# LESOTHO'S NATIONAL RURAL SANITATION PROGRAMME: TECHNICAL ASPECTS

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### SUMMARY:

One of the main objectives of the Technical Development and Training Unit during the pilot phase of the National Rural Sanitation Programme was to design low-cost pit latrines which would be suited to the cultural, social, and cultural conditions in rural parts of Lesotho. Emphasis was placed on acceptability, ease of maintenance and minimum environmental pollution.

In order to fulfil these objectives, the technical inputs should enhance such inputs as:-

- Arrangement for the construction of protypes of various designs, in order to enable the project beneficiaries to express preference and to ascertain their suitability and cost.
- Exploration of and testing of different methods od undertaking construction, including:
  - Self-help with nominal assistance
  - Self-help with appreciable assistance
  - Through assistance to local builders, by imparting latrine construction training courses.
  - Through on-going development programmes
- To provide technical advice, training and support to other rural development programmes which have funding for rural sanitation.
- To train local builders and extension workers in VIP latrine construction methods.

### BACKGROUND

The pilot phase of the Rural Sanitation project was started in late 1983, with the arrival of the international staff, and ended in December, 1986. It was stated that during the pilot phase of three years, 400 latrines should be constructed by both trained local builders and the technical team. The pilot phase of project was financed by UNDP, UNICEF, USAID, Government of Lesotho and executed by World Bank.

It was agreed that the ventilated improved pit latrine, or V.I.P. was the most suitable type of latrine for Rural Lesotho, as was already adopted in other countries of Southern and Eastern Africa Regions.

There are basically two types of latrine currently adopted in Lesotho Rural Sanitation Programme, namely, the single VIP latrine, and the double pit or alternative pit latrine. The basic pit covers are made of reinforced concrete slabs. There is a ventilation pipe and the latrine shelter that can be made out of different locally available materials, these include:-

- Corrugated iron sheets and timber,
- Stones with corrugated iron roofing,
- Mud blocks with corrugated iron roofing,
- Hessian/chicken mesh wire on timber frameworks rough casted with mortar,
- Mud and wattle,
- Cement and sand building blocks,
- Burnt clay bricks.

The choice of building materials is left to the home owner, with advice from project staff, according to financial affordability. The project is composed of three components, or sections. The management component, Socio-cultural component, which deals with monitoring and evaluation of the programmes implementation activities, the Health education component, all which are based within the Ministry of Health, and lastly the technical component, which is based in Ministry of Interior, Chieftainship Affairs and Rural Development, under Village Water Supply section. Thus we can see that the design of the programme is to ensure that both water supply and sanitation programmes work closely together.

The pilot project was evaluated in December 1986 and it was observed that it had succeeded very well in achieving most of its objectives with more than 650 latrines constructed. Hence, in January this year, the Government of the Kingdom of Lesotho declared the launching of the country-wide National Rural Sanitation Programme. At present, four out of ten districts are being covered. The three districts in the North being financed by British Government. More districts are hoped to be covered before the end of this year, with financial support from international organisations and Governments.

## LOCAL LATRINE BUILDERS TRAINING PROGRAMME

Main focus:- Transfer of VIP latrine construction technology from Government expert team to local village artisans, so as to make it as simple and as accessible as possible to the villager.

Model two-week training courses have been developed during the past three years of the RSP pilot phase.

Participation:- about 20 selected village builders

Selection:- A village gathering called "pitso" is called two weeks before start of course, and villagers (builders and Village Health Workers) are encouraged to enroll for the training course. The villagers are briefly informed about the importance of constructing VIP latrines for their families. The chief being the central figure of administration in the village, is the one who really encourages and enrols the builders, with the help of village development councils. The final selection of the suitable builders is done by the project technical team a week before the starting of the training course.

### COURSE SYLLABUS

Mornings during the first week are normally committed to theoretical classroom lectures, with more practicals concentrated to the second week. Trainees are actually involved in pit digging and latrine construction, with technical supervision from the Government technical assistants.

Normally four to five demonstration latrines are constructed, with at least one Double Pit latrine. These are constructed at vital community centres, like the local court, the chief's place, the clinic, and at the home of one of the village Health Workers, or at the home of some prominent or exceptionally needy people in village development.

# END OF COURSE

Certificates of participation are issued to trainees, and are endorsed by District Sanitation Coordinator, District Medical Officer, District Secretary.

But before receiving certificates, trainees are required to sign "latrine construction contracts", which basically binds the trainees that they should be faithful in their costs of construction of latrines for the fellow villagers at certain construction rates stipulated by the project authorities. This is a measure to ensure that latrines are constructed at a cost as low as possible, while keeping in mind that the builders should also get a reasonable pay in exchange for their services. The validity of the contracts remain in the hands of the chief and the village development council.

There is a follow-up technical supervision, for at least 6 months, in each area of programme, immediately following the training, to make sure that trainees improve their quality of construction..

Certain construction materials which are not available locally are sold the homeowners by the project, so as to speed up construction (these include:- reinforcing steel rods, vent pipes + flyscreen).

Step-by-step builders manuals are issued to every builder in the village, after the course, plus other Health education materials.

# OTHER SANITATION RELATED PROGRAMMES

- Lesotho Urban Sanitation Improvement Team (USIT), which deals with low cost sanitation in urban and peri-urban areas. There is very close collaboration between USIT and the Rural Sanitation Programme. Similar latrine designs and a standard set of basic components are used by these programmes.
- CARE LESOTHO
- UNICEF-funded Basotho women in Development Programme, and others.

# FUTURE EXPANSION

The approach by RSP is to establish district by district programmes which are run by district teams, which are answerable to the central National Rural Sanitation team. Means are being developed to provide loans to some financially weak sections of the Rural Communities to enable them to afford latrine construction.

## PROBLEMS AREAS

Although considerable progress has been achieved in promoting latrine construction in the country, there still remain problems to be sorted out. In most of the areas of activities, only about 25% to 75% of the trained latrine builders are active. Hence, it would be of benefit to us if the participants of this conference could provide us with some new ideas of ensuring 100% participation of trained latrine builders, towards construction of more latrines, in order to achieve 90% coverage of latrines in Rural Lesotho, by the year 2,000.

#### BRIEFING NOTES:

RURAL SANITATION PILOT PROJECT AND NATIONAL RURAL SANITATION PROGRAMME IN THE KINGDOM OF LESOTHO

#### Background

The conceptualization of Rural Sanitation Programme in Lesotho stems from assessments during the past decade of Lesotho's village water supply and rural health care programmes. Among other findings, these assessments indicated that improving a water supply alone has negligible impact on rural community health status. An integrative approach is now recommended which will provide concurrent and balanced improvements to water supplies, sanitation, and personal/community hygiene in order to improve rural health conditions. The Rural Sanitation Pilot Project (RSP) was conceived as the first phase of a national rural sanitation programme which would adopt this integrative approach.

Implementation of the RSP began in October, 1983 with support from the United Nations Development Programme (UNDP), United Nations Children's Fund (UNICEF), and the United States Agency for International Development (USAID). Execution of the external assistance for the Project has been undertaken by the Technology Advisory Group of the World Bank (TAG). As a pilot project, the objectives of the RSP have been:-

To determine the form and inputs required for an integrative national rural sanitation programme. To develop a national capacity to plan, implement and monitor/evaluate the national programme. In the long term, to achieve a sustained improvement to rural health status.

The RSP has been implemented through two Ministries by the Government of Lesotho, the Ministry of Health (MOH) and the Ministry of Interior, Chieftainship Affairs, and Rural Development (MOI). MOH is the lead Ministry and is responsible for project administration, health education, promotion, non-technical training, monitoring and evaluation. These responsibilities are executed by the Environmental Health Section of MOH. MOI, through the Village Water Supply Section, is undertaking technical research and development and technical training. This inter-ministerial arrangement is expected to continue for the foreseeable future.

The RSP terminated at the end of 1986 and the National Rural Sanitation Programme (NRSP), adopting the strategy developed during the pilot phase, was launched by the Government of Lesotho concurrently.

## Strategy:

The strategy for the NRSP, taking into consideration existing constraints on Government spending, seeks to:

minimize the need for an expanded GOL establishment or physical infrastructure to support the programme;

maximize the active participation of the private sector and beneficiary groups in planning, management and implementation of the programme.

A decentralized approach has been adopted which uses the district as the focal point for programme implementation.

The Ventilated Improved Pit Latrine (VIP) has been selected as the technology of choice for the programme. The VIP is a simple, relatively low-cost improvement of a traditional pit latrine. Its main distinguishing features are a strong foundation, secure concrete slabs for flooring, seat and pit cover, and a screened ventilation pipe which extends at least ½ meter above the latrine. The vent pipe draws foul air out of the pit, keeping the latrine smelling fresh and preventing flies from entering the latrine or pit. In collaboration with the Urban Sanitation Improvement Team (USIT), the RSP developed a standard design and kit of components for Lesotho VIPs. Rural households are encouraged to build VIPs based on these kits using locally available materials wherever possible to keep costs low.

Behavioral change with regard to personal and community hygiene habits is considered to be perhaps the most important objective of the national programme with regard to health impact. Hence, a strong and comprehensive health education and social marketing package is envisaged for the Programme.

At the district level, District Sanitation Teams (DSTs) will be formed comprising One District Sanitation Coordinator (Senior Health Assistant) and two to four Health Assistants, all from EHS - MOH, and four Technical Assistants from VWSS - MOI. In close collaboration with other primary health care and village water supply activities, the DST will develop a plan of action to

increase effective demand for VIP latrines, ensure that skills for constructing VIPs are present in rural communities, and encourage improved personal and community hygiene habits. The team will conduct courses for local artisans, Village Health Workers and other interested individuals on VIP latrine construction. Successful trainees will then be expected to build latrines on a commercial basis in their home communities. A variety of training, community mobilization and promotional techniques will be used by the DST before, during and after these courses to increase demand for VIPs and to ensure their effective use and maintenance.

Rural households are expected to pay the full cost of VIP latrine construction. Hence, minimizing these costs is an important concern of National Programme planners and implementors. With regard to labor, an attempt is made to balance profitability with affordability through written agreements between trained builders and their communities which indicate ceiling prices to be charged for labor inputs. Households are encouraged to use for VIP construction materials which are available locally at little or no cost, such as stone or mud blocks, and to undertake some or all of the construction themselves, if they have sufficient skill.

In order to assist lower income groups who may have difficulty in affording a VIP, methods for providing loans are being developed. After testing and evaluation of their effectiveness and manageability, these credit schemes may be incorporated into district programmes.

At the national level a rural sanitation team will be maintained in order to assist with the establishment of DSTs and coordinate the implementation of district programmes. This national team will train DST staff, mobilize resources for district programmes, regularly monitor and evaluate national and district programme progress, develop and produce project support communications inputs for the DSTs, and ensure that all district programmes are implementing consistent and effective policies.

### Achievements to Date:

During the pilot phase the RSP was active in six sites in Mohale's Hoek District. Over 700 VIPs have been built, and over 140 rural latrine builders trained during the three-year period. A plan of action for monitoring and evaluation of the National Programme has been developed and is now undergoing testing, as well as a strategy for health education and social marketing of the Programme.

During the final year of the pilot phase a district-wide rural sanitation programme was stated in Mohale's Hoek, and staff placed for the DST. Two additional district programmes are now being established in Leribe and Butha Butha Districts with support from the Overseas Development Administration of the United Kingdom. Also, a detailed section on the National Rural Sanitation Programme has been included in the Draft Fourth Five Year Development Plan for Lesotho.

Targets and Plans for the Next Five Years and Beyond:

A target of 70,000 VIPs for rural households has been proposed for the fourth national development period. In order to achieve this target, district programmes will need to be initiated in all ten districts by 1990. As was stated above, three district programmes have already been established. Donor support for a fourth district, Mokhotlong, has also been assured. When fully under way, each district programme will require at least 200 active VIP latrine builders who will complete at least 40-50 VIPs per district each week.

In the longer term, it is expected that 90% of rural households will have VIP latrines by 1999. Achieving this coverage will require the construction of 275,000 VIPs through the district programmes. It is also expected that the latrine construction effort will occur concurrently with water supply improvement and positive behavioral changes with regard to personal and community hygiene.

To reach these targets an intensive and well coordinated effort will be required from Government personnel at both the district and national levels, as well as private sector individuals and organizations. Health education and social marketing will form a critical element of the programme in order to increase demand for improved sanitation, and to induce improved hygiene practices. A regularly implemented and well designed monitoring and evaluation component will be required which provides useful, sufficiently detailed and timely information on programme implementation and impact. This will allow for regular and rapid modification of programme design and implementation in order to enhance its effectiveness.