Water and Sanitation Program

An international partnership to help the poor gain sustained access to improved water supply and sanitation services

The National Sanitation Programme in Lesotho: How Political Leadership Achieved Long-Term Results

Africa Region

Discussing water and sanitation options with community.

Summary

Sound principles for sanitation policies and programmes have been discussed and documented for years, but there are very few countries that have actually put them into practice at a national scale. Lesotho is one such example: its national programme dates back twenty years but is not well known outside the country. The programme shows how determined government leadership, limited subsidies and private sector capability can lead to large increases in national sanitation coverage (from approximately 20% to approximately 53% of the population in twenty years). Its goal is to reduce morbidity and mortality attributable to diseases associated with poor sanitation through health and hygiene promotion and the promotion of the construction of ventilated improved pit (VIP) latrines, and evidence shows that this goal is indeed being achieved.

The national sanitation programme is subdivided into urban and rural programmes, implemented on a district basis. The three outstanding features of the programme are: it is a permanent and budgeted part of the government's work, independent of external support agencies; its financing rules are clear, including zero direct subsidies for building individual household latrines; householders directly employ private-sector latrine builders, while the government concentrates on promotion and training.

The Lesotho programme has been successful in addressing sanitation holistically at a national level, both in the urban centres and in the rural villages. There are, however, still two issues that require solution, namely helping the poorest people and emptying the full VIP latrine pits.

Water, sanitation and hygiene are vital components of sustainable development and the alleviation of poverty. Across Africa, political leaders and sector specialists are generating new momentum in these important areas. This Field Note, together with the others in the same series, constitutes a timely contribution to that work. It is intended principally to help politicians, leaders and professionals in their activities. As the Water Ambassador for Africa, invited by the African Development Bank and endorsed by the African Water Task Force and the African Ministerial Conference on Water (AMCOW), I commend it to your attention.

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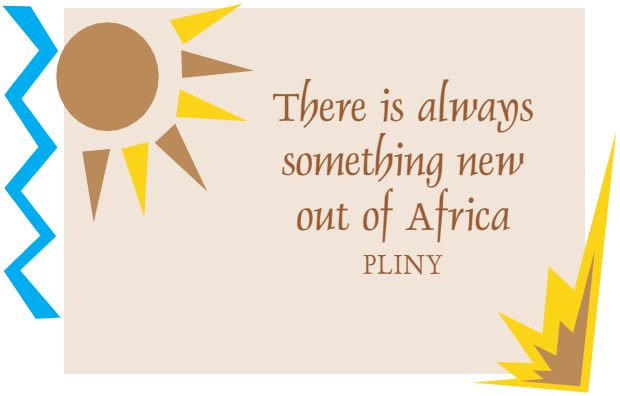
Water Ambassador for Africa

Blue Gold
Building African Solutions for Water, Sanitation and Hygiene



Background

The Kingdom of Lesotho has a population of approximately 1.9 million with an annual growth rate of 2.6%. Approximately 90% of the people live in rural areas. Only 13% of the land is arable, the rest being either mountain regions or land occupied by human settlements.

In 1981 Lesotho's main health problems were diarrhoeal and parasitic diseases, tuberculosis, influenza, measles, malnutrition and certain skin diseases. The infant mortality rate was 115 per 1000 births. Only 21% of the population (84% in urban areas and 15% in rural areas) had any sort of sanitation. The urban statistics were misleading, in that only 22% of the population had a sanitation system that effectively isolated human excreta from the environment. Many urban households had bucket latrines that required manual emptying once or twice a week. These bucket latrines were highly unsatisfactory, as they exposed their contents to the environment and created health risks to the workers who emptied the buckets. Conventional water-borne sewerage, on the other hand, was known to be far beyond the means of most residents, and unaffordable by the government and municipal authorities, except on a small scale. As to the rural areas, the increasing population density and decreasing number of trees led, as would be expected, to a potentially high demand for latrines.

After a series of technical studies by various international organisations, particularly the Water and Sanitation Program (WSP), the government started water supply and sanitation improvement programmes in both the urban and rural sectors of Lesotho in the early 1980s.

Key features of the national sanitation programme

Institutional arrangements

From the beginning in 1980, the sanitation programme has always been carried out by government bodies. Two separate Sanitation Improvement Teams were set up for the urban and rural sectors. They developed in different ways:

• The Urban Sanitation Improvement Team (USIT) was located within the Ministry of the Interior. USIT started its work rapidly, with the support of the United Nations Development Programme (UNDP) and the Water and Sanitation Program, as part of a World Bank-funded Urban Development Project. Because of its initial location within an externally funded project, it was able to act semi-autonomously with a high level of flexibility in terms of finance, manpower recruitment, transport, office equipment and supporting office staff. Its professional team initially comprised two national staff members and one expatriate technical expert, the latter handing over full responsibility to Lesotho nationals within two years and staying on as an advisor. In 1984 USIT became an independent department directly responsible to the Ministry of the Interior.

• The Rural Sanitation Improvement Team (RSIT) started in 1983 with a three-year pilot programme in one district. That led to the formulation of the National Rural Sanitation

The role of external support agencies

The external support agencies initially supplied both expert personnel and financial support. The aim of the support was to help develop the programme in close co-operation with national personnel within government, and to rapidly hand over all management responsibilities to local personnel, providing only advisory services for a period.

Support funding was directed at programme development, not actual project implementation. Project implementation was the full responsibility of the Lesotho Government, funded from the government's regular budget and hence more sustainable in the longer term.

Programme (NRSP) in 1987, based in the Environmental Health Section of the Ministry of Health. This location was chosen because of the importance of health and hygiene promotion as the main entry point for sanitation and improved latrines in rural areas. However, RSIT needed to co-ordinate its work with that of the Village Water Supply Section of the Ministry of the Interior. The Village Water Supply Section provided the technical support, while RSIT provided the education, training and community participation. This split arrangement was later discontinued and the whole programme came under the Ministry of Health.

From that time to the present day (2002) both sanitation teams have continued their work as parts of the Lesotho Government's regular, centrally funded programme of public-sector development work.

The different institutional arrangements of the urban and rural sanitation teams could have led to conflicting policy and strategies. Recognising this risk, they chose to liaise and plan together, which resulted in consistent policies, approaches and technology (including the same dimensions for concrete latrine slabs) being adopted by both organisations. Their work is also co-ordinated through a sub-committee of the national steering committee for water supply and sanitation.

Overall principles and approaches

Technology choice was a simple issue. Households in Lesotho typically built their own latrines using various materials. The ventilated improved pit (VIP) latrine, invented in Zimbabwe in the 1970s, had emerged as an appropriate and superior form of on-site sanitation because it overcame the two major disadvantages of traditionally designed pit latrines – smells and fly infestation – through the inclusion of a screened vent pipe in the design. So from the start, the Lesotho sanitation programme adopted the VIP latrine technology, adapted to local conditions, construction techniques and preferences.

This had an important effect on the whole approach of the programme. While sanitation programmes typically begin with a strong technical bias due to the need to test a range of technologies and select one or more to use, the Lesotho programme, after a brief phase of developing and testing the technology with users, became more concerned with broader social issues such as community participation, health and hygiene promotion, and finance.

Key principles adopted by the programme are:

- Decentralisation of project work to district level
- Community involvement in programme development

Sullage water disposal pit.

Pilot projects

In both the urban and rural work, pilot projects were launched before scaling the work up to the full national programme. The pilot projects enabled ideas to be tried out locally before applying them nationally. For example, the urban pilot projects included:

- Construction of demonstration VIP latrines next to ordinary pit latrines to highlight the differences
- Training local builders to construct masonry VIP latrines
- Training local carpenters and galvanised steel manufacturers how to upgrade existing latrine types to VIP latrine superstructures (These builders and manufacturers subsequently promoted the VIP latrine)
- A health education programme employing local community workers
- The use of mass media (radio) to promote improved sanitation using the VIP latrine

As to the rural pilot project, it involved the assessment of the following:

- Methods to integrate sanitation with other environmental health interventions
- Institutional needs of the Ministry of Health to be able to plan, implement and monitor a national programme
- The required characteristics of a Rural Sanitation Unit within the Ministry, to manage the programme
- The impact of the projects on health and hygiene practices

In both cases, these informed the design of the full-scale work that followed.

- Education and promotion to the users
- Full cost recovery from the users, i.e. no government subsidy of the latrine costs
- Promotion and use of the private sector
- Provision of training to the builders

Each of these principles is already well known to professionals in the sanitation sector. The important point about Lesotho is that they have all been put into practice together, consistently and for a long time: this may be unique in Africa. Using these principles, some 38,000 VIP latrines have been constructed in the urban centres (Maseru and thirteen towns), and in the rural areas approximately 36,000 new VIP latrines have been built, 19,000 ordinary pit latrines have been upgraded to VIP latrines, and there are some 30,000 ordinary pit latrines. This corresponds to an increase in coverage from 50% to 90% in urban areas and from 15% to 44% in rural areas.

Involvement of communities

In recognition of the requirements for long-term sustainability, the programme planners were committed to community involvement and education. This took the form of co-ordinated planning with representatives of communities and all relevant government institutions, the agreement and acceptance of joint responsibilities, and the provision of education and training. Overall community approval and commitment to sanitation improvement proved to be extremely important for the success of the projects, especially in rural areas.

District-level sanitation teams use existing local channels of communication to reach members of rural communities, particularly home visits, small group meetings and community meetings. As the project progresses, village development committees take on more responsibilities, including the recruitment and monitoring of local latrine builders.

Promotion

All opportunities are used to market latrines and raise the profile of sanitation. Two basic messages are put across by promotional activities:

- The health, hygiene and cleanliness benefits of improved sanitation
- The status of the VIP latrine as a new, desirable, modern and convenient product

The media used for promotion include printed matter (posters, pamphlets, leaflets, stickers, tee-shirts, flash cards and flip charts), radio, tape-slide presentations and videos. Most of this is targeted at potential latrine owners. In addition, each householder who builds a latrine is given an information leaflet on its use.

The people who carry out the promotional work in the rural villages are mostly existing village health workers and village water minders who have been trained in promotion and health education. Health Assistants, who are based at Health Centres, also undertake hygiene education and supervise both the construction of individual latrines and the communities' management of the hygiene promotion work. In the urban areas USIT staff carry out promotional campaigns, and also rely on the latrine builders.

Financing by the users

From the beginning, the design of the programme deliberately avoided the possible stigma of a VIP latrine being perceived as a poor person's latrine. Middle-income

people are deliberately targeted in promotion as they can buy latrines without direct subsidies.

Thus informed and motivated by the promotional work, each household takes responsibility for its own sanitation. The household pays for the construction of its latrine by a private-sector builder. The programme attempted to introduce specific arrangements to enable poorer households to be able to afford the capital cost of a latrine:

• For the urban areas, the parastatal Lesotho Bank set up a special loan scheme underwritten by government deposits set aside for the purpose. (The government underwriting was not publicised, so that borrowers would see these as bank loans to be strictly enforced rather than government loans to be abused.) This is a revolving fund, to which each loan must be repaid over two years. Each loan is for building materials only, not for the cost of paying the builder. Approximately 5% of latrines built have used these loans.

• In the rural areas similar loans are made available through the Lesotho Co-operative Credit Union League – village-based unions established to provide agricultural loans. Although exact figures are not available, it appears that few people have actually taken out these loans.

However, despite these arrangements, it seems probable that the poorest people in Lesotho are not able to afford a latrine and will need some form of direct subsidy. In rural areas a latrine costs approximately one month's salary, even though rural home owners were able to reduce costs by collecting and using local materials for building. One study on affordability (by USAID in 1985) indicated that 45% of households could afford a VIP latrine without a loan, 30% would need a loan, and 25% could not afford one without partial or full subsidy. The latest indications are that the rate of construction of latrines in the rural areas is declining, which probably indicates that most people who can afford them have built them.

Similarly, in the urban areas approximately 10% of households cannot afford a VIP latrine without some form of subsidy. By following a zero subsidy approach, the government programme has not yet met the needs of the poorest people, even if the majority of households have been able to build latrines. One Lesotho NGO, the Christian Health Association of Lesotho (CHAL), is giving means-tested subsidies to the poorest 5 or 10% of village households, and achieving almost 100% coverage in those villages. The government itself may soon need to consider such a scheme.

Financing by the government

The Lesotho Government has consistently taken the

Pit emptying: a technical and financial problem

The issue of pit emptying is the biggest problem in the Lesotho programme. Initially, specialist pit-emptying vehicles were used. These had suction pumps strong enough to remove the contents of latrine pits and were capable of accessing urban properties where larger vehicles would have difficulty. However, these vehicles proved to be expensive to operate, and after two or three years were plagued with maintenance problems that often required imported spares.

The pit-emptying service then started to use conventional suction tankers. These have weaker pumps, designed for septic tanks. The contents of latrine pits are usually too thick for these pumps and hence must first be liquidised by adding water. These tankers also experience blockages from refuse such as bottles and cans discarded in the pits.

Conventional suction tankers, and the process of adding water to the pits, are expensive. This causes a major financial problem. Many urban households, even though they were willing and able to pay the full price for the latrine itself, are reluctant to pay the full tariff for pit emptying. Consequently, until March 2001, USIT was subsidising the service and charging a lower tariff. In March 2001 the pit-emptying service provided by USIT was merged into the conservancy and septic tank-emptying service provided by the Water and Sewage Authority (WASA), and the tariff was increased to reflect more closely the actual costs (though the service was still partly subsidised). The number of pits being emptied is, however, very low.

The programme staff had anticipated this problem by promoting the option of building ventilated improved double-pit (VIDP) latrines. Social surveys indicated that many householders would be prepared to empty a pit by themselves after it had matured for three to five years. However, in some areas with high water tables the maturing pits never dried out properly causing cross-contamination between the pits. The programme stopped promoting VIDP latrines in urban areas that could be served by suction tankers, retaining the option only in rural areas.

The disposal of sullage water, particularly in the urban areas, has been addressed at the same time as the disposal of human excreta. Simple sullage soak pits have been widely promoted, and many households have installed these. However, the soak pits also cause problems due to the poor drainage characteristics of the soils, particularly where piped water is available and households use more water.

political decision to allocate significant sums to sanitation through its regular budget. These funds enable the government programme to pay for the supporting activities such as promotion, training local artisans in latrine construction, and monitoring to assess the social acceptance and use of latrines. In rural areas it also supplies basic latrine components (vent pipe, screen and steel for the slab) 'at cost' to households, to keep the prices low. It runs the loss-making pit-emptying service. Both of these services are indirect subsidies to householders, but the government does not give direct subsidies.

There is, however, one difficulty arising from mainstreaming the sanitation budget into the district health budgets. It now competes with curative work, and many of the district decision makers view the latter as a priority. Consequently the sanitation budget is reducing, and the programme is depending increasingly on the momentum of the communities' own involvement.

The programme also runs a separate, 50%-subsidised, schools sanitation programme. This includes its own user-education component.

Although the total funds invested by householders are difficult to estimate, they are probably three to six times as much as the government funding.

The role of the private sector

The latrines themselves are all built by private-sector builders in the urban and rural communities. In urban areas, these are mostly existing small building companies, for whom latrines provide a welcome extra market sector. In rural areas, hundreds of people were trained as local latrine builders, of whom approximately half took up latrine building as their full- or part-time job. So, in all settings, people with latrine construction skills are able to market those skills and have a direct economic incentive to promote improved sanitation.

A local (lower income) housing company was also supported by the programme to offer on-site sanitation, both as a component of new housing projects and as an individual service to existing home owners.

Lessons from the Lesotho programme

The Lesotho national sanitation programme has been running for a long time, and is still functioning within the Lesotho Government itself, with minimum external support. Small-scale pilot projects which tested out approaches, complemented by clear policies which took into account the non-sustainability of high subsidies and focused government support on training and promotion, have led to the build-up of a programme operating at the national scale.

That programme has achieved significant increases in sanitation coverage, although the coverage rate has not yet approached 100%. Careful assessments during the pilot

Local latrine builders constructing a VIP latrine.

VIP latrines in a rural village in Mokhotlong District.

projects suggested a significant reduction in the incidence of sanitation-related diseases in areas where water and sanitation projects had been implemented, in contrast to recent outbreaks of dysentery in areas with poor water and sanitation services. For years, the government has consistently applied policies that now correspond to generally accepted good practice in the sector, which give rise to the following lessons.

Many households can finance latrine construction

A major emphasis on community empowerment has resulted in high levels of user involvement and contributions. The majority of urban and rural households have been able to finance the construction of a VIP latrine without any direct subsidy or loan.

The loan system has also benefited a small proportion of other people, whose finances were on the margin of affordability.

The lack of subsidy has meant that the poorest households have been unable or reluctant to construct latrines. Some NGO programmes have offered subsidies to such households in the rural villages.

The government's sustained commitment is vital

The Lesotho Government was, and remains, strongly committed to sanitation. The sanitation programme has been fully supported by government policy, funded and incorporated into the mainstream functions of the government ministries. Its two main contributions were in promotion and training.

The government undertook to promote improved sanitation using as many different methods as feasible, and allocated money from the national budget to do so. The use of radio has been particularly strong and has resulted in a significant take-up of improved sanitation in terms of behaviour and construction of latrines. The use of two key messages in the promotion programme appears to have increased the impact. The key messages relate to improved health and improved status.

Health education and the hygienic use and care of latrines have been strongly promoted. Domestic health and hygiene has now been incorporated into all water and sanitation projects at community level. Participatory health education techniques have been incorporated into the programmes from an early stage, and more recently Participatory Hygiene and Sanitation Transformation (PHAST) techniques have been adopted as the norm for most projects.

The government programme paid attention to training at all levels. This included the sanitation improvement teams, the health authorities, local latrine builders, community health workers, local material suppliers, and

indeed the householders. The adopted approach to training was that not all people trained would take up the option of practising. This meant that more were trained than were actually required. However, this was not seen as a shortcoming, but as a general education process to address the overall needs.

Small private companies can make a living from sanitation

From the start of the programme, households commissioned the construction of their latrines from private-sector builders. The householders have received a good service at an acceptable price. The private sector companies have had a strong incentive to promote improved sanitation to potential users.

Employment has been generated for local latrine builders, and local industries and materials distributors benefit from their linkages to construction activities. The training and building experience gained by local latrine builders are valuable skills that can be used in other income-generating activities. In the rural areas, however, the recent decline in demand for latrines has led to a high drop-out rate among latrine builders, leading to a reduction in the number of people who obtain their livelihoods from sanitation.

VIP latrines have worked well, except for pit emptying

The already tried and tested VIP latrine concept was readily adopted as standard, and existing latrine construction techniques were incorporated into its design. A national standard was adopted for both urban and rural programmes using identical dimensions for slabs but allowing a wide range of materials for walls, roofs and doors.

The biggest remaining technical and financial problem is pit emptying:

- Emptying ventilated improved double-pit latrines by hand (after three to five years maturing) has been problematic in areas of high water table.
- Imported specialist pit-emptying vehicles, although initially successful, have been expensive to operate and difficult to maintain.
- The only method still in use is emptying by conventional suction tankers. This method requires the addition of water to liquidise the pit contents before suction, and is relatively expensive.

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