

The African Sanitation and Hygiene Conference will be held in South Africa from 29 July to 1 August 2002. The overall goal of this conference is to accelerate the progress of sanitation and hygiene work in Africa, in accordance with the Millennium Development Goals and the aims of NEPAD.

A preliminary draft paper has been compiled that is a case study of sanitation policy development and implementation in South Africa and will form an input to the African Sanitation and Hygiene Conference.

You are invited to comment and make input on this preliminary draft document. Comments should be forwarded to Mampiti Matsabu at e-mail: mampiti@dynacon-online.com by no later than close of day Friday 12 July 2002. Please make your suggestions electronically in track changes in the document or highlight the changes.



Department of Water Affairs and Forestry

**THE DEVELOPMENT OF A
SANITATION POLICY
AND
PRACTICE IN SOUTH AFRICA**

2002

PRELIMINARY DRAFT PAPER

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1. INTRODUCTION

The African Sanitation and Hygiene Conference will be held in South Africa from 29 July to 1 August 2002. The overall goal of this conference is to accelerate the progress of sanitation and hygiene work in Africa, in accordance with the Millennium Development Goals and the aims of NEPAD. The purpose of the conference is three-fold:

- To assess the status quo of sanitation and hygiene in Africa, sharing experiences and lessons learned in this field.
- To raise the profile of sanitation and hygiene in Africa, both at and after the World Summit on Sustainable Development.
- To strengthen leadership and advocacy for improved sanitation and hygiene in Africa.

The Conference will build on recent global and regional initiatives such as the International Conference on Freshwater in Bonn (December 2001), the Second World Water Forum at The Hague (2000) and the Water Supply and Sanitation Collaborative Council (WSSCC), Water and Sanitation Hygiene (WASH) campaign launched in December 2001 and the South African chapter in March 2002.

1.1 Purpose of This Paper

This paper is a case study of sanitation policy development and implementation in South Africa and forms an input to the African Sanitation and Hygiene Conference. The purpose of this paper is to:

- Review sanitation policy development and implementation in South Africa, and
- Share experiences, lessons learnt and best practices developed.

It is the firm belief of the South African government that sustainable development can only be achieved through a focus on poverty eradication and economic development. Water, sanitation and hygiene are regarded as key issues for the achievement of these objectives. To this end, the government's sanitation programme is targeted towards the poorest of the poor thus ensuring that the benefits of the programme are delivered to those persons that are most in need.

The South African government is committed to ensuring that its entire people have access to adequate sanitation. The government intends to improve on the Millennium Development Goal to halve the sanitation backlog by 2015, by completely removing the backlog by the year 2010.

1.2 Historical Background to South African Situation

Sanitation policy development and implementation in South Africa can be divided into three distinct periods. Firstly, the pre-1994 period before the establishment of a democratically elected government; Secondly, the period between 1994 to 2001 during which the new Constitution was implemented and a policy for provision of sanitation services was developed and a delivery programme initiated; and lastly the period from 2001 forward during which the sanitation policy has been refined and the programme of service delivery accelerated toward meeting the Millennium target.

1.2.1 Period: Pre – 1994

During this time, the Republic of South Africa was divided into eleven different “homeland” administrative and political areas, the four independent TBVC states, six self-governing territories and the dominant Republic of South Africa territory, governed by the tri-cameral parliament. In addition, within the ten homelands were a number of rural areas that were managed by tribal authorities. This situation resulted in a fragmented approach to service provision with no cohesive strategy, guidelines or support structures to guide the provision of sanitation. Limited or no services were available in the former “black” urban areas and rural areas, and in particular farm dwellers and farm schools had no sanitation services. Where services were provided these were often in a bad state of disrepair. Despite the lack of capacity in the tribal authorities, assistance for provision of sanitation services was not requested. Conversely, the Department of Public Works did not take responsibility for providing these services to avoid interference in the tribal areas. Responsibility for service provision in the rural areas was with the Department of Development, although service provision was characterised by a lack of consultation and buy-in from the stakeholders.

The previous proliferation of institutional structures contributed to the problems faced in providing sanitation services due to: The absence of an institutional framework which established clear responsibilities; The overlapping of institutional boundaries, as well as the exclusion of many areas of great need; A lack of political legitimacy and will; and the failure to make resources available where they were most needed.

Sanitation service provision was primarily focused on toilet building, sewer systems, and maintenance, with little consideration given to community needs or health and hygiene education. As a result, those who had inadequate sanitation were forced to continue using the bucket system, rudimentary pit toilets or the veld. In addition, there was an increase in the numbers of poorly designed or operated sewerage systems.

Groundwater pollution associated with on-site sanitation systems were a major cause of concern at this time. One example, was the unacceptably high levels of nitrate that were found in the groundwater used for drinking purposes in the Winterveld area, north of Pretoria, as a result of pit latrines.

In the early 1990s, it was estimated that about 21 million people did not have access to a basic level of sanitation, which is defined as a ventilated improved pit-latrine or equivalent (DWAF, 2001b).

1.2.2 Period: 1994 to 2001

Addressing the water supply and sanitation backlog was one of the first priorities of the newly elected democratic government in 1994. On 1 July 1994, a new Department of Water Affairs and Forestry was established that consolidated government staff from all parts of the previous structures into one new organisation. In the absence of a coherent policy for water supply and sanitation, the White Paper on Water Supply and Sanitation Policy (DWAF, 1994) was compiled that set out the policy for the new Department with specific regard to these services. The finalisation of the White Paper was identified as a key priority, as well as the development of an integrated implementation strategy for clearing the backlog in support of local government for sanitation provision.

In the execution of this intent, the government embarked on a major investment programme in 1994, aimed at the provision of basic services, primarily in poor rural areas. The Department consulted with a range of stakeholders, which formed the basis for the development of the Community Water Supply and Sanitation (CWSS) Programme. The primary objective of the

CWSS programme is to extend the access to basic water supply and sanitation services to all people resident in South Africa.

The Constitution of the Republic of South Africa (Act 108 of 1996) was published in 1996 and assigned the local government the responsibility of providing water and sanitation services access to all. A range of municipal legislation has been developed and implemented since 1994 to transform the local government, including the Local Government Municipal Demarcation Act 27 of 1998, the Municipal Structures Act 117 of 1998, the Municipal Structures Amendment Act 33 of 2000, and the Municipal Systems Act 32 of 2000.

However, in the absence of fully developed local government structures, the Department of Water Affairs and Forestry (DWAF) was mandated to ensure that all South Africans have equitable access to water and sanitation services where local government was unable to carry out this mandate. Targets were set to eliminate the backlog over a ten year period; to provide each individual with at 25 litres of water per day within 200 metres of their home; and, to provide each household with basic sanitation in the form of at least a Ventilated Improved Pit (VIP) latrine.

A National Sanitation Task Team (NSTT) comprising representatives of the national departments with responsibilities for providing sanitation service (i.e. Health, Education, Environmental Affairs and Tourism, Housing, Water Affairs and Forestry, Provincial and Local Government, and Public Works,) and the Mvula Trust was established in 1995 to facilitate an integrated inter-departmental approach. The NSTT's specific objective was to provide a coherent framework for addressing the sanitation backlog. A process of consultation was undertaken with the three levels of government, NGOs, CBOs and other stakeholders, which resulted in the compilation of the Draft White Paper on Sanitation (DWAF, 1996). This policy document formed the basis for the development of the National Sanitation Programme in 1996, which was revised in 1998 (DWAF, 1996 and 1998).

The NSTT launched a new initiative in 2000 to update the 1996 Draft White Paper on Sanitation in the light of legislative developments at both the national and local level that impact on local government service delivery, and to incorporate the experience gained in the implementation of the sanitation programme. Stakeholder inputs were incorporated into the revised draft. Parliament subsequently endorsed the White Paper on Basic Household Sanitation during September 2001 (DWAF, 2001).

1.2.3 Period: 2001 to the Present

Over the last 7 years (1994 to 2001), considerable progress has been made in addressing the levels of under-servicing. However, the demand for the expansion of municipal infrastructure continued to exceed supply, leading to rising backlogs in some services and limited progress in the elimination of backlogs. Local government has been extensively restructured to meet these challenges and fulfil its developmental mandate.

At the beginning of this period (2001) the *national backlog* of persons without access to adequate sanitation facilities was estimated to be 18 million or 3 million households. The majority of persons falling in this category live in rural areas, peri-urban areas and informal settlement areas. It is also estimated that up 26% of urban households and 76% of rural households have inadequate sanitation. This backlog was further reduced during the next year by 2.4 million persons.

DWAF, supported and assisted by sanitation role players, has developed and launched a *National Sanitation Programme* that is already showing positive results. The Programme focuses on the eradication of the sanitation backlog in the rural, peri-urban and informal

settlement areas by the year 2010. In addition, eradication of the bucket system (currently estimated at about 428 000 households) is to be achieved by 2007.

These targets are to be met through the provision of *two primary deliverables*, namely promotion of sanitation, health and hygiene awareness and the provision of a basic toilet facility. Secondary deliverables necessary to create an appropriate enabling environment for a community-based approach includes training and capacity building elements. Projects will be implemented using a community-based approach. The highest priority will be given to those communities that face the greatest health risk due to inadequate sanitation and who cannot afford to meet their own requirements. To maximise synergy of effort, the prioritisation of communities will be aligned with the priority areas identified in the Integrated Sustainable Rural Development Strategy process.

Community participation is identified as a key requirement for the success of the implementation programme. Projects are to be demand driven by the community, as demonstrated by the community's willingness to assist in project implementation. Where possible, projects are to be implemented without the use of external contractors to facilitate the upliftment of the local economic situation. Training is to be provided to members of the local community to construct the facilities. Sufficient information is to be provided to the community to enable them to make an informed decision with regard to the type of technology implemented.

The recent (2001) *cholera outbreak* and subsequent proposal and initiatives to contain the epidemic, highlighted the importance of sanitation and the need for a close inter-departmental co-operation and clear leadership of the sector. The close link between water supply, sanitation and health necessitates that these issues be addressed jointly and in an integrated manner at national, provincial and local government level. The Department of Health, in collaboration with DWAF, has developed a National Cholera Strategy to combat and prevent the spread of cholera. It includes immediate, medium and long-term interventions as well as how to deal with organisations, funding and logistical arrangements in case of emergencies.

A *policy review process* has been initiated to address the changes needed to reflect the new local government and municipal financial arrangements. A draft discussion document has been compiled to stimulate discussion and debate around key issues and policy options to support the process. The process is to be followed with bilateral meetings with key stakeholders and regional consultation workshops in order to compile a draft White Paper on Water Services, which will include broad sanitation areas.

Policy gaps identified in the White Paper on Basic Household Sanitation, which are currently being addressed include: Farm dweller sanitation; Informal settlements; Norms and standards; Emergency sanitation; and Free basic services.

2. POLICY INSTRUMENTS

2.1 Legislation

Key roles of national, provincial and local government for sanitation provision are allocated in Constitution. It tasks local government with the responsibility for provision of sustainable services to communities, with the support of provincial and national government.

Key legislation with respect to sanitation is briefly discussed below.

The Water Services Act (Act 108 of 1997) is to assist municipalities to undertake their role as water services authorities and to look after the interests of the consumer. It also clarifies the role of other water services institutions, especially water services providers and water boards.

The National Water Act (Act 36 of 1998) legislates the way in which the water resource is protected, used, developed, conserved, managed and controlled. It also governs how a municipality may return effluent and other wastewater back to the water resource.

The Municipal Structures Act (Act 33 of 2000) provides for the establishment of municipalities in accordance with the requirements relating to categories and types of municipality and to provide for an appropriate division of functions and powers between categories of municipality. The Act allocates the responsibility for water services to the District Municipality or the local municipality if authorised by the Minister of provincial and Local Government.

The Municipal Systems Act (Act 32 of 2000) focuses on the internal systems and administration of a municipality. The Act introduces the differentiation between the function of an authority and that of a provider. It also identifies the importance of alternative mechanisms for providing municipal services and sets out certain requirements for entering into partnerships.

The Municipal Demarcation Act (Act 27 of 1998) provides criteria and procedures for the determination of municipal boundaries by an independent authority. In terms of the Act, the Municipal Demarcation Board is established to determine municipal boundaries. Section 24 provides that when demarcating a municipal boundary, the Board must aim to establish an area that would enable the municipality to fulfil its Constitutional obligations, including the provision of services in an equitable and sustainable manner, the promotion of social and economic development and the promotion of a safe and healthy environment. The tax base must also be as inclusive as possible of users of municipal services in the municipality. This is important in that rural and urban areas are consolidated, which ensures a more effective use of resources.

The Division of Revenue Act, which is enacted annually, gives effect to Section 214(1) of the Constitution that provides for the equitable division of nationally raised revenue among the three spheres of government. The Act for 2002 makes provision for the CWSS as an “Indirect Conditional Grant “ to fund basic level of water services and the implementation of infrastructure projects where municipalities lack the capacity to do so.

The White Paper on Basic Household Sanitation (DWAf, 2001) emphasises the provision of a basic level of household sanitation to those areas with the greatest need. It focuses on the safe disposal of human waste in conjunction with appropriate health and hygiene practices. The key to this White Paper is that provision of sanitation services should be demand driven and community-based with a focus on community participation and household choice.

2.2 Funding Mechanisms

Sources of funding for sanitation improvement that are available to local government include, the, Municipal Infrastructure Grant (MIG) and Equitable Share funding transfers from national to local government, and the revenue collected by the local authority.

2.2.1 Municipal Infrastructure Grants

Municipal Infrastructure Grants are conditional grants for capital investment provided by national government. It is intended to provide capital finance for basic municipal

infrastructure for poor households (those with household incomes of below R1 100 per month) and to a limited extent micro enterprises and deserving institutions. Municipalities in the urban renewal and rural development programmes are favoured for support. The Municipal Infrastructure Grant will have an overall target of removing the backlog with regard to access to basic municipal services over a ten year period.

The grant will be phased in over a three-year period, through the merger of Consolidated Municipal Infrastructure Programme, the Local Economic Development Fund, the Water Service Capital Grant, the Community Based Public Works Programme and the Building for Sports and Recreation Programme. Individual national line departments will continue to lead the monitoring and support of the implementation in their specific functions and priorities.

2.2.2 The Equitable Share

The Equitable Share is provided by national government to the local government for subsidising operating costs. It was introduced to assist the local government to overcome the burden of service delivery to the very poor.

Where the cost of service delivery exceeds the amount that is billed to very poor households, the subsidy will be used to contribute towards the general operating account of the local authority. This subsidy is an inter-governmental transfer of funds from national to local government. However, the Constitution indicates that inter-governmental transfers like the Equitable Share cannot be conditional, which means that local authorities have used the subsidy for other purposes.

2.2.3 Local Authority Revenue

The Local Authorities' own revenue may be used to cross subsidise between "rich" and "poor" households. A broad assessment of municipal income in rural areas, (the areas with the greatest sanitation need), indicates that currently direct cost recovery is only applied to electricity. Any shortfall in the funding for other services is either carried by the service provider or financed with inter-governmental transfers. The total cost of service provision in rural areas with the exception of electricity, is therefore currently subsidised. Cost recovery in many areas remains a matter that requires urgent attention.

The local authority has discretion in deciding on the composition of the service delivery packages, the levels of service and the manner in which these are funded. The Integrated Development Plan is the mechanism for deciding on priorities and for steering and co-ordinating service delivery to avoid duplication of subsidies and the construction of houses without services.

2.2.4 Subsidies

Despite the view of the World Bank that service provision should not be subsidised, the South African government believe that this approach is justified. Due to the large disparity of rich and poor in South Africa, the average per capita income in South Africa is estimated to be R3 700 per annum, which exceeds the R3 000 per annum that is defined to be the poverty line. South Africa therefore has the resources to subsidise service provision, specifically to the indigent.

Once-off capital subsidies are currently provided for: housing (R15 000 to R17 000 per household); water (R600 to R1 000 per capita), sanitation (R1 200 per household) and rural electrification.

2.3 Information and Education Programmes

A Water, Sanitation and Hygiene (WASH) awareness campaign has been launched in collaboration with the United Nations Water Supply and Sanitation Collaborative Council. The aim of the campaign is to increase hygiene awareness and to promote hygienic sanitation practices.

The Department of Education is also assessing the mechanism of including health and hygiene education on the curriculum in order to maximise education impact on hygienic sanitation practices.

2.4 Inter Sectoral Approach -Roles and Responsibilities for Providing Services

One of the main obstacles to the effective delivery of acceptable sanitation in the past has been the lack of clarity on the roles and responsibilities of the various role players. The roles and responsibilities of the three levels of government have subsequently been clarified in the White Paper on Basic Household Sanitation.

The *local government* is in the first instance accountable for the provision of sanitation services and, through its Environmental Health Practitioners, to promote health and hygiene awareness and to monitor the health of its communities. The local government must also take responsibility for driving the process set in the White Paper on Basic Household Sanitation at the local level, for creating an enabling environment through its municipal by-laws and for taking responsible decisions on levels of service to ensure that they are both appropriate and affordable. Local government is required to develop an Integrated Development Plan, which is aimed at the integrated development and management of its area of jurisdiction. One component of this plan is a Water Services Development Plan that reviews current service levels and backlogs and sets clear objectives with quantifiable performance indicators. Using these objectives, a domestic sanitation business plan is developed that includes a detailed strategy development process. Councillors and local government officials are encouraged to participate in the development of this coherent strategy and to agree on the priorities and approaches.

Provincial government is responsible for supporting local government in achieving their objectives and ensuring that they perform effectively. Support can be provided in a number of areas, including financial, human resources and technical. In addition, certain provincial departments, such as provincial departments of the environment, local government, education, health and housing are the implementation arm of their national counterparts.

At a *national government* level, there are a number of role players responsible for sanitation. In accordance with a Cabinet decision, DWAF is responsible for co-ordinating the involvement of national government in the sanitation sector. Other key role players at the national level include the Department of Provincial and Local Government, the Department of Health, the Department of Education, the Department of Housing, the Department of Public Works, The Department of Environmental Affairs and Tourism and the National Treasury.

The *Department of Provincial and Local Government* is the custodian of the Municipal Systems Act and the Municipal Structures Act. Matters relating to provincial and local government systems fall within this department's ambit. This includes promoting the development by the municipalities of their Integrated Development Plans, ensuring that provincial and local government have the capacity to fulfil their functions, co-ordination of

the provincial and local governments equitable share and municipal infrastructure grants, and the provision of financial support to sanitation programmes.

The focus of *the Department of Health* is to provide all South Africans with access to affordable, good quality health care. In co-operation with the provinces, the Department of Health has the primary responsibility to creating demand for sanitation services through health and hygiene awareness and education programmes, developing standards and norms relating to health aspects of sanitation and water supply, co-ordinating interventions when a crisis poses a regional or national health risk, and providing a systematic approach to the proposition of sanitation facilities in clinics, hospitals and other health institutions.

The Department of Housing is responsible for developing norms and standards in respect of housing development and for co-ordinating the application of the housing subsidies administered by the provincial housing departments. The minimum level of service prescribed for sanitation is a VIP per household, unless the situation, such as soil conditions, dictate otherwise.

The National Department of Education is responsible for the development of curricula, while the provincial departments are responsible for the provision of school facilities, including toilets and other sanitation facilities. The Department of Education, together with the Department of Health, develop curricula, guidelines and other support mechanisms to take up issues relating to health, hygiene and sanitation.

The Department of Public Works acts as the implementing agent on behalf of the national and provincial government departments when facilities, such as schools and clinics, are constructed or rented. The Department has the responsibility in ensuring that adequate provision is made for sanitation facilities in government and public buildings, and ensuring that norms and standards are complied with.

The Department of Environmental Affairs and Tourism is responsible for the protection of the environment. The Department will take primary responsibility for developing policies, guidelines, procedures, norms and standards relating to the impact of sanitation systems on the environment and for monitoring environmental impacts of sanitation systems.

A number of co-ordinating structures have been established at the three levels of government. Co-ordination of sanitation programmes at a national level is through the National Sanitation Task Team (NSTT). In order to achieve greater alignment between sanitation and other municipal infrastructure programmes, the sanitation co-ordination structure will be re-established as a sub-committee of the Municipal Infrastructure Task Team. As the national sphere co-ordinator, DWAF will be responsible for convening the sanitation sub-committee and will ensure participation by all relevant stakeholders.

At a provincial level, Provincial Sanitation Co-ordinating Forums have been established that comprise representatives of the district and metropolitan local authorities and the relevant national government departments, and chaired by provincial representatives.

Co-ordination and integration at the local government level will be the responsibility of the District Municipality or Metro as the Water Services Authority or the local municipality. The Integrated Development Plan is the mechanism for attaining this integration between role players at the local level, as well as between municipalities and their provincial and national government counterparts. Within the Integrated development Plan, the Water Services Development Plan, provides the basis for sanitation provision and operation.

3. IMPLEMENTATION

3.1 Appropriate Sanitation Technologies

A range of toilet technology types are currently used in South Africa, including: buckets, chemical toilets, simple pit toilets, ventilated improved pit toilets, dehydrating and composting toilets, aqua-privies, flush toilets with septic tanks, flush toilets with small bore solids free sewers, and, flush toilets with full waterborne and central treatment works (Mvula Trust, 2001). The choice of technology is influenced by many factors, including the following criteria:

- Affordability to the household.
- Operation and maintenance (O&M) requirements. High service levels, such as flush toilets, have onerous and costly O&M requirements. Local community members can readily undertake maintenance of on-site toilets.
- Sustainability: The system should be manageable by the local community and be sustainable over the long-term.
- Improvements to health.
- Compliance with environmental protection regulations.
- Ability of community based contractors to implement.

3.2 Phased Implementation

The Community Water Supply and Sanitation (CWSS) Programme was launched by the Department of Water Affairs and Forestry (DWAF) to address backlogs in these areas. The *first phase* of the programme that was initiated in 1994, involved the identification and immediate implementation of key water projects. However, provision of sanitation services lagged behind water, and only in 1997 was the National Sanitation programme initiated.

During the *second phase* of the programme, the focus was on increasing the rate of delivery of water and sanitation services, in order to meet the government target of eliminating the backlog within 10 years. DWAF was assisted in this task by a large number of implementation agents and project teams, including NGOs and small-scale private sector support teams, who undertook the project work on the ground. They worked to support local committees to assist in delivery and training in building and health and hygiene promotion.

The third and final phase of the programme is currently ongoing. The Masibambane (an isiZulu word meaning ‘lets work together’) Programme has been integrated with the CWSS programme. Masibambane is a sector support programme intended to enable the provision of basic water supply and sanitation services through a variety of activities with a focus on rural communities in the provinces of Limpopo, KwaZulu Natal and Eastern Cape, as 80% of the national backlogs in water supply and sanitation delivery are in these areas. The emphasis is placed on support to the entire water sector rather than specific projects. It signals a new way of working in the water and sanitation sector with joint decision-making involving all players in a government led sector-wide initiative.

Between January 2000 to February 2002, 65 542 new toilets and 4 768 upgraded toilets have been completed serving 545 320 people and a total of 553 000 people have been positively impacted by health and hygiene education (DWAF, 2002). This has created an additional short-term 11 662 jobs, of which 3 598 are for women.

3.3 Hygiene Promotion

Although by early 2002, in excess of 7 million people had been provided access to water supply at a basic level of service, only half a million people had been positively impacted by the National Sanitation Programme. There are many role-players who believe that this prioritisation on water supply is misplaced, including the Human Rights Commission and NGOs who are promoting sanitation. Although it is a worldwide trend to prioritise provision of good quality drinking water over good sanitation, experience has shown that good health requires three essential components, i.e. water, sanitation and hygiene. Poor water and sanitation undermines immune functioning and increases vulnerability to infections. This is particularly significant given the prevalence of AIDS in South Africa.

Affordable services should be promoted to ensure the broadest coverage within the shortest time frame. As a minimum basic sanitation services and potable water within 200m of a dwelling should be provided in the short-term, and upgraded when feasible. In addition good hygiene practices, i.e. hand washing, safe water storage, and food hygiene and good waste management should be promoted through implementation of appropriate awareness campaigns.

3.4 Social Issues

Good sanitation is as much about people and their personal dignity as it is about public health, infrastructure provision or environmental management. Government policy states that basic sanitation is a human right, and emphasizes the importance of involving ordinary people in choosing, planning and implementing sanitation improvements that meet their needs and aspirations.

Social issues are often not considered or properly integrated into sanitation programmes. Inadequate sanitation frequently results in the loss of privacy and dignity, and increases risks to personal safety when toilets are placed at a distance from the home. This is particularly true for women and the elderly. Poor sanitation and unusable facilities in many rural contributes to absenteeism and an uncongenial learning environment, and is cited as an important reason why many girls drop out of school (UNICEF, 2002).

The national sanitation programme has immense potential to alleviate poverty: directly, through sanitation improvements which break the cycle of ill-health, lost income, foregone opportunities and economic impoverishment; and indirectly, through investment in local knowledge, skills and implementation capacity. Where local representative structures and SMMEs drive sanitation improvement, that knowledge is entrenched locally, and funds intended for rural development remain within targeted communities, rather than flowing straight back to urban centres.

Community-based (rather than contractor-based) approaches that focus on sanitation improvement for people are encouraged by government. Although contractor-driven approaches offer speedy delivery, community-based approaches are more likely to ensure long-lasting benefits with significant positive implications for community health and local economic development (Netshiswinzhe and Eales, 2002). Awareness is also raised about the link between health, sanitation and waste management, which leads to more sustainable health improvements. Skills and jobs developed in the context of sanitation improvement remain within the community, and can be extended to other development initiatives. Community-managed projects have been shown to be more sustainable, because projects reflect local priorities and preferences, and result in a greater sense of ownership.

3.5 Mitigation of Groundwater Contamination from On-Site Sanitation

Groundwater pollution problems associated with on-site sanitation systems have given rise to concern in terms of its potential negative impact on the environment. However, more recent research, both internationally and in South Africa, suggests that despite the potential for groundwater pollution from these sanitation systems, the concerns about this risk may have been overstated.

In order to address the potential for groundwater pollution by on-site sanitation, DWAF has developed “A Protocol to Manage the Potential of Groundwater Contamination from On-Site Sanitation” (DWAF, 1997). This protocol aids practitioners involved in the development or upgrading of on-site sanitation to address this environmental pollution issue. The protocol evaluates prevailing groundwater resources, the risk of contamination of resources and suggests measures to reduce the pollution risk. Guiding principles have also been presented with respect to the investigations required, certain minimum requirements and common sense rules related to borehole positions and distances relative to sanitation systems.

3.6 Monitoring and Evaluation

The progress of sanitation implementation will be monitored and evaluated against key performance indicators and focuses on outcomes rather than inputs. Broad categories of monitoring and evaluation include progress related to:

- Programmes to clear the backlog,
- The promotion of health and hygiene education,
- The impact of sanitation improvement programmes on the health of communities,
- The allocation, application and management of funds,
- The involvement of communities,
- Development of common norms and standards, guidelines and other tools.

Key performance indicators are being developed for each of the broad categories. Data collection and measurement is taking place at the level of implementation. The data collected is being evaluated, interpreted, summarised and reported to the various spheres of government through the co-ordination structures that have been established. This monitoring and evaluation system will be used to guide skills development and capacity building to bring about behavioural changes in regard to health and hygiene practices

4. CHALLENGES

South Africa has made significant progress in the field of sanitation service provision since the introduction of the democratically elected government in 1994. Appropriate sanitation policies have been developed, adapted and refined in the light of practical experience with implementation. Many lessons have been learnt and these have been used to refine implementation strategies.

The major challenges now facing in South Africa in promoting sustainable, affordable and efficient service delivery, includes:

- Promoting the Water Service Development Planning Process, within the framework of the Integrated Development Plan, as the key instrument for planning, monitoring and regulating waster services, with full community involvement. Service provision

should be demand-responsive rather than supply driven to ensure appropriate choices of technology, lower costs, better uses of resources and more sustainable services. The Water Service Development Plan should guide strategies related the choice of service levels and technology implemented.

- Developing an appropriate regulatory framework that ensures the effective, efficient, equitable and sustainable provision of at least basic sanitation services to all people living in South Africa, and cost-effective, reliable services to businesses and institutions.
- Finalisation of the institutional framework. Currently the local government structures must deal with a range of approaches to service provision that span both urban and rural areas. The allocation of powers and functions between district municipalities and local municipalities needs to be resolved.
- Rationalising the financial framework in order to support sustainable service provision, specifically with regard to the provision of free basic services and implementing appropriate pricing for services.
- Managing the transition to local government as the service provider and DWAF to become the supporter and regulator.

Furthermore, South Africa wishes to share its experience with its neighbours and all African countries, as well as learning from their experiences in order to realise its vision to clear the backlog in sanitation by 2010 in a sustainable manner.

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