Framework for a National Sanitation Strategy
Bringing Sanitation up to Speed

February 2002

Department: Water Affairs and Forestry
Your partner in creating a better life for all

National Sanitation Task Team
Communities are encouraged to use local resources and available building materials for the construction of structures for sanitation facilities.

The Archloo is one of the options provided to cholera affected areas. Health and hygiene programmes are also being presented to ensure health improvements.
Background

The White Paper on Water Supply and Sanitation Policy, published in November 1994, indicated that more work had to be done to clarify many items of sanitation policy, and then to develop a national sanitation strategy. Accordingly, a draft National Sanitation White Paper was developed by the National Sanitation Task Team (NSTT) and published in 1996.

An initial two-year National Sanitation Programme was developed. The focus of the National Sanitation Programme was mainly on policy development, capacity building, establishment of co-ordination mechanisms, implementation support and development of monitoring and evaluation mechanisms for sanitation.

The recent and current cholera epidemic, as well as the slow pace of sanitation delivery, has urged government to look more closely at its sanitation implementation strategies and policies. It is vitally important that sanitation - as it impacts on public health - receives the necessary attention and priority to ensure the good health of all South Africans.

Introduction

In order to understand the complexities of sanitation and the resources that are required to address the sanitation backlog, it is important to understand what sanitation is.

Sanitation refers to the principles and practices relating to the collection, removal or disposal of human excreta, household waste water and refuse as they impact upon people and their environment. Good sanitation includes appropriate health and hygiene awareness and behaviour as well as acceptable, affordable and sustainable sanitation services.

Health and hygiene education to children ensures a better quality of life for all. From an early age children are taught to take pride in their health and environment.
Lessons learnt up to date

A review of lessons learnt and best practice was one of the most important features of the initial phase. Some of the lessons learnt in sanitation implementation include the following:

• Health and hygiene promotion, together with social marketing of toilets, motivates communities to mobilise the resources needed for lasting sanitation improvements.
• Participatory planning, management and learning are best.
• Communities can teach other communities and themselves.
• Given a range of choices, the costs and the advantages and disadvantages, most communities will choose a technical option with low capital and running costs.
• More work needs to be done to communicate technical options to stakeholders.
• Communities will invest in sanitation improvements given encouragement, information, appropriate assistance and time to save.
• Institutional sanitation (especially school sanitation) is a major problem in most areas and requires a planned and co-ordinated approach.
• Regular monitoring of Implementing Agents is imperative.
• Integrated development is important. This will result in significant health benefits as well as appropriate use of human resources.
• Review of the DWAF subsidy system is necessary.

Problem definition

An estimated 18 million South Africans do not have access to basic sanitation. 75.8% or ±13.374 million of these people are in rural areas. The total backlog translates to approximately 3 million households. Out of these, 2 million households do have access to some kind of sanitation facility below the basic level, as well as limited knowledge of hygiene behaviour to ensure good health. An estimated 1 million households do not have access to any sanitation facilities and hygiene knowledge and here, behaviour is an unknown factor.

Approximately 200 000 new households are formed per year. Their sanitation needs are being addressed through the National Housing Programme.

It has been found that nearly half of all schools use ordinary pit latrines and that these are often insufficient in number, over-utilised, unclean and unsafe. Another 11.7% of schools have no sanitary facilities at all and it is estimated that there is a shortage of 217 339 toilets in schools.

An estimated 15% of clinics are without sanitation and water facilities. In some cases, there is an inadequate supply of sanitation facilities for the numbers of patients.

Very little progress has been made in addressing the backlog in sanitation since 1996. The following factors have contributed to this:
• Sanitation is a low priority on household level and in all spheres of government.
• Funds allocated to sanitation are inadequate to address the backlog sufficiently.
• There is limited human capacity in the sanitation sector and limited funding to build capacity.
• Local government is often weak in the areas of highest need, i.e. rural areas.
• Sanitation is still seen as a programme aimed at providing infrastructure only. The health impact is therefore limited.
• There is inadequate understanding and acceptance of the various technical options.
• There is limited programme management capacity for large-scale community-based implementation.
• There is inadequate co-ordination and integration of planning on all levels.
• Grant funding programmes are fragmented and follow different criteria.

Opportunities

Despite the numerous constraints, many opportunities exist to ensure access to adequate sanitation for all. These include:
• The cholera epidemic has heightened awareness of the importance of sanitation.
• Sanitation programmes create opportunities for local economic development through skills transfer and job creation.
• It gives people the opportunity to improve their existing sanitation facilities, especially where traditional housing has been built, as well as their health and hygiene knowledge, thereby enhancing the health profile of communities.
• There is an increased understanding and knowledge of the range of technical options available.
• The Integrated Sustainable Rural Development Programme (ISRDP) and Integrated Development Plans (IDPs) give the opportunity for integrated planning.
• Inter-sectoral collaboration is accepted as a basic principle.
A National Sanitation Strategy

Vision
Improved health, dignity and quality of life for all South Africans through improvements in sanitation and hygiene.

Purpose
To define a National Sanitation Strategy for accelerated delivery, with the focus on rural households, peri-urban areas and informal settlements, as well as institutional sanitation.

Objectives
Time, considerable human and financial investment and advocacy at all levels will be required to address the sanitation problem. The programme needs a clear strategy to achieve the vision. Preconditions for this are:

• Agree on a target date to clear the backlog.
• Get commitment for a concerted programme of implementation.
• Clarify the roles and responsibilities of all partners.
• Agree on approaches and technical options.
• Agree on resources that need to be committed to clear the backlog.

Key focus areas
This strategy will focus specifically on access to basic sanitation in rural, peri-urban areas and informal settlements where the need is greatest.

Intersectoral collaboration and integrated planning
Sanitation is not the responsibility of one single government department or institution. A vast number of government institutions in all spheres, as well as private institutions, are responsible for sanitation. The roles and responsibilities of all the stakeholders are clearly spelt out in the National Sanitation Policy. The Department of Water Affairs and Forestry, as recognised lead department for sanitation, will oversee and co-ordinate the fulfilment of these roles and responsibilities.

All sanitation planning must happen through the Integrated Development Planning (IDP) process. Projects will be prioritised and funding will be made available based on the IDPs submitted by local municipalities. Programme and project management structures should be in place at national, provincial and local levels.
Current financial resources available

Household and institutional sanitation is currently funded through a number of government programmes.  
- DWAF is allocating R100 million for sanitation improvement programmes in rural areas for the 2001/2002 financial year.  
- The National Housing Programme funds a toilet facility per household as well as internal sanitation infrastructure services.  
- CMIP is funding both internal infrastructure or on-site sanitation as well as bulk and connector infrastructure. This includes rural areas.  
- The Department of Health employs Environmental Health Officers (EHOs), responsible for health and hygiene promotion in communities. It is also responsible for the installation of toilet facilities at clinics, hospitals and other health institutions.  
- The provincial Departments of Education are responsible for the funding of sanitation facilities at schools and the Department of Public Works acts as the implementing agent on behalf of the Department of Education. There is a vast backlog of sanitation facilities in schools and all new schools have to provide at least a basic level of sanitation. Health and hygiene education is included in the curriculum. The Department of Education, in collaboration with the Government Communications and Information Services (GCIS) is currently distributing health and hygiene education materials - accompanied by instructions - to all schools in the country.  
- Local government is primarily responsible for the implementation of sanitation programmes on household level. Treasury is currently proposing a single capital grant made up of current funding channels that would probably be managed by DPLG. The housing and CMIP programmes address the sanitation needs of new households. CMIP is also responsible for the upgrading and rehabilitation of sanitation in new and existing households. A new approach is needed to address the backlog. Sanitation programmes are currently being implemented using private and NGO sector implementing agents. There is a lack of implementing agents with the necessary skills and approach to implement sanitation effectively. Sanitation is still often seen as an infrastructure development programme only. An integrated participatory team approach is being promoted at local level to ensure effective implementation of sanitation.

Proposed sources and levels of funding

In order to clear the backlog within the next 10 years, government needs to drastically increase the funding for the sanitation programme. We need to look at new approaches and methodologies. As a guide, a subsidy of R1 200.00 per household is proposed. This is part of a programme to assist with the improvement of sanitation facilities and money has been made available to implement it. The household subsidy must be subject to clearly-defined norms and standards agreed to by all departments.

Although the R1 200.00 per household proposed will address the needs of the majority of South Africa’s rural households, any comprehensive programme will have to include instruments to meet the needs of communities where special problems of topography, climate or soil conditions increase the cost of basic infrastructure.

Where households already have a sanitation facility, they will be assisted to upgrade the existing facility to ensure that it is safe and hygienic. The use of local materials that match existing housing will be encouraged. This is especially relevant in the case of traditional housing.

The basic subsidy would include health education and hygiene promotion since, while it is envisaged that this would be undertaken by Departments of Health, existing Environmental Health resources are inadequate to support a major national programme and will have to be reviewed and supplemented. The basic subsidy of R1 200.00 thus includes:
- Awareness raising
- Training and capacity building of the Project Steering Committee
- Health and Hygiene promotion
- Training of local contractors in building skills
- Building of demonstration toilets
- Infrastructure development

A split of R300.00 for community development and R900.00 for the development of infrastructure is recommended.

Health and hygiene education will include the following:
- Personal hygiene: including the importance of washing hands after going to the toilet or changing the nappies of babies, before the preparation of food or the handling of drinking water.
- Household hygiene: including the importance of keeping the home and toilet clean, safe disposal of refuse and solid waste, cleanliness in areas where food is stored and prepared, and ensuring that food and drinking water are kept covered and uncontaminated.
- Community hygiene: including the importance of the whole community working together for better health and a cleaner environment and issues relating to the disposal of excreta, sullage and solid waste (refuse) as well as issues relating to the vending of food, the keeping of animals and storm water drainage; and
- User education, including operation and maintenance of the toilet facility.
DWAF’s sanitation programme has to date been based on the demand responsive approach, community/household participation, health and hygiene focus, community empowerment and cost effectiveness. This approach requires a lot of dedication, skilled human resources, continuous funding and intensive community development capacity. It is time consuming and results are difficult and slow to materialise.

Based on international experience as well as lessons learnt from local projects, it is however the only way of ensuring sustainable sanitation services and improved health. It also brings with it substantial spinoffs in terms of local job creation and training as well as small enterprise development and community mobilisation.

Three basic principles are essential to successful sanitation programmes:

• A developmental approach, which is community based and encourages job creation and business development. This should be coupled with an intensive advocacy and social marketing programme.

Capacity building includes:

• Project Steering Committee training on project management.
• Storekeeping, bookkeeping, procurement and other administrative issues.
• Training of community health workers to do health and hygiene promotion amongst community members.
• Training of community members in the building and construction of toilet facilities.
• Subsidy application procedures.

The Department of Education has developed a strategy to clear the backlog of sanitation facilities at schools. The provincial Departments of Education are responsible for funding and implementing this strategy which includes:

• Prioritisation of sanitation and water provision by the provincial Departments of Education to schools in high cholera-risk areas.
• Health and hygiene awareness campaigns together with the Department of Health and GCIS. In addition, all stakeholders are working together with Education to ensure that the relevant health and hygiene messages, methodologies and approaches are included in the curriculum.
• All new education facilities must be provided by provincial Departments of Education with sanitation and water facilities and services.
• A joint strategy with the Department of Water Affairs and Forestry to align plans and accelerate the delivery of sanitation and water provision to schools. Additional budget allocations are already available but implementation capacity is limited suggesting that school sanitation delivery could usefully be integrated into a household sanitation programme.
• The setting up of provincial project teams consisting of officials from the Departments of Public Works and Education and their provincial counterparts to remove obstacles, improve efficiency and effectiveness and accelerate infrastructure delivery.

The Department of Health continues to use its personnel to promote health and hygiene, while at the same time - through funding from the World health Organisation - upgrading and providing new sanitation facilities in existing clinics. All new clinics will be provided with adequate sanitation facilities.

**Approaches, methodologies and models**

Women are very involved in the construction of sanitation facilities and promote health and hygiene practices in their communities.
Management of sanitation in traditional rural households

The sanitation programme recognises the significance of rural housing and, as such, focuses attention on improving or upgrading existing facilities to promote health while at the same time providing new facilities where necessary. Where sanitation facilities exist, households will be assisted to upgrade facilities to ensure that they are safe and hygienic. The use of local indigenous material is promoted to ensure harmony in the environment and to reduce the cost impact. The local community is involved in decision-making during the implementation and their capacity to build the sanitation facility is improved through a skills transfer programme. Where basic building skills already exist, inputs on health requirements are given to suit the needs of the specific technical option chosen. An enabling environment is created for local contractors to benefit from jobs generated by the programme. Communities and households accept responsibility for and ownership of the sanitation programme if they benefit directly from the project.

Prioritisation

Project areas should be prioritised based on very clear criteria. These can include:

- Finances divided pro rata according to provincial backlogs
- ISRDP nodes
- High-risk areas
- Population density
- Local capacity to implement
- Geographical conditions
- Affordable options offered that comply with norms and standards
Technical Options, Operation and Maintenance

The full range of technical options for providing adequate basic sanitation is still not widely understood. In particular, the long-term financial implications of operating different sanitation systems are not appreciated. As a result, communities and local governments are currently choosing technical options which in the long term are unaffordable and unsustainable.

Given the wide range of options and the different environments in which they are implemented, experience shows that it is important to allow local solutions to be developed. The options include the ventilated improved pit toilet with all its variations, the composting toilet as well as on-site wet systems such septic tanks and full water borne systems.

Communities often choose between single pit ventilated improved latrines, double ventilated improved pit latrines and urine diversion/composting latrines. The aforementioned options promote household management, operation and maintenance so that, in most cases, the cost of emptying a single pit every 5 years is estimated at between R35 and R60. Where higher levels of service are chosen the cost is a lot higher and can be as much as R500 per household per annum. The initial capital cost is also dependent on the choice of technology. A lesson learnt from the DWAF programme is that it is possible to provide on-site dry systems at less than R1 000.00. The Archloo, provided to cholera affected areas, is an example of a facility that could be provided at R600.00 using local materials and labour as well as large-scale production. This has to be coupled with health and hygiene promotion to ensure health improvements.

Options: Funding, programme approach and timing

Option 1: Contractor driven

The backlog can be cleared within the next 5 years using a contractor driven approach and with an annual budget of R720 million. Job creation would be approximately 150 000 person years of employment. The approach does not ensure implementation within the agreed principles and in most cases results in “toilet in the veld syndrome” with no ownership on the part of communities. Community participation is often overlooked and as such, no skills are transferred to communities - thus perpetuating dependence on government and destroying the spirit of partnership and ownership. The result of the lack of skills transfer is that there will be no upgrading of existing facilities and therefore no cost saving and no extension of coverage to areas where there is no infrastructure.

Our approach is that the implementation of the sanitation programme is one of the tools used to eradicate or reduce poverty levels. The contractor based approach does not lead to sufficient job creation and, as such, does not contribute to the overall improvement of the quality of life. The fact that, in most contractor driven approaches, all material is imported, means that only one option is given to communities which in most cases translates to “tin toilet”. The existing rural infrastructure is therefore ignored with the provision of a facility that does not blend well with the environment. The rural traditional building plan is often lost through this approach. The contractor driven approach also reduces the health benefit as the approach is driven from infrastructure delivery without taking into account the health imperatives of the programme.
Option 2: Community Development Approach

The second option would be to aim to clear the backlog within the next 10 years, using local capacity to build the infrastructure and to implement an intensive health and hygiene promotion and education programme. The focus for the first two years would be to build implementation capacity on the basis of existing, tested, pilot project approaches to gear up for an accelerated implementation programme. Job creation would be approximately 400,000 person years of employment, two-and-a-half times greater than that of a contractor based approach, although spread over a longer period.

This second option focuses on community development and is in line with the principles of the Reconstruction and Development Programme (RDP). While the time taken with this approach is long the sustainability benefits endure. A holistic approach is used to ensure that the process of providing services is in line with the Integrated Development Plan. Affordable and sustainable service to both households and municipalities is ensured. The approach takes into account capacity building at all levels of the community - which includes health and hygiene promotion, community awareness programmes, training of community members in project management, bookkeeping, quality assurance, expertise in appropriate technology as well as developing their skills to be health workers. The approach encourages needs-based development wherein new facilities are provided while at the same time upgrading existing facilities. The upgrading of existing facilities ensures that all facilities at the end of a programme meet the health standards and therefore add value to the health status of households. All projects will have to comply with EIA guidelines so as to ensure minimal impacts on the environment.

The success of an accelerated national sanitation programme is dependent on the level of prioritisation and willingness to contribute to the programme by all relevant departments. The resource allocation should not come from one single government department only, but should be an effort to bring resources together in a planned and co-ordinated manner. The various departments will contribute towards the programme in line with their mandates.

Recommendations

- Integrated Development Plans must include sanitation and all sanitation projects must be a part of the IDP/WSDP.
- The impact of sanitation operating costs on equitable share must be considered.
- Additional sanitation - specific conditional grants should be allocated subject to norms and standards.
- Benefits of the community-based development approach and local economic development should be accepted.
- Equal priority should be given to health and hygiene awareness and promotion.
- Allowances should be made for different technical approaches which take into account environmental factors.
- Supplementary subsidies for exceptional conditions should be conditional.
- A 10 year target to clear the backlog should be set.
- Programme and project management structures should be in place at all levels.

Conclusion

It is clear that certain essential elements need to be in place to achieve the objectives spelt out in this strategy. These include strong leadership, increased human and financial resources, political commitment in all spheres and increased focus on capacity building in the sector. Confirmation of financial resources should be the first step as a major programme cannot be implemented without the required financial commitments. Once this is done, the priority will be to build implementation capacity in the sanitation sector. The pace of implementation will be built up systematically as increased capacity becomes available. With this approach, the sanitation programme could be up to speed within two years and well on its way to ensuring improved health and dignity for all.
A Ventilated Improved Double Pit latrine - which is a dry sanitation system not requiring water for operation - is one of the options for construction.

Job creation through the community development approach to provide access to sanitation services will create approximately 400,000 person years of employment.
Who can be contacted?

National Sanitation Task Team

Department of Water Affairs and Forestry
Ms T Mpotulo
(012) 336 8811
xga@dwaf.pwv.gov.za
Private Bag X313
Pretoria, 0001

Department of Health
Zama Zincume
(012) 312 0503/(012) 323 0796
zincuz@health.gov.za
Private Bag X828
Pretoria, 0001

Department of Education
Charles Sheppard
(012) 321 5470/(012) 321 5478
ShepperdC@edu.pwv.gov.za
Private Bag X895
Pretoria, 0001

Department of Housing
Johan Wallis
(012) 421 1440/(012) 341 2560
johan@housepta.pwv.gov.za
Private Bag X655
Pretoria, 0001

Department of Provincial and Local Government
Zama Nofomela
(012) 334 0750/(012) 334 0769
zama@dso.pwv.gov.za
Private Bag X804
Pretoria ,0001

Department of Environmental Affairs and Tourism
Lucas Mahlangu
(012) 310 3536/(012) 320 1167
Imahlangu@ozone.pwv.gov.za
Private Bag X447
Pretoria, 0001

Department of Treasury
Simon Maphaha
(012) 326 6311/(012) 315 5151
simon.maphaha@treasury.co.za
Private Bag X115
Pretoria, 0001

Department of Public Works
Lorraine Malebo
(012) 337 2764
lorraine@dpw.gov.za
Private Bag X65
Pretoria, 0001

SALGA
Mr Thabo Mokoene (CEO)
(012) 338 6700 / 29
tmokoena@salga.org.za
PO Box 2094
Pretoria, 0001

DWAF Regional Offices

WESTERN CAPE
Lionel Visagie
(021) 950 7152
odg@dwaf-wcp.wcape.gov.za
Private Bag X16
Sanlamhof
7532

MPUMALANGA
Richard Mbambo
(013) 752 4183
6bc@dwaf.mpu.gov.za
Private Bag X11259
Nelspruit, 1200

KWAZULU-NATAL
Viv Naidoo
(031) 336 2763
Naidoo@dwaf.kzntl.gov.za
P O Box 1018
Durban, 4000

FREE STATE
Gabriël Hough
(015) 430 3134
4bj@dwaf.ncape.gov.za
P O Box 528
Bloemfontein, 9300

NORTHERN CAPE
Antonino Ross
(053) 831 4125/(053) 831 5682
rossa@dwaf.ncape.gov.za
P O Box 416
Kimberley, 8300

EASTERN CAPE
Mfusi Mpendu
(043) 643 3011
mpendud@dwaf.ecape.gov.za
Private Bag X7485
King Williams Town, 5600

GAUTENG
Johan Enslin
(012) 392 1300
enslinj@dwaf-nuc.pwv.gov.za
Private Bag X8007
Hennopsmeer, 0046

NORTH WEST
Logogang Bogopa
(018) 384 3270/(018) 392 2998
mochethandi@dwaf.pwv.gov.za
Private Bag X5, Mmabatho, 2735

NORTHERN PROVINCE
Masia Mgwambani
(015) 290 1238/(015) 295 3250
mgwambm@dwaf-ptg.pwv.gov.za
Private Bag X9506
Pietersburg, 0700