poor access to information and lack of financial resources to make a household contribution where this is required. The policies should make provisions for meeting the special sanitation needs of women, children and other vulnerable groups.
- **Levels of service** – The selection of the level of service must be based on household affordability and willingness to pay. Other factors such as availability of water, convenience and health impacts should be taken into consideration. All these factors are important for the sustainability of the sanitation services.
- **Improvement in health** – The improvement in the health of target groups should be the primary goal of investing in sanitation infrastructure programmes. The sanitation policies should provide guidance for ensuring that the sanitation services contribute to the achievement of the desired health outcomes. Health and hygiene education must target prevalent sanitation-related diseases and promote desired behavioural changes amongst target populations.
- **Environmental considerations** – The selection of the sanitation service level and technology option should compromise the environmental integrity, surface water and groundwater should be protected from pollution from untreated human waste. Environmental impact assessment should be undertaken prior to the implementation of large sanitation projects.
- **Financial issues** – The national policies should clearly indicate how the capital costs of the sanitation infrastructure will be financed. It should also indicate the financial responsibility for O&M costs and plans for subsidizing sanitation services for the poor households.
- **Institutional framework** – The national sanitation policy should make provision for coordination of sanitation service delivery and roles and responsibilities of the different sanitation sector stakeholders must be clearly defined to avoid duplication and waste of resources.

2.3 Strategies for sustainable sanitation services

Mukherjee (2001) identified the following strategies that ensure sustainable sanitation services from her research in Cambodia, Indonesia and Vietnam:
Choice of sanitation facilities and costs – Availability of choice in design, types and costs of sanitation facilities were shown to be primary requirements for sustainable sanitation services. The research showed that sanitation projects that offered a single technology option without taking the preferences of local people into consideration were doomed to fail.
Peer pressure and collective community responsibility – Behavioural change should be promoted as community initiative. The peer pressure generated in small rural communities was strong enough to force behavioural change for the whole community.
Use of neighbourhood and community networks – The research showed that rural communities were more cohesive and they tended to trust the opinions of their neighbours rather than outsiders. When a new sanitation technology was introduced by outsiders, local people accepted it only when relatives or neighbours had checked it and confirmed the appropriateness of the new technology. It was also shown that a negative experience of a new sanitation technology could turn off many people in

the community. The study also showed that hygiene messages communicated by local religious leaders and village schools were easily accepted by the local people.
Development of local enterprises – The research showed that sustainable sanitation service delivery required the development of the demand and supply aspects through the establishment of local enterprises that could sustain the sanitation service delivery beyond the project interventions

2.4 Models for sanitation service delivery

Wootton (Wateraid, undated) reviewed the following models of sanitation service delivery:

- **Hardware solution** – About 86% of funds for water and sanitation were allocated to hardware (pipes and plants) and only 14% to health and hygiene education for the beneficiaries. The limitation of this approach was that no budgets were allocated to support the institutional capacity building, specifically, governance and technical expertise to ensure proper operation and maintenance of the new infrastructure.
- **Community-led approach** – This approach focused on building the capacity of the beneficiary communities to take all the decisions on sanitation technology choices based on the available local resources and affordability to the households. The local community was responsible for the identification of the poor households that qualified for a full sanitation subsidy. WaterAid used this approach to achieve 94% sustainable sanitation projects that were functional after 5 years post-implementation. This approach was successful because it was pro-poor and gender sensitive, it used appropriate sanitation technology options selected by the community and it built capacity at the community level, local NGOs, local government and national organizations.
- **The '*No*' aid approach** – This approach was based on the school of thought which argued that offering full subsidy led to unsustainable projects. It supported payment by all households including the poor to ensure that the sanitation services were well managed and maintained. Wootton argued that it was unrealistic to expect the developing countries to deliver the services without any form of subsidy because the developed countries had underlying subsidies for water and sanitation services.
- **The 'aid' = development approach** – This approach was necessary to ensure that the poor households were not excluded from benefiting from improved sanitation services. This was based on the finding from several studies that showed that improvement in access to clean water and adequate sanitation contributed to health improvement and this translated to economic growth, for example, a yard tap was shown to increase the frequency of hand washing and thus contributed to 30% reduction in the incidence of diarrhoea.
- **Technological approach** – Wootton argued that the challenges faced by the urban areas of developing countries were similar to challenges faced by developed countries during the 19th century. These countries started with basic water and sanitation technologies which were later upgraded to full waterborne sanitation. Countries like Australia were under immense water stress due to the impacts of climate change; they were experimenting with local and community-based solutions such as rainwater harvesting and local wastewater recycling. On the other hand developing countries were not being encouraged by donors to focus on appropriate technologies; they were funded to repeat the mistakes already made by the developed countries.

- **Privatisation approach** – The privatisation of water services was advocated as a solution to the inefficient water services delivery by public sector institutions. However, experience showed that private sector providers were not keen on extending services to the poor; they only provided improved services to those already connected.

2.5 Pro-poor sanitation subsidies

2.5.1 Characteristics of good water and sanitation subsidies

Mehta (2003) in her review of subsidies identified the following characteristics of good water and sanitation subsidies:

- **Genuine need** – A thorough assessment of the need for subsidies should be undertaken, this should include the level of tariff necessary to ensure financial viability for the service provider and the minimum level of usage by the poor should be determined. Genuine need should be based on the level of demand and willingness to pay by the different consumer groups. This was very important when cross-subsidization was being considered.
- **Accurate targeting of the poor** – The subsidy must be based on accurate targeting of the poor households. Methods used include targeting the individual households or zonal characteristics based on levels of consumption or socio-economic status of the neighbourhood. The accurate targeting was important for limiting the cost of the subsidy.
- **Administrative simplicity** – Simple administration procedures for the subsidy must be developed in order to make sure that most of the budgets allocated to the subsidy for the poor actually benefited the poor households.
- **Preservation of economic incentives** – Full subsidies were not encouraged because they could lead to perverse economic incentives for the poor households. The subsidy must be capped at the level that forced the households to pay a minimum fee linked to the usage of the service. For example, in Chile, the direct subsidy covered 85% of the water bill and the subsidy was only paid when there was proof that the household had paid its share (Foster, Gomez-Lobo and Halpern, 1999).
- **Coverage** – The design of the subsidy must be based on the total number of target population so that the service coverage could reach most people over a defined period.

2.5.2 Development of pro-poor sanitation subsidy options

Mehta (2003) identified the following key issues to be taken into consideration in developing subsidy options:

What should be subsidized?

There was a need to distinguish between the subsidy for access to the sanitation infrastructure and consumption of the service. Where the majority of the poor households lacked access to the service, the subsidy should focus on increasing the coverage.

Sources of funding for subsidies

Potential sources of funding for subsidy could include internal cross-subsidization where the service provider charged high tariff to rich customers and used some of collected money to subsidize the poor (consumption subsidy); allocation from

government to cover the subsidy for the poor and the third option could be the surcharge levied by government to create a subsidy fund for the poor.

Who should be subsidized?
The subsidies were needed when a significant number of citizens did not have resources to access basic services due to a mismatch between the cost of services and affordability.
Subsidies might be necessary under the following circumstances:
Subsidies for high cost areas – Where the cost of providing a basic services was beyond the reach of most households, for example, in rural areas where water resources were scarce or there were problems with the quality of water.
Subsidies for the poor – The subsidies were necessary to enable poor households to access minimum service levels.

How should the subsidy be provided?
Subsidies could be delivered in two ways: the subsidy could be paid directly to the poor households; this required accurate targeting of the poor. A second option was to pay the subsidy to the service provider who must then be responsible for developing systems and processes for efficient implementation of the subsidy.

2.5.3 Examples of pro-poor subsidy options
Table 3 provides examples of approaches that have been used to provide pro-poor subsidies for the water supply and sanitation sector:

Table 3: Examples of subsidy instruments

Subsidy instrument	Description
Partial capital for access to rural sanitation	Partial capital grant ranging from 25-95% funded by the World bank under the demand responsive approach
Demand promotion for sanitation and hygiene	Subsidy for support of the costs of staff responsible for demand promotion initiatives such as hand washing, village rewards for sanitation improvement in India or provision of toilets in some countries such Burkina Faso and India
Social connections for the urban poor	Subsidies to private service providers to provide connections to the water supply networks for the urban poor (Cote d'Ivoire and Senegal)
Cross-subsidies	Water Services Providers use different tariffs for the different consumer categories in order to raise funds for subsidizing the poor customers.
Direct subsidies for consumption	Direct subsidies paid by government to utilities to meet the costs of providing services to identified poor consumers (Chile and Panama – the poor households pay 15% of the water bill)
Village rewards	The Indian government was awarding rewards to villages that had achieved 100% sanitation coverage

Source: Table adapted from Mehta M (2003) Meeting the financing challenge for water supply and sanitation – Incentives to promote reforms, leverage resources and improve targeting. World Bank – Water and Sanitation Program

2.6 Implementation of subsidized sanitation programmes

There was growing evidence that providing subsidies for the construction of toilets for individual households did not guarantee improvement in the health of beneficiary communities (WSP, 2007). India's experience of delivering sanitation service over two decades showed that provision of generous sanitation subsidies led to the increase in sanitation coverage but it did not motivate people to use toilets. The toilets were often abandoned or used for other purposes (WSP, 2007). A state wide sector assessment conducted in India by WSP (2004) showed that most people continued to defecate in the open despite having access to toilets because they lacked awareness of health risks associated with their unhygienic behaviour. This assessment showed that usage was highest amongst households who had paid for the construction of their toilets.

The following Box 1 provides a summary of the Indian experience of implementing the sanitation policies.

Box 1: Supply driven sanitation delivery in India (WSP 2007)

In 1986 the Indian government drawing on its success with the implementation of the water policy through the use of one standard quality controlled hand pump design known as Mark 11 decided to apply the same approach in the implementation of sanitation policy, namely, one standard design for rural and urban on-site sanitation toilet, and the double vault poor flush latrine. A 100% subsidy was provided by Central Government for the Rural Sanitation Programme targeting scheduled castes, scheduled tribes and landless labourers and the subsidy for other groups were decided at a state level. The 100% subsidized rural sanitation programme failed to improve coverage and use of sanitation facilities because of too much focus on toilet construction, no demand creation , no user participation with regards to the position of the toilet, design and maintenance requirements. It was found that 50% of the toilets were not used or in some cases there were used as storage facilities.

To address this problem, the Indian Government reduced the subsidy to 80% in 1992 and only targeted households below the poverty line and households had a choice of four toilet options with different cost levels. The government allocated 10% of funds to the promotion of health and hygiene awareness and the sanitation project was driven by external agencies.

In 2001 the sanitation policy guidelines were changed to a ` Total Sanitation Campaign ` which put emphasis on informing and educating rural households about the importance of having sanitation facilities. Households could apply for a flat subsidy depending on type of sanitation facility selected. The implementing agencies were responsible for setting up sanitation marts where households could buy materials required to build the toilets. Limited success was achieved with this approach because of the lack of guidance and training for the local communities. Some implementing agencies lacked expertise in gender and poverty sensitive promotion. Deficiencies were also found in organizations responsible for allocating funding and monitoring of implementation of the sanitation programme.

Wateraid (2006) showed that the sanitation coverage in India, Nepal and Bangladesh was not reaching the poor and other vulnerable people. Although the Total Sanitation Campaign of the Indian Government made provision for subsidized toilets for the poor, many of the poor were not benefiting from the subsidies because of limited community participation and lack of access to information on the subsidy for remote villages. Some of the reasons cited for poor sanitation coverage for the poor included the following:

- **Geographical location** – The materials for building toilets were very expensive in remote villages and there was a lack of appropriate sanitation technology options for the poor households that lived in difficult locations such as flood prone areas.
- **Legal** – Poor people living in non-tenured land were excluded because governments were not willing to provide sanitation services to these settlements.
- **Institutional capacity** – Local government institutions did not have capacity to manage large scale, pro-poor sanitation programmes.

2.7 Community-Led Total Sanitation (CLTS) approach

In recognition of the failure of the supply-driven approaches, South Asia adopted the community-led sanitation approach; this approach was a shift from the subsidy-led toilets for individual households to the emphasis on behavioural change for the whole community. The objective of this approach was to reduce the incidence of sanitation-related diseases and to manage the public risks of poor disposal of human excreta at a community level. The ultimate goal of this approach was to achieve 'open defecation-free villages'.

According to WSP (2007) the Community-Led Total Sanitation (CLTS) was based on a principle of triggering collective behavioural change. Communities were assisted to take a collective action to adopt safe sanitation and hygienic behaviour and ensure that all members of the community had access to safe sanitation facilities. Communities were assisted to understand and realize the negative impacts of poor sanitation and they were empowered to collectively find solutions to improve their sanitation service provision.

The CLTS was first piloted in Bangladesh in 2001 by the Village Education Resource Centre, a local NGO and WaterAid Bangladesh to achieve total sanitation coverage. As a result of this intervention, the community achieved a total ban on open defecation within the village without any external subsidy. Communities established their own committees, developed innovative low-cost sanitation technologies, monitored progress and ensured that all households adopted safe and hygienic defecation practices. In 2004 the Government of Bangladesh allocated 20% of the annual development budget to local government for the promotion of the CLTS approach and also instituted an incentive scheme. The CLTS approach has resulted in over 70 million people adopting safe sanitary practices in a short time, and Bangladesh expected to achieve 100% sanitation coverage by 2010 ahead of 2015 MDG target.

The CLTS approach has been adopted by other districts in India; the Maharashtra State modified the approach by bringing local government as partner and the approach was linked to the state reward scheme for communities that achieve 100% sanitation coverage. Based on the success achieved in Bangladesh and Maharashtra

district, the Indian government has revised the national sanitation guidelines to include the concept of CLTS. A national reward scheme was launched in 2004 for rewarding local governments and local communities for achieving 'open defecation free areas' within their jurisdiction. The CLTS approach helped Maharashtra State to achieve sanitation coverage for 5 million households in 2006 and the state government set a target of an 'open defecation free environment' for its rural population of 50 million by 2008. Pakistan, Nepal, Indonesia and Cambodia were also adopting CLTS.

Success factors of the CLTS approach

WSP (2007) identified the following critical success factors for the CLTS approach:

Support for the collective behavioural change at scale – The success depended on government support for capacity development at local level and the availability of committed local NGOs with the capacity to facilitate community mobilization.

Addressing the needs of the poor – The CLTS approach required the participation of all households including the poor. This implied that sanitation interventions had to take affordability for the poorest into consideration. Information on different sanitation options for the various socio-economic groups must be provided. Communities cross-subsidize the poor and microfinance arrangements were made where cross-subsidization was not possible in order to achieve 'open defecation-free environment.'

Overcoming physical constraints – The CLTS approach demonstrated that once local communities were motivated to achieve 'open defecation free environment', they were able to find solutions to problems of water scarcity and adverse hydro-geological conditions.

Creation of a supply chain – The success of the CLTS approach required the establishment of an effective system for meeting the demand for building materials for the different sanitation technologies. For example, in Bangladesh and Maharashtra State, the local entrepreneurs in partnership with the local government were supplying building materials to the villages to improve access for poor households.

Ensuring sustained behavioural change – Peer monitoring at local level was an important component of CLTS approach, it ensured that villages remained free from open defecation. Communities enjoyed a sense of pride when their villages were officially declared 'open defecation free areas'. The rewards awarded by the national government for the best performing villages brought a sense of pride and a strong desire to maintain the status. This motivated all members of the community to monitor each other to make sure that their status was maintained.

The following Box 2 provides a summary of Africa's experience with CLTS:

Box 2: Africa's experience of CLTS

The CLTS approach was introduced in 8 villages of Ethiopia in February 2007; three months later the programme was extended to 57 villages and 1436 households in these villages constructed their own pit latrines without any subsidies. The CLTS resulted in an increase in sanitation coverage from 28% to 71% in the participating villages. Communities were motivated by a desire to achieve 'open defecation free environment'. Limited external funding was spent on training community leaders, village health agents, Health extension workers and staff from partner institutions (IRC, 2007).

2.8 Urban sanitation service delivery

According to Tipping et.al (undated) in 1970 two thirds of the world's population lived in the countryside, and by 2001, 47% of the world's population lived in urban areas and this number was expected to reach 50% in 2007. Africa was currently experiencing the highest rate of urbanization. It was projected that the African urban population would increase fourfold between 1990 and 2020 to reach 500 million. The total urban population worldwide was approximately 3 billion and at least 1 billion of the urban population lived in slum. This number was expected to reach 2 billion by 2030. The slum dwellers in most developing countries lacked access to basic water and sanitation services.

According to Paterson et.al (2007) the slum dwellers were most vulnerable to sanitation-related diseases because they were exposed to human excreta in open drains. It was argued that poor access to safe sanitation in the slum areas posed a major health risk to slum dwellers compared to rural areas which were usually sparsely populated. Therefore there was a need to prioritize provision of adequate sanitation services to these settlements.

2.8.1 Challenges of rapid urbanisation

Rapid urbanisation was a major challenge for big cities in developing countries that were struggling to meet MDGs delivery targets. Most of these countries did not have sanitation policies for the provision of sanitation services to dense urban informal settlements; the national governments tended to prioritise rural sanitation service delivery. The sanitation crisis in dense urban informal settlement areas was due to the following factors (WSP, 2006):

- The middle class who had access to sewer networks were indifferent to the needs of the poor households living in these settlements.
- There was a lack of data on sanitation access and lack of a common definition of sanitation in the urban context.
- Unclear responsibility for urban sanitation which was often split across a number of different government institutions coupled with poor sector coordination.
- In many countries, local government had a mandate to provide sanitation services but lacked financial resources and technical capacity to provide effective sanitation services.

Schaub-Jones (2005) analysed the sanitation challenges faced by tenants of dense informal settlements in the cities of Africa and South America and made the following conclusions:

- Tenants in shacks and slums faced major challenges with regards to the improvement in their sanitation facilities because they could not build their own toilets in a rented facility and landlords who lived in a different area had no vested interest in improving the sanitation facilities.
- The approaches that were successful in creating a demand for sanitation in rural areas were usually not suitable for the dense urban informal settlements because of a lack of a community spirit and social cohesion which characterized rural communities.
- Hygiene education was the best way to help tenants of urban slums to improve their health by adopting hygienic practices.

2.8.2 Pro-poor sanitation technologies

Paterson et.al (2007) argued that most low cost on-site sanitation technologies were not appropriate for the dense urban informal settlement areas. Many engineers and planners considered conventional waterborne sanitation to be the only sanitation technology option for urban areas in developing countries, but Paterson et.al (2007) were of the opinion that the high cost and water requirements made this technology to be inappropriate for low-income households. In Indonesia on-site sanitation systems were prohibited in areas with more than 250 people per hectare (Fang, 1999). The simplified sewerage technology was shown to be the only technically feasible and economical viable sanitation technology option for low-income, high density peri-urban areas. Simplified sewerage was widely used in South American countries such as Brazil, Colombia, Peru and Bolivia (Watson, 1995 and Bakalian et. al 1994). This sanitation technology was also implemented successfully in Pakistan and it was becoming common across Asia (Watson, 1995; Tayler 1996). The success of simplified sewerage was attributed to the low cost and community involvement in the project implementation and O&M of the system (Katakura and Bakalian, 1998, Banes et.al 1996, Sinnatamby, 1990).

Paterson et.al (2007) identified the following barriers to the large scale adoption of pro-poor sanitation technologies:

Lack of investment in sanitation infrastructure – Politicians preferred to be associated with high cost prestigious projects such as dams and water-borne sanitation systems; low cost sanitation projects were not popular. At a local level, poor households with limited income had water, food and shelter as high priority and sanitation was far down the list of their priorities. There was a need for engineers should to work in partnership with social scientists in promoting the simple sewerage sanitation technology in poor urban informal settlements.

Insufficient cost recovery for sanitation services – The UN Committee on Economic, Social and Cultural Rights adopted a new right to water in 2002 which entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water, Paterson et.al (2007) believed that this right has been misinterpreted to mean that water services should be free. Most countries charge water and sanitation tariffs that are less than the unit cost of providing the water services. This leads to unsustainable water services due to the lack of adequate funds for operation and maintenance of the infrastructure and extension of service coverage to the poor areas. According to Whittington et.al (1992) most of the urban poor were willing to pay for affordable basic water and sanitation services provided that the services were sustainable.

Conservative technical standards favoured over innovation – Engineers preferred to stick to the established technical standards and were not willing to be innovative. Brazil and Bolivia were successful in adopting the simple sewerage sanitation technology because they developed new technical standards and by-laws for the design and construction of simplified sewerage systems. The problem of conservative professionals was their reluctance to change established practice and this prevented the large scale adoption of simplified sewerage sanitation technology.

Low-cost sanitation technologies perceived as second class – The rejection of low-cost sanitation technologies was based on the view that the poor deserved the same standards as affluent communities. In South Africa due to its past apartheid policies all the historically white areas were provided with conventional waterborne sanitation technology, therefore, it could be argued that as part of re-dressing the past imbalances every household should have access to waterborne sanitation services despite the high operational cost and scarce water resources

(Beall et.al 2000). These expectations prevented acceptance of low-cost technologies in most developing countries. Paterson et.al (2007) argued that pro-poor sanitation technologies were neither second class nor anti-rich but they were desirable for all communities that wanted to reduce the cost of services irrespective of their socio-economic status.

Lack of engagement with end-users – In most countries the peri-urban informal settlements were considered to be illegal; therefore their needs were not taken into consideration in the decision-making on appropriate sanitation technologies. Consequently, the informal settlement dwellers had no incentive to operate and maintain the provided sanitation facilities. The community participation in all aspects of the implementation of simplified sewerage was shown to be very important to the success of this technology.

2.8.3 Provision of sanitation services to the urban poor

The Water and Sanitation Program (2007) analysed several case studies and identified the following best practice for delivering water and sanitation services to the urban poor:

Partnering for change – The WSP used the slum networking project of Ahmedabab in Gujarat's largest city slum to demonstrate how the partnership between the slum dwellers, government agencies, NGOs and the private sector contributed to improving access to water and sanitation for 11,500 households. The success of the partnership was due to well defined roles for all the partners. The Ahmedabab municipality was responsible for funding, facilitating and coordinating the partners. The beneficiary communities were responsible for the monitoring, operation and maintenance of the sanitation facilities and they also participated in health and socio-economic programmes. The private sector was responsible for implementing the project, training of the community and assisting local entrepreneurs to set up viable sanitation businesses. The NGOs were responsible for community mobilization including facilitation of access to micro-financing institutions for the poor households, such as SEWA.

Well-planned communication strategy – The WSP used the experience of Alandur Municipality in Tamil Naidu to demonstrate the importance of political commitment, effective communication, transparency and partnership with community-based organizations in improving access to sanitation services for the slum dwellers. The well-planned communications strategy ensured acceptance of the sanitation project by the community. Access to the sewerage network was improved and households paid for the connection and the poor households were provided with communal toilets after extensive needs analysis and consultation. A locally based CBO was responsible for O&M and all beneficiaries paid a monthly fee for O&M.

Stakeholder participation as a key to sustainable sanitation services*:* Greater Mumbai's dense slums of 8 million people managed to improve access to sanitation by involving slum dwellers and NGOs in the design, implementation and O&M of sanitation facilities. The municipality was responsible for financing 60% of the project costs and the community paid an upfront contribution to the CBO for major repairs and toilet expansion.

2.9 Role of citizen's voice in the improvement of water services

WSP-South Asia (2007) used ten case studies of citizen engagement in India to show how the creation of institutionalized citizen engagement could enhance public accountability, performance and customer responsiveness in the Indian urban water and sanitation sector. The study was guided by the following institutional factors

identified in the World Development Report (2004) that must be strengthened to achieve successful public service provision:
Delegation – this refers to the setting of performance standards whereby customers ask for a service and define the terms on which the service should be delivered.
Performance – services delivery is measured against the set performance standards.
Finance – the customers must pay for the service.
Information on performance – Assessment of the service quality by the customers and policy-makers.
Enforcement – dissatisfied customers and policy-makers penalize the poor performing service providers.

The WSP study found that there was a need to strengthen accountability of the service providers to their customers in India. The WSP identified the following factors that must be addressed to enhance citizen's voice:
Institutional frameworks and feedback systems – Improvement of water and sanitation services required an institutional framework for the monitoring of the service providers against agreed service standards and customer satisfaction should be measured. Systems should be put in place to provide the citizens with a voice and power at all points of the service delivery chain.
Enhancing staff capacity – The problem of poor responsiveness of frontline staff to poor consumers who are not taken seriously because of their limited social and economic power was identified. Staff should be trained and incentives provided to improve customer responsiveness and the citizens should be provided with communication channels to report to policy makers on the efficiency and responsiveness of service providers.
Benchmarking, *performance management and public reporting*: The study identified performance benchmarking and public reporting as suitable tools for putting pressure on utilities to become more accountable to consumers.

2.10 Case studies of national sanitation policy implementation

Two African case studies of national sanitation policy implementation were selected for analysis because of their similarities to the South African context.

2.10.1 Uganda

Uganda has many years of experience in the formulation of policies that address the national needs while taking constraints and resources of the national economy into consideration. It has established sanitation policies in terms of health, water, environment and local and national government. However, over the years political support has declined and sanitation services to rural areas, small towns have received limited attention. In 1997 the Kampala Declaration on sanitation defined ten areas of action to improve sanitation and an official national sanitation policy and the draft National Environmental Health Policy for Uganda were developed. These policies took urban, small towns and rural areas into consideration. The policies were based on important elements for sustainability such as stakeholder participation, hygiene education and appropriate sanitation technologies.

The case-study analysis showed that the implementation of the Ugandan sanitation policy at the local government level was not effective because sanitation was rarely prioritised, emphasis tended to be on water supply. Sanitation was not treated as a

separate programme with its own budget and there were no sanitation implementation plans. Individual households were not assisted with materials for the construction of their toilets and maintenance of the sanitation facilities. Government funding was limited to the promotion of sanitation and provision of technical guidance.

According to the IRC evaluation, the Ugandan sanitation policies were strong in concept and were based on principles of sustainability but at local government level the implementation of the policies was weak and they had limited impact on the increase in sanitation coverage because of lack of targeted funding. This showed that good sanitation policies alone were not enough to increase sanitation coverage without targeted funding.

2.10.2 Zimbabwe

The Government of Zimbabwe after achieving its independence in 1980, it initiated the Integrated Rural Water Supply and Sanitation Programme (IRWSSP) as an intervention for re-dressing past imbalances. The new government inherited a wealth of water and sanitation experience that was accumulated during the development of low-cost rural technologies in the 1970s. The IRWSSP had a goal of providing the entire population with access to safe water and adequate sanitation. It was estimated that 1.4 million Blair latrines were needed to achieve universal sanitation coverage by 2005. The IRWSSP utilized an integrated approach which included promotion of health and hygiene education, mobilization and participation of user communities, provision of appropriate water and sanitation technologies, establishment of operation and maintenance systems and transfer of technical and organizational skills.

The new government of Zimbabwe initiated decentralization of service delivery responsibility to Rural District Councils (RDCs) which lacked experience and capacity needed to deliver services. The decline in the economy of Zimbabwe led to an increase in dependency on donor funding and in the 1990s, the External Support Agencies (ESAs) were responsible for 90-95% of the Rural Water Supply and Sanitation sector funding for the capital investment. However due to slow progress in project implementation by RDCs, the ESAs took over the responsibility of project implementation. Unfortunately this change led to the neglect of O&M because ESAs stipulated that most of the funds should be used for capital investment because the ESAs felt that the government should be responsible for O&M to ensure long term sustainability.

The following lessons were learned from the Zimbabwe experience:
Scaling-up decentralized service delivery was complex and took time
Decentralization led to the decline in the rate of delivery of sanitation service because the RDCs did not have capacity to manage large sanitation projects. This demonstrated the importance of investing in the strengthening of local institutions before the devolution of responsibilities for service delivery to these institutions.
Effective co-ordination required participation of major stakeholders
The major stakeholders in the implementation of IRWSSP such as local authorities, line ministries, ESAs, local NGOs and informal private providers were not involved in co-ordination of the IRWSSP. Sustained participation of all stakeholders in the co-ordination of service delivery was necessary for successful sanitation service delivery.

Need to invest in sustainable systems
Rural households in Zimbabwe demonstrated their willingness to invest in the improvement of their wells and Blair latrines without the need for large subsidies.

2.11 Key issues emerging from the review of international experience

The following key issues emerged from the review of literature on international experience:

- Policy principles of sustainable sanitation policies and programmes – Improvement in health, affordability, environmental sustainability and management at the lowest appropriate level are fundamental requirements for sustainable sanitation programmes.
- The experience on the implementation of pro-poor sanitation subsidies stressed the importance of ensuring that subsidies were based on genuine need and accurate targeting of the subsidies to the poorest households.
- India's experience of implementing of supply-driven sanitation projects clearly demonstrated that 100% sanitation subsidies did not usually led to health improvement and sustainable sanitation services for the beneficiary communities.
- The success of Community-led Total Sanitation (CLTS) approach in South Asia demonstrated that poor people were able solve their sanitation problems without government subsidies provided they were supported to take collective actions and had access to microfinance for funding the construction of the toilets. Communities took charge of improving their sanitation facilities and put pressure on all households to adopt safe sanitation and hygienic practices in order to achieve 'open defecation free villages'.
- Urban sanitation service delivery to slums required a different approach from that of rural sanitation because of the different conditions and challenges in urban slums. Policy makers should take the unique conditions of these dense urban settlements into consideration when developing sanitation policies for urban slums. VIP toilets were generally not suitable for these dense urban settlements for a variety of reasons.
- Importance of making sure that service providers were accountable to the citizens was emphasized and factors for enhancing the citizens' voice were identified from case studies.
- Two case studies of the implementation of national sanitation for policies of Uganda and Zimbabwe showed that good policies alone were not adequate to achieve sanitation coverage, capacitated local government institutions and targeted funding for sanitation support were required.
- Decentralization of service delivery should go hand in hand with capacity building at the local level.

3. SOUTH AFRICAN EXPERIENCE OF IMPLEMENTING THE SANITATION POLICY

3.1 Introduction

Since 1994 the South African Government has embarked on a massive programme of clearing the water and sanitation service backlog for millions of its citizens that were denied access to these basic services under the apartheid government. The ANC Reconstruction and Development Programme (RDP) gave water and sanitation a high priority because of the impact of these services on health improvement and empowerment of women (Hemson, 2004). The delivery of sanitation services is guided by the White Paper on Basic Household Sanitation of 2001 and the Strategic Framework for Water Services of 2003. The national government has set a target of eradication of the basic sanitation infrastructure backlog by 2010 and huge annual budgets have been allocated to achieve this goal.

3.2 Sustainability audit of sanitation facilities

A DWAF Report (2005) on the sustainability audit of sanitation facilities implemented by sector departments between 1994 and 2003 in the nine provinces found that 28% of the sanitation projects were not sustainable when evaluated against the following sustainability criteria:

Governance

- Most of the municipalities were familiar with the national sanitation policies and guidelines, but only 48% had developed their own sanitation bylaws.
- Inadequate guidance was provided by national and provincial sanitation strategies on the implementation of higher levels of sanitation services.

Institutional capacity

- Sanitation was not a high priority in a significant number of municipalities, for example, only 60% of the municipalities had a dedicated sanitation unit.
- 65% of municipalities had inadequate technical capacity to implement and manage large sanitation infrastructure projects.
- There was inadequate capacity for O&M of sanitation infrastructure in most municipalities, for example, 73% of municipalities only performed reactive maintenance.
- There were no sanitation M&E systems in the majority of municipalities and only 48% of the municipalities had an M&E system for sanitation.
- About 78% of the municipalities did not have any O&M plans for VIP toilets.

Social aspects

- 35% of households were not satisfied with the quality of toilets provided.
- There was inadequate involvement of communities in the planning and implementation of the sanitation infrastructure projects in most municipalities.
- The problem of low household affordability and willingness to pay for sanitation services.
- Inadequate education on proper O&M for on-site sanitation facilities was provided to households.
- Most households were not interested in sanitation technologies that required them to handle human waste and use it as a fertilizer.

Health aspects

- 66% of the households indicated that they did not receive any sanitation, health and hygiene education during the implementation of sanitation infrastructure projects.
- 14% of households did not have access to a hand washing facility near the VIP toilets.

Technical aspects

- The audit found that only 44% of the sanitation projects were preceded by an environmental impact assessment.
- The top structure of 34% of the toilets was not designed to withstand strong wind forces thus leading to the damage of toilet superstructure during strong windy storms.
- Some pits were too small and this reduced the lifespan of the VIP toilet.
- Most designs for the VIP toilet slabs did make provision for desludging and the superstructure was also not designed to facilitate relocation to a new pit when the pit was full.
- An assessment of waterborne sanitation systems found that most of these systems were leaking or flushing continuously due to the broken ball valves.

3.3 Constraints to effective sanitation service delivery

A DWAF 2002 position paper prepared for the African Sanitation and Hygiene Conference held in South Africa in 2002 highlighted the following constraints that were affecting the acceleration of sanitation service delivery in South Africa:

- Lack of support for a demand-responsive approach and too much focus on supply-driven approaches which did not support long-term sustainability of sanitation services.
- There was no appropriate regulatory framework necessary to ensure efficient, equitable and sustainable delivery of at least a basic sanitation services to all households.

Hemson (2004) identified the following constraints to the delivery of basic water and sanitation services:

Policy and strategy

- The setting of spending priorities was done through long debates between councillors and municipal officials and this delayed the implementation of sanitation projects.
- Municipal strategies for spending sanitation budgets were often driven by personal agendas when funds were limited thus leading to spreading the limited sanitation budgets over many villages, for example, funding for 100 VIPs was spread across 20 villages in order to satisfy all Councillors who wanted to be seen to be delivering services to their constituencies.

Institutional capacity

- Lack of capacity to manage large water and sanitation projects in municipalities.
- High staff turnover in rural municipalities because professionals were not keen to work in remote rural areas due to the poor living conditions in these areas.
- Poor communications between municipalities and the national government departments.

Equity
Funds allocated to municipalities that lacked capacity to implement sanitation projects could be re-allocated to municipalities that had capacity to spend the funds. This could lead to long-term equity problems because under-resourced municipalities in the poor areas were affected by the lack of capacity to deliver sanitation services.

3.4 Promotion of the VIP toilet as a basic sanitation technology

The definition of a basic level sanitation service by DWAF (2001) as a well-constructed VIP toilet has led to the promotion of the VIP toilets as a solution for providing a basic sanitation service level to all South Africans who currently lack adequate sanitation services. Austin and van Vuuren (1999) argued that VIP toilets were not suitable for all conditions, for example, geotechnical conditions such as rocky ground could preclude the selection of a VIP technology. Other conditions that made the VIP toilet to be an unsuitable sanitation technology option included shallow ground water tables.

The national sanitation policy did not provide guidelines on how municipalities should deal with full pits. Pit emptying was not adequately acknowledged as an essential component of sustainable sanitation service provision (Eales 2005). Most municipalities were currently focusing on the construction of VIP toilets without putting in place any plans for emptying the full pits.

eThekwini Municipality had started piloting approaches for emptying the full pits in its dense urban informal settlement areas. In 2003 the Municipality approved a policy to introduce the free basic sanitation. As part of this policy the municipality committed itself to providing a pit emptying service once every five years for its 100 000 pit toilets in peri-urban areas at an average of R700 per pit commencing in 2005. It was using a franchising approach whereby a large contractor was appointed by the municipality to franchise pit emptying to small businesses. It was estimated that this approach would create 6400 jobs, with each job lasting for three months. The long-term plan of the municipality was to upgrade all the urban households to waterborne sanitation systems.

3.5 Implementation of alternative sanitation technologies

The sanitation sector institutions have started to implement alternative sanitation technologies such as the Urine Diversion Sanitation (UDS). This sanitation technology promotes the use of human excreta as a resource that can be used as a fertilizer when all the pathogens have been killed. The UDS Technology is an example of the ecosan option that has already been implemented in several communities as an alternative to the VIP sanitation technology. It was first piloted in the Eastern Cape by the CSIR in 1997 (Austin & van Vuuren, 1999)

eThekwini Municipality has selected this technology as a preferred sanitation option for less dense settlements. In 2005 there were 30 000 UDS toilets in this municipality. The single pit toilets in the rural areas were being replaced by double pit UDS toilets to reduce O&M costs for the municipality. About 15 000 UDS toilets were implemented in Northern Cape as a replacement for the bucket sanitation system. The UDS technology was being piloted in other municipalities.

An evaluation of user perceptions of the UDS technology conducted by Matsebe and Duncker (2005) in North West, Northern Cape and KwaZulu-Natal provinces highlighted the following issues:

- The owners of UDS toilets indicated that handling of human faeces was not acceptable and they were also not prepared to use human waste as a fertilizer for their crops.
- All users liked the UDS toilet superstructure because it was well built but they did not like the technology and they considered it to be second class.
- In all three provinces, the local municipalities were leading the implementation of UDS and the users were not involved in the selection of sanitation technology choice.
- Only eThekwini Municipality provided post project technical support to the households to assist them to handle the maintenance-related problems.

3.6 Socio-economic impacts of on-site sanitation systems

The selection of sanitation systems tended to focus on technical and financial aspects and limited attention was paid to the social aspects of sanitation. Bernhardt Dunstan & Associates (1998) made the following findings from a socio-economic evaluation of on-site low flush sanitation systems and unimproved pit latrines in peri-urban areas of Gauteng and North West Provinces:

- *Community experience of on-site sanitation systems* – The operation and maintenance of the low flush on-site sanitation system was found to be inconvenient for elderly, sick and disabled because of the requirement to collect the water for flushing from a communal standpipe. The toilet structure was too small to enable people on wheel chairs to use it comfortably. The national sanitation policy did not make provision for the sanitation needs of disabled people (Matsebe 2006). Women were burdened with emptying the sanitation tanks in the absence of a reliable emptying service from the municipality. In cases where the toilets were blocked, the people had stopped using these toilets and reverted to unimproved pit latrines.
- *Health implications of on-site low flush toilets* – The on-site low flush toilets were perceived to be unhealthy because of sludge that was leaking from full tanks and the practice of households of disposing the sludge in the streets thus leading to an unhealthy environment.
- *O&M costs for low flush on-site toilets* – The households were responsible for the payment for the emptying service. The manufacturer had told the residents that the tanks would require emptying every two years but in practice the tanks needed emptying every six months and this made the cost of emptying unaffordable for the poor households.

3.7 Lessons learned from case studies of sanitation projects

An analysis of several documented case studies of sanitation projects identified the following lessons:

3.7.1 People centred development approaches

The democratic government of South Africa recognized the importance of stakeholder participation and empowerment as necessary elements of strengthening democracy. It acknowledged the importance of a bottom-up approach to decision-making in meeting the development needs of people. This would ensure that government development programmes were informed by the needs of the people on

the ground. Access to water and sanitation services was recognized as human rights in South Africa. The Constitution of South Africa (1996) guarantees a right of access to the basic water and sanitation services for all. However it should be emphasized that citizens must be willing to accept their responsibility for routine operation and maintenance of the sanitation facilities.

An analysis of several case studies found that community-driven sanitation projects were more successful because local people were actively involved in the selection of sanitation options and day-to-day management of the sanitation project implementation processes. In this approach, the external implementing agents provided support and project management while local leaders took all day-to-day management decisions. This approach led to the success of the Winterveld Sanitation Project, Kraaipan community managed sanitation project and Northern Cape Household Sanitation Programme (WIN-SA, The Mvula Trust).

3.7.2 Strong political commitment and management support

Full support and commitment of municipal councils (politicians and officials) were the major contributing factors to the success of the sanitation projects, for example, Councillors were responsible for chairing the sanitation project steering committees in Mogalakwena and Winterveld sanitation projects. The Northern Cape Household Sanitation Programme was endorsed by the Premier of Northern Cape and Bophirima District Municipality supported the demand-responsive approach adopted by Kraaipan Community managed sanitation project.

3.7.3 Sanitation sector cooperation

A good working relationship between DWAF, the municipality, project steering committees and other sector departments was very important in ensuring that all role-players were focused on meeting the sanitation delivery targets. The value of interdepartmental cooperation in successful promotion of health and hygiene education was demonstrated in the Western Cape H&HE Programme where national, provincial and local government worked together to improve health in informal settlements (WIN-SA).

3.7.4 Contribution to job creation and local economic development

Sustainable sanitation service delivery depended on the creation of short and long-term opportunities for local economic development through supporting growth of local small businesses, for example, assisting local people in setting up brick-making facilities and use of local businesses as suppliers of building materials for sanitation facilities. This approach was used successfully by Mogalakwena Local Municipality, Dr JS Moroka LM and Alfred Nzo District Municipality. The employment of local people for project activities and provision of accredited training contributed to job creation and long term empowerment of the local people. People benefiting from the jobs created by the sanitation projects acted as agents for increasing the demand for sanitation facilities. Local communities supported this approach because most of the project funding benefited local people. Building of the capacity of local emerging contractors to deliver sanitation infrastructure contributed to the acceleration of sanitation service delivery in Dr JS Moroka Local Municipality.

3.7.5 Operation and maintenance

The choice of high maintenance sanitation systems such as waterborne sanitation and low flush on-site sanitation technologies should be made with full consultation of the beneficiary households to make sure that they understand their responsibility for

operation and maintenance costs. Municipalities that do not have financial and human resources to provide regular emptying service should not burden households with the low flush on-site sanitation systems that require emptying at short intervals. They should consider other sanitation options that could be maintained by households with limited or no assistance from the municipality. Municipalities that are considering upgrading the bucket sanitation system to the full waterborne sanitation system in poorly planned townships should ensure that they allocate adequate budgets to allow for the extra costs that could be incurred. The problem of O&M for high maintenance sanitation technologies was demonstrated in Bekkersdal and Matwabeng sanitation projects (WIN-SA, unpublished).

3.7.6 Use of an integrated approach to promote health and hygiene

Health improvement should be the driving force behind the delivery of household sanitation services. This can be achieved by using an integrated approach to promote health and hygiene awareness to all the members of the community including school children. Use of local health promoters contributed to the success of health and hygiene programmes. Rand Water succeeded in promoting health and hygiene education in the Winterveld sanitation programme by using community workshops, door-door visits, posters and T-shirts with hygiene messages. On-going health and hygiene promotion initiatives were also important in ensuring sustainable improvement in the health of the local communities. This was demonstrated by Dr JS Moroka Local Municipality (LM) sanitation programme and Western Cape H&HE Programme.

3.8 Municipality-Community-NGO Partnerships in service delivery

The meaningful participation of civil society in the delivery of services was supported by the South African government because of the perceived role of CBOs in the strengthening of democracy and the contribution of active involvement of communities in development interventions to the sustainability. NGOs have an important role to play in the mobilization of communities at a local level. Klarenberg and Masondo (2005) conducted five case studies of good practice in municipal-community-NGO partnerships and based on the findings they made the following recommendations that municipalities should take into consideration when exploring these partnerships:

- *Sustainable development was a slow process* – It took time to establish and maintain partnerships that would lead to sustainable projects. Municipalities should invest time and financial resources in the building of the partnerships.
- *Political support* – It was the most important component of sustainable partnerships. The political support of District and Local Municipalities including active participation of Ward Councillor in meetings of the community and tribal authorities was important for sustainability.
- *Broader stakeholder participation* – All stakeholders should be involved at the start of the project and the local communities should be seen as the major stakeholders to ensure wide acceptance and commitment to the partnership.
- *Regular and open communication between all stakeholders* – There should be clear lines and open channels of communication between all members of the partnership. Budgets should be allocated for communication and appropriate communication media should be used to reach the communities, for example, community meetings, theatre, radio, pamphlets and posters in local languages.

- *Role of Civil Society Organisations (CSOs)* – Involvement of the communities in their own development projects promoted a sense of ownership which was an essential ingredient for sustainable services delivery.
- *High levels of women participation* – The sustainability of development projects led by women was very high because they had a vested interest in reliable water supply and functioning sanitation systems as caregivers for children, elderly and the sick.
- *Documentation and sharing of experience* – It was important to share lessons within partnerships and across partnerships to replicate good practice and also to promote learning from the mistakes of others.

3.9 Summary

The following conclusions were drawn from the review of available South African literature on sanitation projects implemented since 1994:

Supply-driven approach to sanitation services delivery: The pressure put on municipalities to achieve the 2010 sanitation targets had forced them to ignore people centred development approaches because these required more time, therefore, they were incompatible with accelerated sanitation infrastructure delivery.

Contribution of sanitation projects to job creation: In line with the government policy of promoting job creation and local economic development in sanitation projects, the case studies showed that rural municipalities were making a concerted effort to build skills of local people so that they could play a central role in the implementation of sanitation projects. The employment of local people in sanitation projects contributed to the increase in the demand for sanitation facilities because local people were getting the financial benefits of the sanitation projects.

Community ownership of sanitation facilities: The case studies showed that rural communities were more willing to contribute labour and materials to the improvement of sanitation facilities provided they were involved in the planning and implementation of the sanitation projects.

Involvement of NGOs and CBOs in the delivery of sanitation:
Although the South African government supported the participation of civil society in the delivery of services, the sanitation policy framework did not create an enabling environment for the meaningful participation of NGOs and CBOs in the delivery of sanitation services at a local level.

Sanitation monitoring and evaluation systems: The focus of M&E was on counting the toilets and the budget spent on sanitation projects, there was no M&E of the quality of service and its impact on behavioural change for the beneficiary households.

Learning from global experience: The case studies showed that there were pockets of good practice and the sustainability audit study conducted by DWAF (2005) showed that most municipalities were using the supply-driven approaches with limited involvement of beneficiary communities. This demonstrated that South Africa has ignored the international experience on the importance of people centred development approaches to the achievement of sustainable sanitation services.

4. CONCLUSIONS

The literature review identified the following issues that are critical to sustainable sanitation services for the poor:

Principles of sustainable sanitation programmes Improvement in human health should underpin all sanitation improvement programmes and environmental sustainability should not be compromised. Affordability and involvement of households or representative of beneficiary communities are fundamental requirements for long-term sustainability of sanitation services.

Supply driven versus demand responsive approaches to sanitation service delivery

India's experience provided an example of failed supply-driven approach and the success of the Community Led Total Sanitation approach in South Asia demonstrated the importance of creating a demand for sanitation by focusing on behavioural change for the whole community and allowing the households to take the lead in construction of sanitation facilities. It was also shown that government and non-government organization had an important role to play in facilitating the process and funding hygiene awareness and community mobilization.

Pro-poor sanitation subsidies

Sanitation subsidies must be based on genuine need and be based on a thorough understanding of the target communities and accurate subsidy targeting mechanisms were needed to ensure that the majority of the beneficiaries are the poorest households. There should be a distinction between subsidy for sanitation infrastructure and consumption subsidy. Where a large percentage of the population still lacks access to basic sanitation infrastructure, allocation of the subsidy to sanitation infrastructure should be prioritized. A strong pro-poor regulatory framework was very important to regulate access to the subsidies by the poorest households.

Decentralization

International experience showed that decentralization of service delivery to local government was not enough to ensure efficient sanitation services delivery for the poor. Capacity building, establishment of the required institutional capacity and a regulatory framework were required to achieve sustainable services delivery.

Sustainability of sanitation services

The evaluation of sanitation projects implemented in South Africa since 1994 highlighted weaknesses in governance, institutional capacity, O&M, lack of community involvement and neglect of hygiene education and awareness as threat to the long term sustainability of sanitation services. There was also too much focus on VIP toilets and waterborne sanitation systems without paying much attention to other alternative sanitation technologies thus limiting technical choices available to households.

The overall conclusion drawn from the literature review was that the involvement of the beneficiary communities in decision-making processes on appropriate sanitation technologies was very important in the promotion of acceptance and ownership of the sanitation facilities by all households.

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APPENDIX C

EXAMINATION OF THE UNDERSTANDING AND INTERPRETATION OF SANITATION POLICY AND PROGRAMME

A Desktop analysis of the understanding and interpretation of the sanitation policy

TABLE OF CONTENTS

LIST OF ACRONYMS

CSOs	Civil Society Organisations
DEAT	Department of Environmental Affairs & Tourism
DOH	Department of Health
DHLGTA	Department of Housing , Local Government and Traditional Affairs
DPLG	Department of Provincial and Local Government
DWAF	Department of Water Affairs & Forestry
Eco-san	Ecological Sanitation
FBSan	Free Basic Sanitation
H&HE	Health & Hygiene Education
HIV/AIDS	Human Immuno Virus/ Acquired Immunodeficiency syndrome
IDP	Integrated Development Plan
IWSMF	Integrated water and sanitation management Forum
KPIs	Key Performance Indicators
KZN	KwaZulu-Natal
LGES	Local Government Equitable Share
MCSSP	Masibambane Civil Society Support Programme
MCC	Masibambane Coordinating Committee
MIG	Municipal Infrastructure Grant
NDOE	National Department of Education
NSTT	National Sanitation Task Team
O&M	Operation & Maintenance
PMUs	Project Management Units
PSTT	Provincial Sanitation Task Team
RDP	Reconstruction and Development Programme
SAHRC	South African Human Rights Commission
SFWS	Strategic Framework for Water Services
UDS	Urine Diversion Sanitation System
VIP	Ventilated Improved Pit toilet
WC/WDM	Water Conservation/Water Demand Management
WSDP	Water Services Development Plan
WATSAN	Water and sanitation
WSAs	Water Services Authorities
WSSLG	Water Services Sector Leadership Group

1. INTRODUCTION

1.1 Background

Access to adequate safe water and sanitation services is regarded as the first step in addressing poverty because these services relieve women from the burden of fetching water from remote sources and contribute to the improvement of health and reduction of the mortality rates for children under five years old. The Democratic Government of South Africa has prioritized the eradication of the water and sanitation infrastructure backlog because of the perceived high impact of water services on the lives of the poor in South Africa (ANC, 1994). International experience has shown that an improvement in access to water and sanitation services is necessary to ensure sustainable health improvement and poverty reduction.

The sanitation delivery targets that were set in the Strategic Framework for Water Services in 2003 for the eradication of sanitation service backlog by 2010 has forced all spheres of government to allocate more resources to support the acceleration of basic sanitation infrastructure delivery to all those households who currently lack access to these services. However, in spite of all these efforts, there were still millions of households that lacked access to a basic sanitation service.

There was a growing concern that some of problems of slow sanitation delivery experienced by some municipalities could be due to the lack of a common understanding and interpretation of the national sanitation policy. This study was initiated to investigate the current understanding and interpretation of the national sanitation policy and programme by municipalities and other sanitation sector stakeholders. The outcome of this investigation will be the identification of sanitation policy issues that were misunderstood and misinterpreted by those responsible for the implementation of the sanitation policy at local level. The study will also identify policy gaps that could be contributing to the slow delivery of basic sanitation services and make recommendations for addressing these gaps.

Questions have been raised on the appropriateness of a single national sanitation policy for all settlement types (urban, rural and dense informal settlements). The working hypothesis for this study was that the sanitation policy principles of the White Paper on Basic Household Sanitation (DWAF, 2001) were relevant to urban, rural and informal settlements; the only difference was how these principles were interpreted under different contexts.

1.2 Objectives

The main objective of the sanitation policy analysis was to investigate the understanding and the interpretation of current sanitation policy and programmes relating to the subsidy, ownership of infrastructure, responsibility for O&M, responsibility for monitoring issues of new pits, etc. amongst the national, provincial and local government sanitation sector partners. The specific aims of the desktop analysis include the following:

- To assess the understanding of the definition of a basic sanitation service by all sanitation sector stakeholders.

- To identify approaches used by the municipalities to target subsidies to the poor.
- To assess community participation in the implementation of sanitation infrastructure projects.
- To analyze a sample of WSDP to assess the budgets allocated to Health and Hygiene Education and O&M for sanitation services.
- To assess provision for O&M of sanitation services.
- To identify pit emptying policies at municipal level.
- To identify aspects of the sanitation policy that are misinterpreted.
- To identify policy gaps.

1.3 Scope

The desktop analysis focused on assessing the alignment of sanitation-related policies with the national sanitation policy principles. It did not address institutional sanitation. An assessment of the interpretation of the sanitation policy was based on the review of sanitation guidelines, norms and standards, strategies, sanitation policies of municipalities, Water Services Development Plans (WSDPs) and reports on the evaluation of the implementation of the national sanitation policy. The analysis also included the assessment of the monitoring and evaluation systems for sanitation and coordination of sanitation service delivery at all levels.

1.4 Methodology

The following approaches were used to examine the understanding and interpretation of the national sanitation policy and sanitation programmes:

- A thorough analysis of the White Paper on Basic Household Sanitation (2001) and the Strategic Framework for Water Services (2003) to identify areas of misalignment and policy gaps.
- Assessment of the sanitation-related policies, strategies, guidelines, municipal by-laws, norms and standards, for alignment with sanitation policy principles as outlined in the 2001 White Paper on Basic Household Sanitation and the Strategic Framework for Water Services of 2003.
- Assessment of sanitation policies of selected municipalities to evaluate their interpretation of the sanitation policy principles.
- Analysis of a sample of WSDPs to assess the trends in municipal budget allocation to the sanitation components (H&HE, O&M and sanitation infrastructure).
- Identification of sanitation policy issues that were misinterpreted by analysing reports on the evaluation of sanitation projects and programmes.
- Use of available reports to assess the effectiveness of the sanitation sector coordination, monitoring and evaluation of the sanitation service delivery.
- Identification of policy gaps and areas that are misunderstood based on the outcome of the analysis of all the relevant policy documents, legal framework and sanitation reports.

2. CONTEXTUAL FRAMEWORK FOR THE SANITATION POLICY ANALYSIS

2.1 Underlying principles of sustainable sanitation services

Sustainability underpins all service delivery policies that have been put in place by the South African democratic government since 1994. Sustainable sanitation service delivery has five dimensions (DWAF, 2005):
Technical sustainability – For the sanitation technology to be sustainable, it must be affordable and acceptable to the end-users. Users must be able to operate and maintain their sanitation facilities with limited assistance from external agents, especially in rural areas.
Financial sustainability – This includes capital investments in sanitation infrastructure for households without access to basic sanitation services and allocation of budgets required for ongoing operation and maintenance and future infrastructure replacement costs.
Environmental sustainability – Provision of sanitation services should take into consideration the protection of the environment against adverse impacts such as groundwater pollution due to seepage from pit latrines and pollution of surface water from untreated or poorly treated sewage.
Social sustainability – Access to adequate sanitation services should provide benefits to households in the form of improvement in health, privacy, convenience, safety and dignity. Sanitation services should also contribute to poverty alleviation through job creation and improvement in the health of children thus saving women's time so that they could participate in economic activities.
Institutional sustainability – Sustainable sanitation service delivery requires the establishment of an effective institutional framework that supports the delivery of sanitation services in an efficient and cost-effective manner. Management and technical skilled personnel are critical to sustainable sanitation service delivery.

2.2 Sanitation policy principles

The examination of the understanding and interpretation of national sanitation policy is guided by the sanitation policy principles that are outlined in the 2001 White Paper on Basic House Sanitation. These principles are based on the universal human rights and equality of all persons regardless of race, gender, creed or culture; they are based on internationally accepted good practice for sustainable development.

The following sanitation policy principles were accepted by eight sanitation sector departments in 1996 as an approach to be followed in the implementation of the sanitation programmes:

- **Sanitation improvement must be demand responsive, supported by an intensive Health and Hygiene education programme** – this means that development must respond to the needs of the people and beneficiary communities should take responsible for their own development with the state providing support. Households must be made to understand the link between their health, good hygiene and toilets facilities. Choice is an important element of the demand-driven approach to service delivery.
- **Basic sanitation is a human right** – access to a basic level of sanitation service necessary to provide a healthy environment is a constitutional right. Government has a responsibility for creating an enabling environment for individuals to access basic sanitation services. Where households are too poor to pay for the sanitation services, government must provide financial support.

- **Community participation** – Communities must participate fully in their sanitation projects; they should participate in decision-making and share in the benefits of the sanitation projects or programmes. Communities must be empowered through appropriate capacity building programmes.
- **"Health for all", rather than "all for some"** – Planning and allocation of public funds should give priority to those communities that are inadequately served. A balance must be achieved between what is affordable to households, communities and the national economy.
- **Equitable regional allocation of development resources –** The limited national resources available to support the provision of basic services should be equitably distributed throughout the country according to population and the level of development.
- **Water has an economic value –** Sanitation services must be provided in manner that reflects the growing scarcity of water of good quality in South Africa and should not undermine long-term sustainability and economic growth.
- **Polluter pays principle –** Polluters must pay for the cost of cleaning up the impact of their pollution on the environment.
- **Integrated development planning** – Sanitation development must be linked to water supply in order to achieve improvement in health. The delivery of these services must be coordinated at all tiers of government. The Integrated Development Planning (IDP) process and the Water Services Development Plans (WSDPs) should be used as tools for achieving integrated development planning.
- **The provision of access to sanitation services is a local government responsibility** – Local government has a constitutional responsibility of providing sanitation services and national and provincial government have a constitutional responsibility to support the local government in the delivery of these services.
- **Sanitation is about environment and health** – Sanitation service is more than toilets; it is a process of sustained environment and health improvement, therefore, the delivery of sanitation services must include health and hygiene education.
- **Sanitation services must be financially sustainable** – Sanitation services must be sustainable both in terms of capital costs and recurrent costs.
- **Environmental integrity** – The environment must be protected from the negative impacts of pollution from poorly operated and maintained sanitation systems.

2.3 Sanitation-related national policies, legislation and strategies

The following table lists the national sanitation-related policies, legislation and strategies that were analyzed to assess their alignment with the national sanitation policy principles.

Table 1: List of national policy documents reviewed

Policy	**Custodian**
White Paper on Water Supply and Sanitation 1994	DWAF
Constitution of South Africa 1996	Government of SA
National Sanitation Policy of 1996	DWAF
National Water Policy of 1997	DWAF
White Paper on Basic Household Sanitation of 2001	DWAF
Water Services Act 1997	DWAF
National Housing Policy of 1994	National Dept of Housing
Local Government Policy of 1998	DPLG
Policy framework for the Introduction of the Municipal Infrastructure Grant 2004	DPLG
Draft National Policy Framework for public participation of 2005	DPLG
White Paper on Integrated Pollution Management and Waste Management	DEAT
Legislation	
Water Services Act of 1997	DWAF
National Water Act 1998	DWAF
National Environmental Management Act of 1998	DEAT
National Housing Act of 1994	National Dept of Housing
White Paper on Local Government of 1998	DPLG
Municipal Structures Act of 1998	DPLG
National Health Act 61 of 2003	Dept of Health
Strategy documents and guidelines	
Strategic Framework for Water Services 2003	DWAF
National Sanitation Strategy 2005	DWAF
National Health and Hygiene Strategy 2007	Dept of Health
Water Conservation and Water Demand Management Strategy for the Water Services Sector	DWAF
DWAF Model By-Laws Pack 2005	DWAF
DWAF Guidelines for Compulsory National Standard (Regulations under Section 9 of the Water Services Act) and Norms and standards for water services tariffs (Regulations under Section 10 of the WSA 108)	DWAF
DWAF undated Sanitation Technology options	DWAF
The MIG – Basic levels of services and unit costs: A guide for municipalities 2005	DPLG
DPLG Guidelines – Sustainable municipal infrastructure provision and service delivery 2007	DPLG
DPLG Draft National Policy Framework for public participation 2005	DPLG
DPLG THE MIG: National MIG management unit programme management processes and procedures	DPLG

3. INVESTIGATION OF THE UNDERSTANDING AND INTERPRETATION OF THE KEY SANITATION POLICY PRINCIPLES

This chapter presents the analysis of the understanding and interpretation of sanitation policy principle in sanitation related policies and legislation.

3.1 Access to basic sanitation service as a human right

Everyone has the right to have access to sufficient water, to an environment that is not harmful to his/her health or well-being and to have the environment protected, for the benefit of present and future generations. National government must provide subsidies to the water services sector to promote the realisation of the right to basic water supply and sanitation service. This principle is enshrined in the Constitution of South Africa (1996) and it is embraced by National Sanitation Policy of 1996, Water Services Act of 1997 and White Paper on Basic Household Sanitation of 2001 and Strategic Framework of Water Services of 2003.

Section 24(a) of the Constitution of SA (1996) states that
"Everyone has the right to an environment that is not harmful to their health or well-being"
Municipalities have a Constitutional mandate to ensure access to adequate sanitation services for all and the Municipal Systems Act (2000) makes provision for lifeline tariffs for poor households.

3.1.1 Definition of a basic sanitation service

The following are the two definitions of a basic sanitation service that are used by the different sanitation sector partners:

'The minimum acceptable basic level of sanitation is: a) appropriate health and hygiene awareness and behaviour; b) a system for disposing of human excreta, household waste water and refuse, which is acceptable and affordable to the users, safe, hygienic and easily accessible and which does not have an unacceptable impact on the environment; and c) a toilet facility for each household.' (DWAF 2001, p14)

'Basic Sanitation Service – the provision of a basic sanitation facility which is easily accessible to a household, the sustainable operation of the facility, including the safe removal of human waste and wastewater from the premises where this is appropriate and necessary, and the communication of good sanitation, hygiene and related practices.' (DWAF 2003, p45).

3.1.2 Interpretation of the basic sanitation services in different policy documents and guidelines

The Strategic Framework for Water Services (SFWS) definition of a basic sanitation service does not include the **safety** aspect which is important for women and children especially where communal toilets are considered as an option for meeting the basic sanitation service level. It does not make reference to a sanitation facility for each household unlike the 2001 White Paper on Basic Household which refers to a toilet facility for each household.

A second difference between the two definitions is that the health and hygiene component is not emphasized in the SFWS definition; it refers to the 'communication of good sanitation, hygiene and related practice'. The 2001 White Paper on Basic Household Sanitation states that "Hygiene promotion requires far more than giving

out information and building demonstration toilets. The starting point is to understand the current beliefs, perceptions and practices within a particular community" and based on this understanding relevant messages should be developed to bring about beneficial behavioural change.

The Guidelines for compulsory national standards and norms and standards for water services tariffs (DWAF, 2002) define basic sanitation as
"the provision of appropriate health and hygiene education and a toilet which is safe, reliable, environmentally sound, easy to keep clean, provides privacy and protection against the weather, well-ventilated, keeps smells to a minimum and prevents the entry and exit of flies and other disease-carrying pests". The regulation stresses that H&HE should not be a once-off event linked to the implementation of sanitation infrastructure but it must be continued on a regular basis when deemed necessary. Guidelines do not restrict WSAs to a particular type of toilet. The selection of the toilet type should depend on preference of consumers, affordability, availability of materials and skills and technical conditions. According to the regulation the environmental conditions are a determining factor on the suitability of a VIP toilet as a basic sanitation facility.

The regulation requires that the water services institutions should support viability and sustainability of sanitation services to the poor by providing basic sanitation services such as pit emptying service for the poor at a low cost or free where this is not affordable. This is necessary to protect the public health and uncontrolled disposal of human excreta into the environment or streams.

The DWAF guide on sanitation technology options (undated) provides the following list of sanitation technologies which are not recommended because they are considered to be below the basic sanitation service level in terms of the national sanitation policy:

- Unimproved pit latrines – bad smells and flies;
- Chemical toilets – only suitable for short term temporary use (high maintenance costs);
- Bucket toilet – below RDP;
- Communal toilets – should only be considered for temporary use and to ensure cleanliness maintenance must be assured.

Basic sanitation service for dense urban informal settlements
Both the 2001 White Paper on Basic Household Sanitation and the SFWS of 2003 do not provide adequate guidance for the provision of a basic sanitation service to dense peri-urban informal settlements. The White Paper on Basic Households Sanitation states that its focus is on the provision of basic household sanitation to mainly rural communities and informal settlements. This policy does not provide any guidance for alternative sanitation technologies that are suitable for dense urban informal settlements.

On the other hand the SFWS only states that waterborne sanitation is generally the most appropriate technical solution for urban areas and in rural areas with low density, on-site sanitation systems are considered appropriate. However, with regards to peri-urban areas, the WSAs are expected to make a decision on appropriate sanitation technologies based on financial viability and sustainability.

The MIG policy framework (2004) recommends waterborne or equivalent as a basic sanitation service for dense urban settlements; it does not differentiate between the formal and informal settlements.

The Guidelines for the formulation of a strategy and implementation plan for the provision of sanitation services in informal settlements (DWAF, undated) list sanitation technology options for informal settlements. The Guidelines provide the following list of sanitation technology options that are based on the time-frame of the sanitation interventions:
Long-term permanent services: VIP, UDS, septic tank and waterborne sanitation systems;
Temporary services (1 to 5 yrs) – Shallow VIP, SanPlat or communal wet block
Short-term or **emergency services** (less than 1 year) – SanPlat or communal block
It should be noted that some recommended technologies such as SanPlat have not been mentioned in any national sanitation technology guide as an option. It is therefore not clear why this has been added to the list. There is also no explanation on the benefit of having shallow VIP.

According to the DWAF Sanitation Technology options guide the communal toilets wet or dry are not recommended because they are considered to be below the basic sanitation services level as defined by the National Sanitation Policy (1996, 2001).

The following components of the definition of a basic sanitation service have not been translated into strategies or guidelines:
"A system for disposing of **household wastewater** and **refuse"** is currently not addressed in sanitation guidelines for areas provided with dry on-site sanitation systems; this poses a major health threat for dense urban informal settlements (White Paper on Basic Household Sanitation, 2001). The Strategic Framework for Water Services (2003) refers to "safe removal wastewater from premises" but there are no guidelines on how should be addressed in non-sewered dense urban informal settlements.

How other sanitation sector partners interpret the basic sanitation service level

DPLG

According to the MIG policy framework of 2004 a 'basic sanitation' level of service refers to the level that is considered adequate to ensure the health and safety of the household users. MIG policy uses the definitions of a basic sanitation facility and a basic sanitation service provided by the Strategic Framework for Water Services. The VIP or equivalent is recommended as a basic sanitation facility for rural or urban areas with low density. For dense urban settlements waterborne or equivalent sanitation services such as low flush systems are recommended as appropriate basic sanitation. The final decision on type of basic sanitation facility is the responsibility of the WSA based on financial viability and sustainability.

According DPLG (2007) the setting of a basic level of service should be based on the requirements for a safe and healthy environment and this should determine the minimum appropriate levels of service. This should comply with the National Norms and standards.

National Department of Housing
According to the National Housing Policy of 1994 adequate housing is measured by the following core factors: legal security of tenure, availability of services, materials, facilities and infrastructure, affordability, habitability, accessibility, location and cultural adequacy. The National Housing Act 107 of 1997 stresses government commitment to ensuring on a progressive basis access to "Permanent residential structures with secure tenure, ensuring internal and external privacy and providing adequate protection against elements, potable water, adequate sanitary facilities and domestic energy supply".

Sanitation Policy of the City of Johannesburg
Although the sanitation policy uses the national sanitation policy definition for a basic sanitation facility as a toilet for each household, the City of Johannesburg intends to provide communal toilets as a short to medium term goal for meeting the 2010 targets; however, the long term objective is to provide all households with waterborne sanitation service by 2015 (City of Johannesburg, 2002).

Sanitation policy of eThekwini Municipality
The policy of eThekwini Municipality is to provide waterborne sanitation to the boundary of lots registered within the Metro areas. In areas where it is not viable to provide waterborne sewerage reticulation, a basic sanitation service level is the Urine diversion double vault toilet and Health and Hygiene Education (WSDP, 2004)

eThekwini Municipality has the following interim policy for informal settlements:

- If the settlement is to be upgraded to a formal one within one year, no ablutions are provided;
- If the settlement is to be upgraded or relocated to formal housing between one to five years, communal waterborne toilet facility is provided using a less expensive design;
- If the settlement is to be upgraded within 5 to 15 years a more durable communal facility is provided

Targeting Free Basic Sanitation Services to the poor households
Although both the White Paper on Basic Household Sanitation and Strategic Framework for Water Services mention the poor as the main beneficiaries for the sanitation subsidies, they do not provide a common definition of poverty or any guidelines for targeting subsidies to the poorest households.

Definition of poverty
The following are some of the poverty definitions that are used in South Africa:

- Poverty based on a fixed financial cut-off point.
- Poverty as cluster of problems or deprivations – this definition sees poverty as more than low income but includes factors such as isolation, malnutrition, inadequate access to basic services (water, sanitation); lack of education, gender, low wages and job insecurity.
- Poverty as a set of intangibles – Stats-SA uses this definition, which defines poverty as denial of opportunities and choices most basic to human development.
- Poverty as a lack of productive assets – This refers to capacities as assets and poverty as a lack of assets (natural, physical, human, financial and social) or obstructions in utilising those assets. This definition focuses on the productive use of assets (DPLG, undated).

Approaches used by municipalities to target free basic sanitation services to the poor

The following are examples of approaches used by municipalities to target the poor with free basic sanitation services:

Municipal property valuation

- In Nelson Mandela Metro automatic qualification for free basic services is based on the maximum municipal valuation of the property which depends on the residential area, for example, R20 000 for Despatch, R10 000 in Port Elizabeth and R4000 in Uitenhage.
- For the City of Tshwane the registered indigent with a property of R10 000 or less qualify for 12KL of Free basic water and free basic sanitation
- eThekwini has a limit of R30 000 property valuation to qualify for free basic sewerage and in addition, a system of rising block rebates is provided for households with properties valued between R30 000 and R100 000.
- Msunduzi Municipality's limit for automatic qualification for indigent status is a house and land value of less than R30 000 (similar to eThekwini). Those with property values between R30 001 and R40 000 can apply for registration as indigents subject to the installation of a water restriction device. These households qualify for a reduced rate for water consumption from 7kl-12kl and a reduced tariff for sewerage; households with property value more than R40 000 qualify for a reduced rates if the total household income is between R1740-R2136 per month.

Income – equivalent of two state welfare pension grants

Households whose income does not exceed more than two state welfare pension grants who do not own more than one property must apply and provide proof of income to be registered. The policy also makes provision for child-headed households to qualify for free basic services if the household income does not exceed R2136 per month

Poor households in Body Corporates and retirement centres

The Board of Trustees or Managing agent should apply to the municipal council for the indigent status in respect of the poor owners and the qualifying criteria based on the municipal property valuation. Msunduzi Municipality's indigent policy makes provision for residents of flats to apply for free basic service benefits in their individual capacity if they qualify for the indigent status

From these examples it is clear that there is a need for policy guidelines so that the poor can enjoy equitable benefits irrespective of where they live.

3.1.3 Evaluation of progress in the realisation of the right to free basic water services

The South African Human Rights Commission in its report (SAHRC, 2004) on the evaluation of progress in the realisation of the right of access to water highlighted the following issues:

- The poor and marginalised continued to face inferior access to water and inadequate sanitation.
- Free basic water and sanitation services tended to benefit those who already have access to water and sanitation infrastructure while the poor who lived in dense informal settlements and rural areas continued to have no access to these services.

- Free basic sanitation services were interpreted by WSAs as free basic sewerage and this excluded those without access to waterborne sanitation services. The metros had adequate resources to cross-subsidize free basic water and sanitation services for the poor while the municipalities that were dominated by poor rural communities were not able to cross-subsidize free basic services; they were struggling to find additional financial resources to fund free basic sanitation services in an environment where most households were still without basic sanitation facilities.
- There were no programmes in place for prioritizing water and sanitation service delivery to the HIV/AIDS infected people.
- The SAHRC report raised concerns on the poor sustainability of the water and sanitation services delivered to communities.
- It was also found that there was no common agreement on the definition of the poor.
- Municipalities were using different criteria to target free basic services to the poor.

3.2 Sanitation improvement must be demand responsive, supported by an intensive Health and Hygiene Programme

The principle of demand responsive approach to sanitation delivery and health and hygiene education is based on RDP principles and the White Paper on Basic Household Sanitation of 2001. According to the Water Supply and Sanitation Policy of 1994 "demand" should be understood as the motivation for development originating from within the community, not from some outside agency (including the State) on behalf of the community.
The following shows how this principle has been neglected in the SFWS:

- Strategic Framework for Water Services (2003) has moved away from the demand-responsive approach leaving the WSAs to be responsible for deciding on the best sanitation technology options to be supplied to communities.
- The SFWS is target driven and this has put a lot of pressure on municipalities to adopt supply-driven approaches because these require less inputs from the beneficiary communities, therefore, project delays due to a long time that is required to mobilise community support for the project are avoided.

3.3 Community participation

The principle of public participation in all spheres of government is enshrined in the Constitution of SA:
"Section 151(1e) – obliges municipalities to encourage the involvement of communities and community organisations in local government"
"Section 195 (e) – in terms of the basic values and principles governing public administration – people's needs must be responded to, and the public must be encouraged to participate in policy making".

According to the National Policy Framework for public participation (DPLG, 2005) the government is committed to public participation which genuinely empowers the people not token consultation or manipulation. Public participation should contribute to the capacity building of communities so that they can hold ward councillors and municipalities accountable to them. The international experience in sanitation service delivery has shown that the provision of sanitation services to poor communities fail if the beneficiary communities are not actively involved in the implementation of

sanitation projects (WSP, 2007). The White Paper on Basic Household Sanitation strongly advocates for community participation in all aspects of sanitation service delivery and it also states that communities should share in the economic benefits of sanitation projects through job creation and local economic development.

Section 153 of the Constitution of SA (1996) states that:
"A municipality must structure and manage its administration, budgeting and planning processes to give priority to the basic needs of the community, and to promote the social and economic development of the community."

The White Paper on Local Government (1998) refers to the concept of '*developmental local government'* which is defined as: *'Local government committed to working with citizens and groups within the community to find sustainable ways to meet their social, economic and material needs and improve the quality of their lives'.*

According to the Strategic Framework for Water Services (2003), the provision of water and sanitation services must contribute to the sustainable livelihood and local economic development. The sanitation job creation – stakeholder position paper (2005) provides a framework for an approach to be followed by departments that have a responsibility for the delivery of sanitation services through the local government structures to ensure that sanitation projects contribute to job creation. Sanitation service delivery has a potential to create long-term job opportunities for community members who can be appointed to provide ongoing H&HE and O&M of the sanitation infrastructure.

The SFWS states that government is committed to the promotion of the active involvement of civil society in the provision of sustainable and affordable water services. This would be done through the following mechanisms:

- the supporting the capacity development in civil society organisations;
- encouraging civil society organisations to help monitor sector performance at all levels;
- engaging capacitated community-based organisations to manage water services projects at local level, where appropriate; and
- assisting with the mobilisation of funds for non-government and community based organisations where appropriate.

The national MIG management processes and procedures (DPLG, 2005) make provision for project based capacity building which should include the improvement of the ability of communities to participate in the future operation of the new infrastructure. MIG also makes provision for the evaluation of different designs before final selection.

The Masibambane 11 evaluation report (2007) found that these two provisions of MIG mentioned above are generally overlooked although they are important in ensuring long-term sustainability of the service delivery. The report found that there was limited participation of Civil Society Organizations (CSOs) in the delivery of water and sanitation services. The authors of the report believed that this was due to the different interpretations of who constituted civil society organizations. For example, the Masibambane Civil Society Support Programme (MCSSP) defined Ward Committees as municipal structures not CSOs, whilst the DPLG recognized the Ward Committees as the voice of the civil society.

The Masibambane 11 evaluation showed that CSOs made a strategic contribution to policies on service delivery at the national level but their participation at the provincial level was limited. At a local level, community based organisations and project committees were only used to a limited extent and their role in operation and maintenance as envisaged in the SFWS was minimal.

eThekwini Municipality has a culture of involving communities in sanitation infrastructure delivery. Extensive community education and awareness was conducted in peri-urban and rural communities to highlight the advantages and disadvantages of the various sanitation technology options and the relationship between health and sanitation, good hygienic practices and water supply. The communities were able to make an informed choice of the double pit urine diversion sanitation technology.

The RDP principle of people-centred development is being compromised by the political pressure to meet the sanitation targets at all costs; this has led to the marginalization of communities and they have become spectators in their own development. Limited attention was being paid to the concerns of the beneficiary communities with regards to sanitation technology choices. The political pressure was forcing municipalities to implement unsustainable sanitation solutions that were not responsive to demands of the people but met the delivery targets required by politicians.

Gender mainstreaming in water services delivery
Gender mainstreaming is one of the principles that informs the institutional vision of the SFWS which recognizes that the needs of men and women for sanitation are different. The strategy seeks to ensure that water and sanitation services are provided equitably, affordably, effectively, efficiently and are gender sensitive. To achieve this vision there is a commitment to target women for meaningful roles at all levels in consultations, planning, and decision-making and in operation and maintenance of water services.

The Masibambane 11 evaluation found that more than 50% of WSAs surveyed indicated that they had mechanisms in place to ensure gender mainstreaming, however, site visits found that most WSAs interpreted this as setting quotas for procurement and employment of women. It seems that the concept of gender mainstreaming was seen as referring to issues affecting women; for example, most WSAs surveyed cited celebration of women's day and supporting 16 days of activism against violence on women and children as their contribution to gender mainstreaming.

3.4 Sanitation is about health

The overall goal of improving access to sanitation services is to improve health of people and to protect the environment from the negative impacts of pollution from poor sanitation. This principle puts emphasis on health improvement as the goal of sanitation service delivery, therefore, health and hygiene education should be an integral part of basic sanitation service delivery.

The Strategic Framework for Water Services does not include H&HE in its targets for services; however, it sets a target for hygiene education to be taught in schools by 2005. There is no reference to H&HE for those benefiting from improved sanitation

facilities. The SFWS under the provision of free basic sanitation (FBSan mentions H&HE as one of the challenges. It states that H&HE must be provided in a coordinated manner and funded adequately to make FBSan a reality. It is not clear how it should be funded because the equitable share is supposed to be used to fund O&M costs for FBSan.

Health and Hygiene Education and promotion – The National Sanitation Strategy (2005) emphasizes the fundamental requirement of the White Paper on Basic Household Sanitation which states that Health and Hygiene Education should be an integral component of sanitation service delivery. The approach of using trained community health workers is supported. The role of the Department of Health should be the monitoring of the implementation of H&HE. The departments that are responsible for sanitation infrastructure delivery are required to include a budget for H&HE for the beneficiary communities

Assessment of the integration of H&HE in sanitation service delivery projects
An analysis of 50 WSDPs approved by DWAF between 2003 and 2006 showed that 44% of these WSDPs did not have a budget allocation for H&HE. H&HE was also neglected in a report on Free Basic Services in the Western Cape (Loots, 2003) based on 28 WSAs which showed that 24 out of 28 WSAs were providing Free Basic sewerage to its consumers and there was no allocation for H&HE and also no FBSan was provided to those without full waterborne sanitation.

Duncker et.al (2007) conducted a spot check assessment of MIG water and sanitation projects and found that the majority of beneficiary households did not receive any H&HE and training on the operation and maintenance of their sanitation facilities during the implementation of basic sanitation infrastructure. The study found that two thirds of households assessed did not have a hand-washing facility next to the toilet.

A DWAF report on "Nationwide sustainability audit of sanitation facilities implemented from 1994-2003 "found that the 68% of households interviewed in the eight provinces were not aware of any health and hygiene education conducted in their communities during the sanitation project implementation phase, KwaZulu-Natal was the only province where 83% of households confirmed that they had participated in health and hygiene education programmes. This demonstrated that most municipalities were not putting enough emphasis on health and hygiene education as an integral component of basic sanitation service delivery.

3.5 Sanitation services must be financially sustainable

This sanitation policy principle is advocated by both the White Paper on Basic Household and the SFWS. Both policies emphasize the importance of making sure that the selection of sanitation technology option is based on affordability of O&M by the municipality and beneficiary households.

The MIG Guide stresses that WSAs must have adequate financial and institutional capacity to operate and maintain the complex sewerage systems before opting for waterborne sanitation as a basic sanitation service level. WSAs must also take into consideration the availability of water and associated cost of supplying water for waterborne sanitation.

The MIG guide for municipalities on basic level of services and unit costs (DPLG, 2005) makes the following recommendations for funding higher levels of service with MIG funds:

- Basic sanitation funding for rural or low density areas is restricted to the basic MIG allocation.
- Where the WSAs opt for waterborne sanitation as a basic level of service for dense urban settlements, this maybe fully funded by MIG provided that they can prove through the IDP, WSDP and capital plan that the total sanitation backlogs in its bigger areas are being addressed.

Approaches taken by municipalities to ensure financial sustainability of free basic sanitation services for the poor households include the following:
Cross-subsidization – The high income consumers are charged a higher tariff which includes a subsidy for the free basic sanitation services for the poor.
Subsidies from general revenue – transfers are made from the general revenue account to the income account of the specific water services to fund free basic sanitation services.
Equitable share allocation – transfers based on the DPLG formula to the municipality from the fiscal budget.

According to the SFWS, subsidies for free basic sanitation service should cover hygiene promotion costs and operating costs of providing a basic sanitation service to households. However a selection of municipalities are only subsidising the sewerage tariff.

The Masibambane 11 evaluation report (DWAF, 2007) found that since 1994 the SA government has focused on infrastructure delivery, but limited attention was paid to the operation and maintenance of existing infrastructure. Large budget invested in infrastructure was not matched with adequate budgets for routine maintenance of the assets. This was leading to the deterioration of infrastructure that was implemented prior to 1994 and this was threatening long-term sustainability. MIG funding only financed the infrastructure, it did not make provision for the O&M of the provided infrastructure. Municipalities were responsible for ensuring sustainable operation and maintenance of the new infrastructure.

According to Masibambane 11 evaluation report (2007) the current trend of replacing the bucket sanitation with waterborne sanitation systems has increased the cost of delivering a basic sanitation service because of the need to upgrade water supply and to increase the capacity of sewage treatment plants. The Masibambane evaluation analysed the allocation of ES to identify the funds allocated to the provision of free basic sanitation to the poor and the analysis showed that most of the ES was spent on institutional executive and council support and on finance administration and only minimal funds were allocated to sanitation. The report found that the funds provided through the ES grant for operation and maintenance were not ring-fenced and WSAs were allocating all their sanitation funds to the reduction of the sanitation service backlog.

3.6 Water has an economic value

This sanitation principle stresses the importance of managing water as a scarce resource. The SFWS has a vision of the water ladder which states that "as economic affordability increases and the backlog in the provision of basic services is reduced, it

will become possible for more and more households to be provided with higher levels of services". However, it does not address the issue of water scarcity nor mention the role of water use efficient technologies in the achievement of this vision. With regards to the provision of free basic sanitation, the SFWS states that "in urban areas, where many businesses are located and where residential densities are high, waterborne sanitation is generally the most appropriate technical solution and should be regarded as a basic level of service for the purpose of free basic sanitation policy". Again this section does not make any reference to water conservation and water demand management measures.

The Water Conservation and Water Demand Management Strategy for the water services sector (DWAF 2004) states that the implementation of the strategy should not have a negative impact on the revenue generated by the municipalities from water tariffs paid households. This statement demonstrates a lack of appreciation of water as a scarce resource. WDM interventions could benefit municipalities by reducing the need to develop new sources of water to meet growing water demand. It also worth noting that examples of measures provided in the strategy document for households to reduce water demand such as recycling of wastewater and rainwater harvesting are prohibited by the municipal by-laws. This shows a lack of alignment between the WC/WDM strategy and municipal by-laws.

An analysis of the approaches used by municipalities to deliver free basic water and sanitation services showed that only a few municipalities were using water demand management measures to restrict consumption of water by indigent households.

3.7 Environmental integrity

Environmental sustainability of sanitation services is one of the sanitation policy principles which is very important to achieve the overall goal of improving human and environmental health through the provision of sanitation services.

Section 24(b) of The Constitution of SA states that
"*Everyone has a right*:

- *To have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that –*
- *Prevent pollution and ecological degradation;*
- *Promote conservation; and*
- *Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development".*

The environment is defined as the biophysical element of the natural environment and the so-called "brown" environmental issues which include waste management, water services and environmental health issues (DEAT, 2004).

The White Paper on Basic Household Sanitation of 2001 puts great emphasis on the need to adopt an integrated environmental management approach in the location, selection, design, construction and operations of all sanitation works with special reference to sewage treatment plants and solid waste disposal sites. Environmental education for the general public is recommended so that the public can participate in monitoring pollution. Economic instruments such as "the polluter pay principles" must be upheld.

The SFWS also advocates for sustainable delivery of water services within the context of Section 24 of the Constitution of SA.
In terms of the White Paper on Basic Household Sanitation, the Department of Environment Affairs and Tourism is responsible for monitoring the environmental impacts of sanitation systems and monitoring compliance with environmental policies and guidelines. The SFWS also states that DEAT has a role to play with regards to environmental impact assessments required for water services infrastructure projects. From the search of policy documents from the DEAT website, no guidelines on how the monitoring is being conducted could be found.

Groundwater protocol
DWAF has developed a protocol for managing the potential groundwater contamination from on-site sanitation systems. The protocol is designed to assist the sanitation planners and practitioners to make sure that groundwater is protected from potential adverse effect of on-site sanitation systems. It stresses the importance of involving communities in the assessment of the contamination risk; this is necessary to educate communities about the importance of protecting groundwater resources from contamination. A sanitary surveillance programme involving members of the local communities is recommended by the protocol. However, from the sanitation evaluation reports reviewed there was no evidence that communities were involved in the monitoring of groundwater quality.

Environmental issues at local government level
Although the IDP process identifies the environment as a cross-cutting issue that must be incorporated in all aspects of municipal planning, there is limited guidance provided on how municipalities should do this (DEAT, 2004) and the quality of environmental planning is not assessed for compliance with environmental legislation. The DEAT report (2004) identified the following constraints that must be addressed in order to create an enabling environment for municipalities to implement their mandate of protecting the environment:

- Lack of clarity on the mandate of local government – the environment is not listed as local government matter in Schedule 4b and 5b of the Constitution of SA (1996).
- Low priority given to the environment by municipalities with limited resources (human and financial)
- Poor quality of environmental planning in municipalities – Low profile of the environment within IDPs. It is recommended that DEAT should provide municipalities with guidance on how to address the environment within the IDP.
- Institutional structures for environmental management must be established at municipalities with guidance from DEAT.

4. OPERATION AND MAINTENANCE OF SANITATION SYSTEMS

Proper operation and maintenance of sanitation systems is very important for ensuring long-term sustainability of sanitation services. All sanitation policies and strategies stress the importance of selecting sanitation technology options based on availability of technical and financial resources to cover the cost of O&M of these services.

The National Sanitation Strategy (DWAF, 2005) emphasizes the importance of conducting feasibility studies prior to the selection of sanitation technology options. Most sanitation projects have failed due to business plans that were based on generic solutions without investigating the appropriateness of the sanitation technology options for the local context. Planning for O&M must be undertaken during the planning phase of sanitation infrastructure projects so that the selection of a sanitation technology is based on affordability of ongoing O&M. For example, the planning of VIP toilets should take into consideration the cost of emptying or replacement requirements when the pit is full.

The following are some of the issues that must be addressed by municipalities in the selection of sanitation options (DWAF, undated):

- Operation and maintenance requirements – WSAs should discuss the O&M requirements with the communities during the planning phase so that communities can have a full understanding of financial implications of their sanitation technology choices.
- User education – WSAs must be supported by the provincial government in providing user education on household responsibilities for payment and proper operation and maintenance of the sanitation systems.

The MIG Guide (2005) for the basic level of services highlights the following considerations for selecting a basic sanitation service other than the VIP toilet:

- The WSA must have adequate funds for capital investments and ongoing O&M of the selected sanitation system.
- When WSAs opt for higher levels of sanitation service they should have adequate financial and institutional capacity to operate and maintain the complex sewage systems.
- Water availability, affordability and management required for higher levels of service must be taken into consideration.

DPLG (2007) has developed guidelines to help municipalities to improve sustainability of services after an assessment of existing government policies showed that all government policies made provision for sustainable delivery of infrastructure and services. The assessment found that municipalities were not complying with the principles of sustainable service delivery due to a variety of reasons such as lack of clarity on roles and responsibilities, lack of guidelines, organisational capacity in engineering and accounting and lack of clear common principles of sustainable infrastructure and services delivery. To achieve sustainable service delivery, the guide recommended that municipalities must have an O&M Plan at all times; the plan must make provision for the periodic/routine, predictive and preventative maintenance.

The IDP of eThekwini Municipality acknowledged the importance of ongoing maintenance of existing infrastructure networks and replacement of aging network

component to avoid a huge financial burden due to deterioration of poorly maintained infrastructure (eThekwini Municipality – draft WSDP Vol 2 July 2004).

According to the Masibambane 11 evaluation report (2007), since 1994 the South African Government has focused its resources on the delivery of infrastructure and it has paid limited attention to operation and maintenance of the existing infrastructure. Consequently some of the people who had services prior to 1994 are now joining the queue for new infrastructure because of the deterioration of old infrastructure due to lack of maintenance budgets.

Dealing with full VIP toilets

The draft national water service regulation strategy (DWAF, 2007) raises a policy question on the responsibility for maintenance of VIP toilets when they are full and need emptying. It can be argued that the government which invested in the VIP toilets should be responsible for supporting households to empty the pits when they are full. The regulator should be responsible for monitoring compliance with groundwater protocol, technical specifications for VIP toilets, monitoring pit status and environmental health conditions. Households should be responsible for monitoring the status of the pit and municipality should monitor environmental impacts of on-site sanitation systems and take appropriate steps to address pollution problems.

The SFWS states that in the foreseeable future rural households should be responsible for emptying or relocating their VIPs without any subsidy from the municipality. It could be argued that this approach is not pro-poor because the rural people are the poorest and if they have no subsidy to empty or relocate their full VIP toilets they might revert back to the unsafe sanitation practices. According to model water services by-laws (DWAF, 2005) Section 135 – "The operation of on-site sanitation services and all costs pertaining to it remains the responsibility of the owner of the premises, unless the on-site sanitation services are subsidised services determined in accordance with the municipality's by-laws relating to credit control and debt collection". A DWAF Report (2005) on the sustainability audit of sanitation facilities found that the design of the slabs for most VIP toilets did not have a manhole through which the pit sludge could be emptied.

eThekwini Municipality was identified as the only municipality that had developed a comprehensive policy for emptying full pits. This municipality selected the Urine Diversion Sanitation technology for meeting the basic sanitation needs of the rural households. The vault of the UDS can be emptied by the household at no cost to the municipality. Local small businesses have been established for providing the emptying service for UDS toilets at R25 per vault which is very cheap when compared to R700 being paid by municipality to empty one household VIP toilet (Macleod, 2005).

The Council has a policy of providing a pit emptying service for about 100 000 pit latrines within the eThekwini Municipality boundaries. These are located in rural and peri-urban areas which were incorporated into eThekwini Municipality. The service is provided once every five years at no cost to the households; however, households requiring pit emptying service at shorter intervals than five years have to pay the full cost of the service (Macleod, 2005). The Council was using a labour intensive manual method to empty the pits and this contributed to job creation. The pit sludge was

transported to sewage treatment plants where it was processed with the rest of sewage from waterborne sanitation systems.

5. MONITORING AND EVALUATION OF THE IMPLEMENTATION OF THE SANITATION POLICY

Monitoring and evaluation is necessary to monitor progress and ensure compliance with national norms and standards. The White Paper on Basic Household Sanitation 2001 identified the following broad categories of M&E required to assess progress in the implementation of the sanitation policy:

- The involvement of the community;
- The promotion of health and hygiene awareness and promotion;
- The impact of sanitation improvement programmes on the health of communities;
- Compliance with the integrated environmental management approach and environmental impacts of sanitation systems;
- Development of common norms and standards, guidelines and other tools;
- Programmes to clear the backlog;
- Integrated development plans as well as the Water Services Development Plan and Integrated Investment Plan components;
- The allocation, application and management of funds;
- The construction of sanitation facilities.

The White Paper on Basic Household Sanitation allocated the responsibility for M&E to all the three tiers of government and DWAF as the sector leader has a responsibility for the regulation of water services delivery.

The Strategic Framework for Water Services also refers to monitoring but it does not make any reference to the evaluation of the impact of the services provided. It states that monitoring should take place at the local, regional and national levels and lists role-players who should be involved in monitoring. It does not provide information on specific aspects of sanitation that should be monitored nor does it provide guidelines on how this should be done.

The Masibambane 11 Evaluation (2007) highlighted the following issues on the M&E for water services:

- The focus of M&E for MIG funded water and sanitation projects was on the expenditure, number of days of employment for women, youth, people with disabilities, etc.
- There was no monitoring of the quality of assets provided and proper operation and maintenance of the provided infrastructure.
- DPLG did not monitor the quality and ongoing use of assets funded under MIG. The municipalities were given the responsibility of quality assurance for the infrastructure delivered but due to a lack of capacity they tended to rely on consultants to undertake this task.
- M&E system focused on input and outputs and the impacts of the programmes were not evaluated, for example, the impact of sanitation on health improvement and the environment was not undertaken.
- It was also found that many WSAs and Project Management Units (PMUs) were struggling to understand the M&E guidelines and tools provided by DWAF.

Jones and Williamson (2005) in their report on the review of the sector collaboration highlighted the problem of lack of information on the state of services in WSAs and their sustainability. DWAF has not put in place processes for measuring the

performance of WSAs. This report noted the lack of processes to make WSAs accountable to the consumers. It recommended the establishment of suitable avenues for enabling citizens to voice their concerns with the quality of water services provided by WSAs.

The SAHRC report (2004) found that there were few monitoring bodies that were responsible for ensuring that water policies benefited the poor. This report recommended that DWAF should establish monitoring bodies at local level, regional and national level and put in place proper reporting mechanisms to facilitate better coordination of the monitoring activities. According to DPLG the monitoring of the implementation of policies and legislation at municipal level was weak because municipalities, especially rural municipalities, lacked technical support, adequate revenue bases and capacity to deliver infrastructure.

SAHRC (2004) in its capacity as an assessor of progress in the achievement of the right of access to water and sanitation service for the poor was concerned about the lack of information on the functionality of the infrastructure provided. SAHRC recommended that the quality of the service provided should also be monitored.

DWAF highlighted a lack of a common approach to sanitation infrastructure delivery at a provincial government level where different provincial government departments were using different approaches and standards, especially regarding subsidy levels and maximum unit costs.

6. SANITATION SECTOR COORDINATION

The White Paper on Basic Household Sanitation (2001) outlines the following coordination mechanisms for sanitation service delivery:

National level
The National Sanitation Task Team is responsible for coordination of sanitation interventions by the 8 national sanitation sector departments. To ensure better alignment between sanitation delivery and other municipal infrastructure programmes, the policy makes provision for the NSTT to be re-established as a sub-committee of the Municipal Infrastructure Task Team (MITT). DWAF as the national sanitation coordinator should be responsible for convening the sanitation sub-committee meeting and must ensure the participation of all the relevant sector stakeholders.

Provincial level
At provincial level co-ordination of sanitation interventions is the responsibility of provincial government and must continue to be achieved through the Provincial Sanitation Coordinating Forums, representatives of District and metro municipalities and relevant national governments to participate in these forums. These meetings will be chaired by provincial representatives.

District or Metropolitan level
Coordination of sanitation interventions at local level is the responsibility of District Municipality or Metro as the Water Services Authority. The Integrated Development Plan process should be the mechanism for integration of sanitation at the local level and provide a linkage with provincial and national government counterparts. The WSDP should provide a plan for the provision and operation of sanitation services at the local level.

The Strategic Framework for Water Services (2003) mentions the National Sanitation Task Team and Provincial Sanitation Task Teams as sanitation coordinating bodies at national and provincial levels, respectively. It states that provinces and regions can establish coordinating mechanisms that are appropriate for their needs. It also recognizes the Water Services Sector Leadership Group as an informal national forum for sector partners established for the water services sector coordination.

The Masibambane Programme has set up provincial coordinating sector forums that report to Masibambane Coordinating Committee which in turn reports to the Water Services Sector Leadership Group.
It is not clear how the parallel water services sector coordination bodies' impact on the effectiveness of the sanitation coordination.

The establishment of the national sanitation task team (NSTT) as a sub-committee of the Municipal Infrastructure Task Team (MITT) is evidence of an attempt to co-ordinate sanitation initiatives in this sector. Similarly, Provincial Sanitation Task Teams (PSTTs) have been set up in each province to coordinate the provincial sanitation effort. Evidence of collaboration can further be seen from the interaction that happens between DWAF, Department of Health and National Department of Housing on Health and Hygiene Education programme. This collaboration is also seen with the National Department of Education in terms of school sanitation. For instance, DWAF and DOH developed a Health and Hygiene Education Strategy

(February 2006) on one hand, and DWAF and NDOE developed a school sanitation strategy, on the other hand. At a provincial level, similar arrangements using provincial forums such as PSTT are in place, albeit at junior level or below a Deputy Director level.

While recognizing the coordination efforts of various forums such as PSTTs, the lack of coordination plan approved by the Head of Departments (HODs) tend to weaken the provincial systematic services delivery model. Sanitation and water do not fall under a provincial government level; they fall under National DWAF competence as opposed to provincial role in institutional sanitation and the role of local government in the provision of household sanitation. It is therefore not easy to integrate sanitation at the provincial level. In most provincial sanitation strategies, with the exception of the North West, Mpumalanga, Free State and Limpopo are championed by the MECs for Housing and Local Government, and organized local government at executive levels, they tended to have gaps in addressing, *inter alia*:

- standards and norms;
- understanding of sanitation within the context of integrated planning (rural and urban dimensions);
- agreement on implementation processes;
- research analysis and knowledge sharing quality and content;
- integration of health and hygiene education into sanitation infrastructure delivery projects;
- monitoring and evaluation of sanitation service delivery.

The review of the water services sector collaboration in South Africa conducted by Jones and Williamson (2005) highlighted the following issues on sanitation coordination:

- The three provinces that were supported by Masibambane 1 have stronger sanitation coordination structures:
  - The Eastern Cape has the Integrated Water and Sanitation Management Forum (IWSMF) which brought together key role players in water services sector such as Regional DWAF, Provincial DHLGTA, Councillors, WSAs, Department of Health and Civil Society organisations. Technical working groups were established to support this decision-making forum.
  - KZN has the WATSAN as a water and sanitation coordination group legislated by the KZN provincial government.
  - Limpopo created a coordinating forum called Collacom.

- Collaboration has not been as successful in other provinces due to several reasons such as lack of interest in some regional DWAF offices to take the lead and failure of National DWAF office to enforce a consistent approach to sanitation coordination at the regional levels.

- At national level, Masibambane Coordinating Committee was established as a structure for collective reporting to the donors. This committee has representatives from DWAF, DPLG, SALGA, Civil Society and representatives of provincial fora and donors.

- The Water Services Sector Leadership Group (WSSLG) was established for the sector leaders to share a common vision and work in alignment to meet the national objectives and sector goals. Its major role is strategic direction

and coordination of the water services sector; its mandate is informal but its existence was formalised in the Strategic Framework for Water Services.

- The current sector collaborative structures include WSSLG as the highest body and Masibambane Coordinating Committee and provincial sector forums responsible for collaborative development of strategies and plans and a sanitation core group was established under the auspice of the WSSLG.

Jones and Williamson (2005) noted that sanitation sector collaboration was proving to be more challenging because sanitation was currently highly politicized as large budgets were channelled into sanitation infrastructure to meet the sanitation delivery targets. The report indicated that DWAF and SALGA were cooperating well on water related issues but on matters pertaining to sanitation the relationship was not that smooth. This was due to the urban councillors who were refusing to accept VIP toilet as a basic sanitation service for urban households.

Jones and Williamson (2005) identified a problem of poor participation of important partners such as the National Treasury (national and provincial levels) in the sector collaboration structures such as WSSLG and MCC. DPLG also showed a poor participation record in the water services coordination bodies. The authors of the report believed that the poor participation of DPLG and National Treasury was responsible for inconsistencies in policy-making among the sector departments.

7. KEY ISSUES EMERGING FROM THE SANITATION POLICY ANALYSIS

This chapter provides a summary of the aspects of the sanitation policy that are misunderstood and/or misinterpreted.

7.1 Policy issues

There was a misalignment between the Strategic Framework for Water Services and the policy principles of the 2001 White Paper on Basic Household Sanitation which are based on international accepted best practice and are derived from the ANC Reconstruction and Development Programmes. The difference in the two policy documents reflects the evolution of the sanitation policy from a community – managed approach to a municipality-driven delivery. This change was out of step with international practice where supply-driven approaches have been ditched in favour of community-led total sanitation approaches because of the recognition that poor households were best placed to implement sustainable sanitation solutions.

Access to basic sanitation as a human right
The White Paper on Basic Household Sanitation makes provision for the provision of free basic sanitation to the poor but it does not spell out how this should be done. The Strategic Framework for Water Services provides more details on how the Free Basic Sanitation Services should be delivered. However, the way this policy is being implemented by municipalities varies; the majority of municipalities that are implementing this policy have taken the approach of providing free basic sanitation services to the indigent households with access to waterborne sanitation. The approaches used to target the indigent municipalities vary with household monthly income limit and the municipal property valuation being used by the different municipalities. The sanitation policy does not provide a definition of poor households.

Municipalities are faced with a challenge of providing free basic sanitation services to households who have waterborne sanitation systems while there are poorer households who do not have basic sanitation facilities therefore cannot benefit. This seems to go against the principle of "Some for all rather than all for some".
The lack of uniform approach in the targeting free basic sanitation services to the poor demonstrated that there was a need for DWAF and DPLG to provide clear policy guidelines to assist the municipalities in targeting free basic services to the poor in an equitable manner.

Definition of a basic sanitation service
The broad definition of a basic sanitation service as anything from a VIP toilet to waterborne sanitation seems to be contributing to the different interpretation of the basic sanitation service level by municipalities. There was a need to revisit this definition of the SFWS within the context of access to basic sanitation as a human right. Important aspects of sanitation such as refuse removal and grey water disposal in dense urban informal settlements were generally neglected.

Community participation
The principle of community participation in sanitation service delivery is not strongly advocated by the Strategy Framework for Water Services. Consequently, there is a lack of pressure on municipality to involve the communities in the delivery of sanitation services. A review of successful sanitation projects shows that all are characterized by a strong role for the community in the implementation of the

sanitation projects and involvement of community leaders in the decision-making process.

Provision of basic sanitation service to dense urban informal settlements
There was currently a lack of policy guidelines for the delivery of basic sanitation services to dense urban informal settlements. Consequently, metros that are faced with an ever increasing sanitation backlog due to rapid urbanisation experienced in urban informal settlements are forced to use sanitation technologies that are considered to be below RDP levels such as communal toilets. There is no clear policy guidelines provided by DWAF to assist them in addressing the challenge of sanitation delivery in these dense urban settlements.

Integration of H&HE
Poor integration of H&HE into sanitation infrastructure delivery and provision of FBS continues to be a challenge for some municipalities although the national sanitation policy and sanitation strategies strongly emphasize the importance of H&HE in the improvement of health. MIG monitoring only focuses on counting the number of toilets built and number of jobs created. However, some municipalities continue to have a strong focus on health and hygiene education.

Environmental integrity
Currently, there is limited attention paid to the environmental impacts of sanitation services, this maybe due to a lack of enforcement by the Department of Environment. All the definition of basic sanitation makes reference to wastewater disposal but there are no policy guidelines for managing wastewater in dense urban informal settlements with dry on-site sanitation. There are also no policy guideline for ensuring that the sanitation service level matches the water supply service level to avoid a problem of wastewater disposal where household have house reticulation and dry on-site sanitation systems. Lack of proper wastewater management systems in dense urban informal settlements poses a health hazard for residents and contributes to the pollution of water resources.

0peration and maintenance of sanitation infrastructure
All national sanitation policy documents, strategies and guidelines put a lot of emphasis on the importance of basing the choice of sanitation technology options on the affordability of O&M, but in reality the some municipalities did not consider the O&M costs of on-site sanitation systems and poor households were burdened with high maintenance. The current focus on meeting the sanitation infrastructure delivery targets was responsible for lack of adequate budgets for O&M of sanitation infrastructure because municipalities were allocating most of the sanitation budgets to the eradication of the basic sanitation infrastructure backlog. There was a need for more resources to be allocated and ring-fenced for O&M for sanitation and effective monitoring of the implementation of O&M plans in order to ensure that sanitation services were sustainable in a long term.

Although the VIP toilet was being promoted on a large scale as a basic sanitation technology, there was no policy for dealing with pit emptying, disposal of human waste and relocation of full pits where this was not feasible. DWAF and its sector partners should urgently develop policy for dealing with full VIP toilets.

7.2 Monitoring and Evaluation

The current focus on monitoring inputs and outputs must be balanced by the evaluation of the impact of the sanitation improvement programmes on the health and livelihoods of the poor. The quality of the sanitation service provided to the households and environmental impacts should also be evaluated on a regular basis.

7.3 Sector coordination

The current situation of sector coordination by two parallel DWAF led structures (NSTT and WSSLG) should be reviewed in order to harness the effective coordination of water and sanitation service delivery. With the current high demand for waterborne sanitation service, sanitation cannot be coordinated separately from water services.

8. CONCLUSIONS AND WAY FORWARD

The desktop analysis of the understanding and interpretation of sanitation policy and programmes has focused on the main principles that are critical to sustainable sanitation service delivery. Stakeholders will be consulted to get more information on the aspects of sanitation policies that are misunderstood and misinterpreted by those responsible for implementing sanitation programmes.

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APPENDIX D

EXAMINATION OF UNDERSTANDING AND INTERPRETATION OF THE SANITATION POLICY AND PROGRAMMES

STAKEHOLDER CONSULTATION REPORT

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1. INTRODUCTION

1.1 Context

The stakeholder consultation process was guided by the findings from the desktop analysis that focused on the review of international and national experience in sanitation service delivery and analysis of sanitation policy, strategies and guidelines at national and local government levels. The purpose of the stakeholder engagement process was to seek inputs on aspects of sanitation policy that are misunderstood and misinterpreted including the identification of sanitation policy gaps.

1.2 Aims of the study

The specific aims of the stakeholder consultation process were the following:

- To engage the sanitation sector stakeholders in the identification of aspects of the sanitation policy that are misunderstood and misinterpreted;
- To seek stakeholder inputs in the identification of sanitation policy gaps and recommendations for addressing the gaps;
- To conduct a survey of selected district municipalities to assess their experience of implementing the sanitation policy.

1.3 Scope of the study

The study targeted different stakeholder groups such as representatives of sanitation sector government departments at national level, SALGA, sanitation experts, researchers and DMs that are WSAs from Eastern Cape, KwaZulu-Natal and Limpopo provinces. These provinces were targeted because they collectively have the largest number of households without access to basic sanitation services[1]. The report presents views of these target groups on aspects of the sanitation policy that are misunderstood and misinterpreted and their perceptions of the long-term sustainability of basic sanitation services including Free Basic Sanitation services (FBSan).

1.4 Methodology

Face-to-face interviews were used to engage sanitation sector stakeholders at a national level, District Municipalities in the Eastern Cape, KwaZulu-Natal and Limpopo provinces were interviewed telephonically and electronic questions were used to interview researchers and sanitation practitioners. Responses were received from a total of 17 DMs and a total of 32 people participants representing municipalities, Department of Water Affairs, SALGA, Development Bank of Southern Africa, CSIR, consulting companies and researchers. (Refer to Annexure 1 for a list of participants).

2. FINDINGS – SANITATION POLICY UNDERSTANDING AND INTERPRETATION

2.1 Misunderstood aspects of the sanitation policy

The participants identified the following aspects of the national sanitation policy framework that are currently misunderstood by those responsible for the implementation of sanitation programmes:

2.1.1 Health and Hygiene Education

The sanitation policy did not differentiate between health and hygiene promotion, awareness and education. This problem was also found in the 2003 Strategic

[1] DWAF – Water Services National Information System (March 2008): Backlog statistics for the three provinces – Limpopo = 2.86 million people; KZN = 2.73 million people and EC =2.15 million people without access to basic sanitation services

Framework for Water Service which refers to 'Health and hygiene promotion' in its definition of free basic sanitation service. There was need for structured hygiene education guidelines for the implementing agents; these guidelines should provide a clear definition of hygiene education, awareness and promotion and guidance on when it was appropriate to use health and hygiene promotion or awareness or education should be provided. The policy definition of Health and Hygiene Education must be revisited and clear distinction between sanitation-related health and hygiene education and broader health promotion aspects which were part of primary health care provided by the Department of Health should be made.

Although the sanitation policy recognizes the importance of hand washing, the hand washing facility was not included as compulsory component of the basic sanitation infrastructure where households were provided with dry on-site sanitation systems without access to water near the toilet.

There was no clarity on the roles and responsibilities for Health and Hygiene Education between the Water Services Authority and Municipal Health Division. Current institutional arrangements at the local level were making it difficult to budget for ongoing of H&HE. Views were expressed that Water Service Authorities should only be responsible for the H&HE linked to the provision of basic sanitation infrastructure and the Environmental Health Practitioners located at the DMs or provincial Health departments must be responsible for on-going H&HE as a component of Primary Health Care Education funded by the Department of Health. The WSAs would be responsible for ensuring that on-going H&HE was provided by the Dept of Health.

2.1.2 Definition of basic sanitation service

- Contradictions in the definition of basic sanitation between the 2001 White Paper on Basic Household and the 2003 Strategic Framework for Water Services created problems for municipalities. There was a need for policy guidance on the definition of a basic sanitation service as opposed to appropriate sanitation services.
- Municipalities were faced with a problem of urban households that were demanding a free waterborne sanitation service based on the definition provided in 2003 SFWS. This put municipalities in a difficult position of having to make a decision on whether to allocate the limited resources to subsidizing those who already have sanitation infrastructure while neglecting those without any basic sanitation infrastructure.
- MIG Project Business Plan Technical Report did not require inclusion of the life cycle operation and maintenance requirements for on-site sanitation projects because the expectation was that households would be responsible for O&M. This was not in line with current definition of a basic sanitation service.

2.1.3 Community involvement and household responsibilities

- The 2001 White Paper on Basic Household Sanitation states clearly that households were expected to make a contribution to the construction of their basic sanitation facilities, on the other hand, the 2003 SFWS states that provision of the basic sanitation service was the responsibility of the WSA and it did not make any reference to the involvement of communities in the management of sanitation infrastructure projects.
- This contradiction in the two policies has led to a situation where households were reluctant to contribute anything to the construction of their toilets and even those that dig their pits demanded payment for the labour.

- There was no meaningful involvement of the community in the selection of the sanitation technology options; communities were shown the various sanitation technology choices or models of toilets but the final decision was taken by the WSA based on available budgets.
- Responsibility for O&M of on-site was another area where the two sanitation policy documents were contradictory in terms of the responsibility for O&M. Most rural DMs had decided to allocate the responsibility for O&M of dry on-site sanitation systems to the households; they argued that by providing a free basic sanitation facility, they had met the constitutional obligation of ensuring access to a basic sanitation service as a human right.

2.2 Misinterpreted aspects of sanitation policy

2.2.1 Implementation of H&HE

- The sanitation policy was clear on the importance of including H&HE in the delivery of a basic sanitation service but the implementation was a problem. Funds allocated for H&HE were used for other things because there was no enforcement of compliance.
- DWAF guidelines for costing basic household sanitation infrastructure made provision for a budget allocation for H&HE and community participation but WSAs were using the H&HE budget for other items.
- The problem was that sanitation delivery was driven by engineers who lacked an appreciation of the importance of H&HE in the delivery of sanitation infrastructure.
- There was no M&E system for H&HE, the focus of M&E for sanitation was on counting the number of toilets constructed and the number of jobs created for women, youth and disabled. Specific issues relevant to H&HE such as availability of hand washing facilities next to the toilet, easy access to water and availability of soap for hand washing were not monitored.
- Environmental Health Practitioners were supposed to be responsible for ongoing H&HE but their location at the DM or provincial government level made it difficult to integrate their activities into those of WSAs.
- Inadequate budgets were allocated to health and hygiene education and awareness.
- Poor interpretation of the roles and responsibilities for H&HE between DWAF and the Dept of Health.
- The implementing agents did not provide any user education on the proper operation and maintenance of the sanitation facilities was provided to beneficiary communities.
- Most municipalities were implementing H&HE as a once-off intervention that was linked to the delivery of basic sanitation infrastructure.
- The Bucket Eradication Programme did not include any H&HE and user education was limited to communities provided with alternative sanitation technology; the assumption was that all households already knew how to operate and maintain their new waterborne sanitation facilities.
- The impact of the quality and quantity of water on personal hygiene practice and health was not addressed.

2.2.2 Technical aspects of sanitation

- No quality control provided to ensure that the sanitation infrastructure was compliant with the design standards such the size of pits, slab quality and superstructure quality.
- No quality assessors were employed to monitor the quality of toilets provided to households.

- Households were not empowered to monitor and report poor quality infrastructure to the relevant government institutions.
- Lack of processes to make service providers accountable to the households.
- Lack of understanding of the different sanitation technologies.
- Poor interpretation of the requirements for sustainable sanitation services.
- The design of slabs of VIP toilets did not make provision for pit emptying.
- Provision of waterborne sanitation not linked to the available capacity of the wastewater treatment plants.
- Lack of regulation of the quality of sewage effluents for compliance with the national effluent discharge quality standards.
- Engineering profession was guilty of implementing inappropriate sanitation technology solutions
- Urine Diversion Sanitation technology was poorly interpreted.
- The cost of water not taken into consideration when selecting waterborne sanitation technologies for poor households.
- Water conservation and water demand management strategies were not integrated into sanitation service delivery.
- Most municipalities did not have O&M plans for VIP toilets and there were also no plans for long-term sustainability of VIP toilets.

2.3 Weak areas of the sanitation policy

The following are some of the weak areas in the sanitation policy that were identified by the participants:

- Unrealistic targets set in the 2003 SFWS which did not take into account the lack of capacity in local government institutions were a potential threat to the long-term sustainability of sanitation infrastructure provided to households.
- Provision of higher levels of service to poor households based on the reliance on fiscal transfers to cover operation and maintenance costs posed a threat to long term sustainability.
- The following issues facing rural households and WSAs with respect to the dry on-site sanitation systems need further clarification:
  - Who should be responsible for servicing these systems?
  - What systems and facilities were in place to dispose sludge removed from the pits where it was not feasible to treat it in wastewater treatment works?
  - How could communities deal with neighbours that continued with open defecation despite having access to a VIP toilet?
- How to handle non-biodegradable solid waste in rural areas and which institutions should be responsible for educating the rural communities on proper waste disposal methods.
- The sanitation policy did not address the provision of public toilets in urban and rural areas.
- The pressure to meet the 2010 target for the elimination of sanitation backlog has led to an imbalance between resource allocation to new capital projects, ongoing O&M and refurbishment of existing sanitation infrastructure.
- Refurbishment and upgrading of the capacity of existing sanitation infrastructure was neglected.
- VIP toilets were not suitable for dense urban informal settlements because of difficulty of emptying the full pits due to lack access roads. Other alternative sanitation technologies should be considered for dense informal settlements.
- There was a difference in focus between DPLG and DWAF – DPLG was focusing on building the toilets to meet the numbers without paying attention

to sustainability issues while DWAF as the sector regulator had a responsibility for ensuring compliance with sanitation policy.
- School sanitation – dysfunctional toilets, blocked, broken, vandalised and used as storage for broken school furniture. In some schools the smelly toilets were kept locked so that children could not use them anymore.
- DEAT was not playing its role of regulating compliance of sanitation projects with environmental quality management legislation.
- The reality faced by municipalities with a large rural population that lacked access to basic sanitation infrastructure was the high cost of providing services to sparsely populated rural communities which were located far away from the municipality offices. Poverty prevalent in these areas precluded a possibility of cost recovery to finance some of the costs associated with the provision of basic sanitation services to these communities.

2.4 Sanitation policy gaps

- There was a need for clear compulsory national standards for both basic and waterborne sanitation service levels – it was difficult to regulate if norms and standards were not clear. Current compulsory national standards were very limited and they focused mainly on water issues (Section 9 of the Water Services Act).
- There was a need to align the SFWS with the White Paper on Basic Households Sanitation and update sanitation policy to meet the current realities faced by WSAs.
- There was need a holistic sanitation policy that included basic sanitation, intermediate and higher levels of service in order to facilitate sector regulation.
- Policy on O&M which clarifies role and responsibilities of the different stakeholders was needed. There was a need to separate the operation from maintenance in dry sanitation systems and the households should be responsible for operation and routine maintenance and pit-emptying and sludge disposal should be the responsibility of the WSA.
- Sanitation policy for institutional sanitation was needed and the lack of policy for public toilets in urban and rural areas should also be addressed.
- There was a need for the clarification of roles and responsibilities for H&HE between DWAF and the Dept of Health.
- Policy was required to guide municipalities in the provision of temporal and emergency sanitation facilities to dense urban informal settlements.
- The sanitation ladder needed to be extended so that waterborne users could be encouraged to adopt water efficient technologies.
- There was a need for greater emphasis on decentralised systems that lead to local recycling and re-use of wastewater at a household level.
- The quality sewage treatment effluent discharge must be improved in order to prevent pollution of water resources.
- There was a need for a policy on the use of human waste and nutrients available from the treatment of wastewater for use as a resource.
- There was a need for a greater emphasis on membrane processes for wastewater treatment for pathogen removal.
- Sanitation policy must make provision for enforcement of sustainability compliance and managers must be rewarded for putting in place strategies for sustainable sanitation services;
- Policy on grey water management is required; it should be integrated into dry on-site sanitation service delivery for urban dense informal settlements.

- The sanitation policy should provide municipalities with a flexible guide that considers the needs and culture of the different target groups as well as the capacity of the different categories of municipalities.

3. SUMMARY OF FINDINGS FROM THE SURVEY OF 17 DM'S

These findings are based on a survey 17 District municipalities from Eastern Cape (5), KwaZulu-Natal (9) and Limpopo (3) provinces.

3.1 Free Basic Sanitation Policy

The 5 DMs surveyed in the Eastern Cape did not have a free basic sanitation policy; however, all of them were subsidizing waterborne sanitation services and providing free VIP toilets to rural households. Two DMs from KZN had policy guidelines for FBSan services and three were in the process of developing the FBSan policies. Zululand DM was providing a subsidy for waterborne sanitation service. All three DMs surveyed in Limpopo province were not providing free basic sanitation services but they were providing free basic water and electricity under the indigent support policies.

3.2 Integration of H&HE into the Free Basic Sanitation services

All the EC District municipalities surveyed were only providing a once-off H&HE that was linked to the provision of basic sanitation infrastructure. More than 50% of KZN DMs surveyed were providing H&HE on ongoing basis as a service; they had put systems in place to deliver H&HE as a service. Capricorn and Sekhukhune DMs were using Environmental Health Practitioners to provide H&HE on an ongoing basis. Local Community health workers were trained to provide user education and hygiene awareness in their communities.

3.3 O&M plans for VIP toilets

Only one out five DMs surveyed in the EC had O&M plans for VIP toilets, on the other hand, 7 DMs from KZN had trained households to perform O&M for their toilets and some DMs were planning to provide support in desludging of the pits when they are full. Only two KZN DMs have O&M plans for VIP toilets. Capricorn was still investigation suitable models for O&M of VIP toilets and both Mopani and Sekhukhune DMs had no plans for O&M of VIP toilets because they had allocated the O&M responsibility to households.

3.4 FBSan linkage with job creation and poverty reduction

All KZN DMs surveyed were using local labour to implement sanitation projects and accredited training was provided in most cases. The picture was different in the Eastern Cape where 3 out of five DMs had not created any job opportunities for the local people. All three DMs from Limpopo provinces were using local labour to construct toilets and training was provided according to the principles of the Expanded Public Works Programme.

3.5 Challenges

The following challenges were identified by DMs:

- OR Thambo DM had a problem of poor dysfunctional oxidation ponds which led to poor effluent discharge into Umtata River thus posing a threat to human health and the environment.
- UKhahlamba and Alfred Nzo DMs had a problem of poorly constructed VIP toilets, for example, the superstructure was too narrow and short, therefore not suitable for use for use by adults.

- There was a problem with the limit on the subsidy prescribed by DWAF and MIG because it limited creativity in the provision of durable and sustainable sanitation infrastructure in poor municipalities. The subsidy limits were suitable for Metros because they had capacity to generate local revenue to top up the funding for sanitation infrastructure, while poor municipalities did not have access to any additional revenue.
- Some DMs needed DWAF guidance in the development of their Free Basic Sanitation policy

3.6 Recommendations

The participating DMs made the following recommendations for improving the implementation of the sanitation policy:

- Free Basic Water allocation should be increased to accommodate the water requirements for free waterborne sanitation services.
- Funds should be allocated to poor municipalities for the upgrading and refurbishment of existing wastewater treatment infrastructure
- Compliance with sewage effluent discharge quality standards should be enforced to protect water resources from pollution.
- Municipal by-laws were needed to enforce compliance with design standards for VIP toilets.
- Movable superstructure for VIP toilets should be promoted to ensure long term sustainability of the sanitation infrastructure.
- DWAF and MIG should take into consideration the plight of poor municipalities when setting the subsidy limits for basic sanitation infrastructure.

4. CONCLUSION AND WAY FORWARD

The findings from the stakeholder consultation were taken into consideration in the preparation of the final research report.

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