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# LESOTHO HEALTH EDUCATION PROJECT



LEEDS POLYTECHNIC

January 1986



#### THE KINGDOM OF LESOTHO

## MINISTRY OF INTERIOR MINISTER OF HEALTH

## FINAL REPORT ON HEALTH EDUCATION PROJECT

July 1984 - November 1985

January 1986

Dr John Hubley Department of Health Education Leeds Polytechnic

Under Assignment By The Overseas Development Administration

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By letter dated 29 February 1984

the Overseas Development Administration
engaged the Department of Health Education at Leeds Polytechnic
under British aid arrangements to advise and assist the Kingdom of Lesotho
in the development of the health education component
of its urban sanitation programme.

The Terms of Reference are given in Appendix 1.

Although this Report has been commissioned by the British Government under British aid arrangements, the British Government bears no responsibility for, and is not in any way committed to, the views and recommendations expressed herein.

#### ABBREVIATIONS AND ACRONYMS

GOL Government of Lesotho HEU Health Education Unit, MOH **IDRC** International Development Research Council, Canada **IMRC** Instructional Materials Resources Centre, Ministry of Education MOE Ministry of Education MOH Ministry of Health ODA Overseas Development Administration, Foreign and Commonwealth Office, UK RSP Rural Sanitation Program, MOH TAG Technology Advisory Group established under UNDP Global Project GLO/78-006 **UNDP** United National Development Programme USAID United States Agency for International Development USIT Urban Sanitation Improvement Team, Ministry of Interior **VIDP** Ventilated Improved Double Pit Latrine

Ventilated Improved Latrine

VIP

#### SUMMARY AND RECOMMENDATIONS

The Kingdom of Lesotho is a land-locked country in Southern Africa with a population of 1,438,000. Only 22% of the urban and 20% of the rural population have access to adequate sanitation facilities. An extensive programme has been initiated by the Government of Lesotho to improve sanitation in both urban and rural areas.

The Lesotho Health Education Project was set up by the Urban Sanitation Improvement Team (USIT) of the Ministry of Interior of the Government of Lesotho, with assistance from the Overseas Development Administration of the United Kingdom.

Dr John Hubley of the Department of Health Education, Leeds Polytechnic was brought in as project consultant and made three visits of total duration 12 weeks to Lesotho over the 14 month period from July 1984 - August 1985. During the project the terms of reference of the consultancy were expanded to enable the consultant to assist the Rural Sanitation Project of the Ministry of Health.

#### 2 SUMMARY OF PROJECT ACTIVITIES

During the course of the consultancy the following activities were undertaken by the consultant in close collaboration with local personnel.

- .1 A review of the health education needs of USIT and preparation of a communication strategy to support urban sanitation initiatives.
- .2 Preparation of a series of 14 tape-slide audio-visual programmes (7 in English, 7 in Sesotho) with accompanying notes to support the various Urban Sanitation initiatives. These include: briefing sets for school managers/teachers and pupils on school sanitation; training sets for health workers on sanitation/maintenance/use/hygiene practices; and briefing sets for local administration personnel on the proposed Thirteen Towns Sanitation Project.
- .3 Liaison with the ODA over the provision of audio-visual equipment for production and showing communication materials including: portable VHS camera/monitor and video tapes; Kodak 'Diacase' tape-slide playback unit, portable generator.
- .4 Assistance in the scripting and production of a promotional video film on the construction of Ventilated Improved Pit Latrines. This involved the Consultant in a coordinating role between the Instructional Materials Resource Centre of the Ministry of Education and USIT.
- .5 Provision of a range of other educational resource materials including: books on visual design, photographs/captions/materials for exhibitions, drawing materials, a resource collection of photographs/colour transparencies; a photographic light box and the Collier Macmillan Magnet Board System.
- .6 Liaison with the ODA for the local purchase of an overhead projector and screen for USIT. The Consultant also supplied USIT with materials for the production of overhead transparencies and prepared a comprehensive selection of transparencies on sanitation.
- .7 Provision of on the job training of local personnel through supervised involvement in the design and production of tape-slide/video programmes during the Consultant's visits.

- .8 Provision of specialist training in health education/communication on the Leeds Polytechnic Diploma Course in Health Education in Developing Countries. A person from USIT and another from the Ministry of Health were trained with ODA/British Council funding in 1984/85. A further staff member from USIT and another from the Village Water Supply Programme are currently at Leeds for the 1985/86 session with funding from WHO.
- .9 Assistance to the Rural Sanitation Project through the production of tape-slide programmes. One was an introduction to the problem of Rural Sanitation and the other was an extended training package for health assistants (both sets in English and Sesotho).

#### 3 RECOMMENDATIONS

The terms of reference for the Consultant were to develop educational resources to support urban and rural sanitation programmes. During the course of this work there were certain issues for which it is felt appropriate to make specific recommendations.

- The development of sanitation/hygiene/health education in schools requires careful attention. Local expertise exists within USIT, RSP, HEU, the National Curriculum Development Centre, National Teacher Training Centre and the National University of Lesotho. Close liaison between these agencies should be encouraged. A useful exercise would be to hold a two week curriculum development workshop for sanitation/hygiene education.
- Consideration should be given by the Ministry of Education to the release of key staff for training in health education in Eritain Suitable staff would be health education advisors at the National Curriculum Development Centre or teacher trainers at the National Teacher Training Centre
- 3 There has been considerable development in local capacity to produce educational materials. Future demand from sanitation and other health sectors may require additional media production facilities within the Ministry of Health. Careful consideration should be given to the location of this facility to ensure it is properly used and maintained.
- 4 Consideration should be given to improving the training of fieldworkers in sanitation/hygiene/health education
- 5 Suitable persons should be selected for training in health education/communication skills at courses such as the Leeds Polytechnic Health Education Diploma Course.
- An evaluation of the long-term impact of the Lesotho Health Education Project should be carried out. This evaluation should include not only an assessment of the actual materials produced, but also the equipment supplied, effectiveness of training provided and the follow-up activities directly attributable to the project

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#### 1 INTRODUCTION

#### 1.1 SCOPE OF FINAL REPORT

The Health Education Department of Leeds Polytechnic was contracted by the Overseas Development Administration of the Foreign and Commonwealth Office of the British Government to undertake a 21 week consultancy. The purpose of this consultancy was originally to assist the Government of Lesotho by preparing health education materials to support the work of its Urban Sanitation Improvement Team (USIT). During the Consultancy the terms of reference were expanded to allow the Consultant to develop training tape-slide programmes for the Rural Sanitation Programme (RSP) (see terms of reference for consultancy in Appendix 1)

The Consultancy took place over a 14 month period beginning July 1984 and involved three visits. The visits took place over the period 22 July to 7 August 1984, 3 January to 5 February 1986, 7 July to 15 August 1986. An outline of the various activities undertaken by the Consultant at Lesotho and at Leeds is given in Appendix 2.

#### 1.2 INTRODUCTION TO LESOTHO

The Kingdom of Lesotho is a small, landlocked country of 30,400 square kilometers (10,000 square miles) entirely surrounded by the Republic of South Africa (RSA). (Figure 1) About one quarter of the country in the west and south is lowland country, varying in elevation between 1,500 and 1,800 meters (5,000 to 6,000 feet). The rest of the country is mountainous with peaks of over 3,400 meters (11,000 feet). Only some 13% of the country is suited to crop cultivation. Most of the arable land is in the lowlands. The mountain areas are suitable only for grazing. The road system and other communication infrastructure are relatively well developed in the lowlands, but are severely handicapped in the mountain areas by the terrain and harsh climate.

The population is presently estimated to be 1,438,000. The population grew at a rate of 2.4% per annum between 1970 and 1981. It was estimated that 12% (168,000) of the population live in the urban areas of 16 towns; the remainder live in scattered villages. A village may range in size from a few people to over 1,000 persons. The capital is Maseru which has an estimated population of 65,000 (1978) and an average of 3.5 people per household. Some 11% of the population are working outside Lesotho (80% of these in RSA), comprising about 50% of the male labour force and 10% of the female labour force. In recent years the demand for Basotho labour in RSA has declined.

The Gross National Product (GNP) was estimated at \$756 million (1983); the Gross Domestic Product (GDP) was approximately \$430 million. The earnings of Basotho workers in the RSA are estimated to be about equal to the GDP. Agriculture generates about 33% of the GDP with the remainder being generated by manufacturing (only about 4%), tourism, government and other service activities. The urban share of the GDP increased from 40% in 1970/71 to 55% in 1974/75. The GNP per capita (1983) was estimated to be \$540.

The health profile of the population is dominated by gastrointestinal and parasitic diseases including endemic typhoid. Tuberculosis, influenza, measles malnutrition and skin diseases are all common and there is some leprosy. Life expectancy at birth is estimated at 52 years and infant mortality at 115 per 1,000 live births. Urban poverty is high - between 40% and 70% of households in Maseru and a higher percentage in other towns have incomes below \$123 per month which is the income required for minimum calorie intake and non-food expenditure.

## KINGDOM OF LESOTHO



#### 1.3 URBAN SANITATION AND THE ROLE OF USIT

USIT is part of the Department of Interior within the Government of Lesotho. A British Technical Cooperation Officer is attached to USIT as Urban Sanitation Advisor.

The objectives of USIT are to upgrade the sanitation of the urban population (168,000).

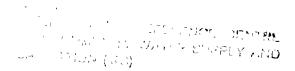
Of the 78% of the urban population estimated to have inadequate sanitation, 16% have no sanitation, 33% have pit latrines and 34% have bucket collection. The emphasis of USIT has been in the development of low cost appropriate sanitation technologies to meet the needs of the low income urban population. These technologies include the Ventilated Improved Pit Latrine (VIP) and Ventilated Improved Double Pit Latrines (VIDPs). USIT has adapted these for available building materials. Among these adaptions are wood/zinc sheet movable VIPs and cement block VIDPs.

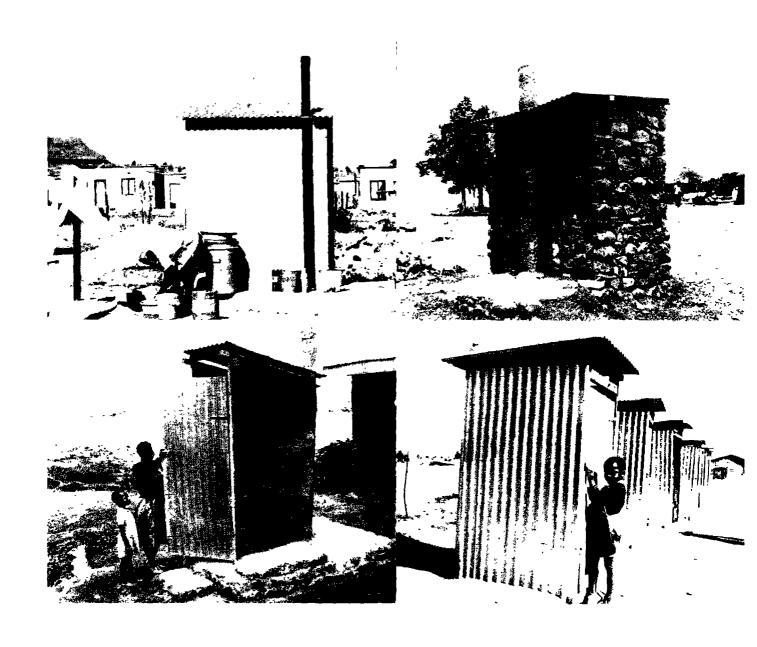
The approach used by USIT has involved directly dealing with potential users through radio and field staff. It has also included training of masons and carpenters in the construction of improved latrines.

The initial emphasis of USIT was in Maseru, however activities have now expanded to other urban areas, especially within the KFW-sponsored 'Thirteen Towns' project which commenced in 1985.

USIT has become involved in assisting the introduction of improved sanitation in schools. This activity is likely to considerably increase.

It was a growing awareness of the importance of communication in the promotion of improved sanitation that led to USIT approaching the ODA for funding of the Lesotho Health Education Project.





The VIP latrine is the most appropriate form of sanitation for countries such as Lesotho where water is scarce. Both USIT and the Rural Sanitation Project have developed VIP latrines using a wide range of locally-available materials.

1.4 RURAL SANITATION AND THE ROLE OF RURAL SANITATION PROJECT (RSP)

Approximately 13% of rural lowland and 3% of mountain households have access to sanitation facilities which are mainly the unimproved pit latrine.

The Rural Sanitation Project (RSP) is a three year project in the Ministry of Health executed by the World Bank and financed by UNICEF, UNDP and USAID. The Project commenced operations in October 1983 with the arrival in the country of the international personnel. Staff include: Project Coordinator and local counterpart; Social Anthropologist (UN volunteer) and two research assistants; Chief Technical Officer and four technical officers. An application is in progress for a UN volunteer to develop health education activities linked to sanitation/hygiene among rural women.

This pilot project has been working in the Mohales Hoek District. Its activities have concentrated on developing appropriate technologies for rural sanitation as well as strategies for village level work.

USIT and RSP work closely together. The Consultant attended meetings with RSP field staff and showed them the various educational materials produced for USIT. The RSP approached ODA and received funding for an extension of the Lesotho Health Education Project to prepare four tape-slide programmes (two in English, two in Sesotho) to meet their needs.

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The Rural Sanitation Project holding a 'Pitso' (public meeting) in their pilot project area in Mohales Hoek District. Tape-slide programmes were developed to introduce the need for sanitation in rural areas and to train health assistants in the planning implementation of sanitation and hygiene programmes.

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## 2 THE NEED FOR HEALTH EDUCATION AND COMMUNICATION SUPPORT IN PROMOTING SANITATION AND HYGIENE IN LESOTHO

#### 2.1 THE IMPORTANCE OF SANITATION AND HYGIENE

The World Health Organisation has estimated that over 80% of all sickness in the world is attributed to water and faecal-related diseases. The provision of adequate amounts of clean water is a pre-requisite for improvement of health.

However experience in Lesotho and other countries indicates that the provision of clean water alone is not enough. The work in Lesotho of Feacham and his co-workers had showed little difference in levels of reported Diarrhoea between villages with and without improved water supply. The reason why health did not improve with provision of clean water is that drinking water is only one of many ways in which a person can be infected from faeces. The other important routes of infection are through direct contact on hands, contamination of food and flies. Drinking water can also be contaminated in storage vessels.

It is thus essential that the provision of safe drinking is accompanied by the disposal of faeces in latrines. The bucket latrines and traditional pit latrines still allow the spread of disease through the flies that breed in the faeces. This spread of disease through flies is prevented in the recently-developed Ventilated Improved Pit Latrines (VIP) which is the most appropriate form of sanitation for rural Lesotho.

However, even with water and VIP latrines, health benefits may not be achieved. The faeces of children are the <u>most dangerous</u> for spreading diarrhoea to other children. Yet is is common to find children not using latrines. Small children playing in yards easily come into contact with faeces on the ground. Parents may regard children's faeces as harmless.

Thus the health benefits from improved water and sanitation will only be realised if accompanied by a comprehensive package of hygiene measures such as hand washing, food preparation, storage of drinking water, disposal of children's faeces and general household cleanliness. The interaction of Diarrhoea with Measles and malnutrition requires hygiene measures to be linked with preventive health measures such as immunisation, child nutrition and oral rehydration therapy of children with Diarrhoea.

Health education and communication can thus be seen to be essential components of sanitation and water supply programmes and in order to achieve the following:

support for sanitation programmes motivation to up-grade sanitation information on latrine construction maintenance of latrines and water supply hygiene practices child health practices.

There is usually strong community support for improved water supply programmes but this is not often the case for latrines. A vigorous health education programme is needed to generate motivation for construction and use of latrines. However the most difficult changes are hygiene practices. It is not easy to change behaviours which have been long established in time. Such behaviours surrounding child hygiene are also reinforced by low incomes, poor housing and the migrant labour system which leaves many women having to raise their children alone and with little extra time for home hygiene and child care.





A mother is making sure her child washes his hands after using their new VIP latrine. Providing water and sanitation on their own is not sufficient to improve health. Health education is necessary to promote hygiene measures in the community such as hand washing, food preparation, drinking water storage and waste disposal.

#### 2.2 PRIORITY AREAS IDENTIFIED FOR COMMUNICATION SUPPORT

Following an extensive programme of consultation with individuals and meetings with USIT staff a list of priority issues was made. The Consultant then suggested which communication need would best be met by different media. The Consultant and USIT agreed on a strategy for materials production which maximised the use of local production facilities supported where appropriate by the work of the Consultant in Lesotho and Leeds. The Consultant made specific recommendations for the purchase of equipment and materials for the production and showing of audio-visual media. These recommendations were implemented during subsequent visits.

During the second and third visits the Consultant had meetings with RSP to determine priorities for rural areas.

The various priority areas and media requirements identified by USIT and RSP are summarised below:

#### 2.2.1 USIT: Briefing local officals in the Thirteen Towns Programme

The expansion of USITs work from Maseru to thirteen other towns in Lesotho require the full understanding and cooperation of a wide range of key officials at a local level in each town. USIT plans to hold a numbe of seminars in each urban centre to brief local officials on their roles. In order to support these seminars communication media will be required especially - tape-slide, overhead transparencies and exhibitions.

## 2.2.2 USIT: Motivation of householders on the need for improved sanitation and information on procedures for construction of VIP latrines.

USIT had already produced a general introductory tape-slide programme and a selection of leaflets/posters to meet this need. This topic was identified as highly suitable for an introductory video film on the construction of the VIDP latrine and the assistance that USIT can provide to householders.

## 2.2.3 USIT: Briefing of School Managers on decision-making process for improving sanitation in their schools.

USIT is actively involved in the development of sanitation facilities in primary schools in both rural and urban Lesotho (there are over 1,000 primary schools in the country. On receiving a request for help a member of USIT staff will come and talk to the school management committee and teachers and advise them of plans and costs.

Problems have been encountered in ensuring that the new latrines are properly maintained and that hygiene facilities for washing hands/food preparation/refuse disposal are provided and used.

It is thus essential that school managers are aware that the full implications of a decision on building latrines include ensuring provisions for maintenance and health education of pupils on the use of latrines and hygiene practices. A need was identified by USIT for a briefing tape-slide programme for School Managers on the decisions they must make in order to improve the health and hygiene in their schools.

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## 2.2.4 USIT: Briefing of pupils in schools with newly-acquired improved sanitation hygiene practices

At present USIT visit each school on completion of the construction of the latrines and conducts teaching sessions with each class on the use of the new latrines. A need was identified by USIT for a tape-slide programme to be used by this 'commissioning team' of USIT staff which would clearly describe the important points on the use and maintenance of the new VIP latrines and the accompanying hygiene practices. Following discussions with USIT staff the Consultant put the main points for use and hygiene into a 'Ten Point Programme' which formed the basis for the tape-slide programme and a children's song was prepared.

# 2.2.5 USIT: Training materials for health workers on their role in promotion of improved sanitation, maintenance and use of latrines as well as improving hygiene practices.

Promoting improved sanitation and hygiene practices is a process requiring close and continuous contact with communities. USIT does not have the field staff to carry out extensive house-to-house motivational work with communities and will have to rely on utilising the existing infra-structure of fieldworkers in other services. Nurses and other clinic staff are important potential resources that could be mobilised to promote sanitation and hygiene. USIT identified a need for a comprehensive package of tape-slide programmes to train health workers in appropriate sanitation technologies, maintenance and use of latrines as well as the hygiene practices required in order to obtain the health benefits from improved sanitation.

## 2.2.6 RSP: Briefing communities and officials on rural sanitation in Lesotho and the role of the Rural Sanitation Project

The Rural Sanitation Project identified the need for an introductory tape-slide programme which they could use for introducing communities and officials to the need for improved sanitation, the use and maintenance of VIP latrines and accompanying hygiene measures. This set would also explain how RSP can assist communities in their work.

## 2.2.7 RSP: Training health assistants in the planning and implementation of sanitation and hygiene programmes

The expansion of the pilot programme activities of the RSP will depend on the infra-structure of health assistants that is being set up by the MOH in rural areas. The training of health assistants in sanitation is a priority of the RSP. A need was identified by RSP for an educational package of tape-slide programmes which would introduce health assistants to the various stages in planning and implementation of sanitation programmes in rural areas.

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SANITATION (IRC)





A nurse explaining the workings of a demonstration VIP latrine to mothers coming to her clinic. The 'Working for Health' tape-slide series was developed as a resource to train health workers in the promotion of sanitation and hygiene in their communities.

# 3 COMMUNICATION MEDIA DEVELOPED IN LESOTHO HEALTH EDUCATION PROJECT

### 3.1 TAPE SLIDE PROGRAMMES

A tape-slide programme is a series of slides with an accompanying commentary on an audio-casette. The cassette is 'pulsed' with an inaudible signal which automatically changes the slide at an appropriate point. Tape-slide programmes are cheaper to produce than video or film, are extremely flexible and can easily be revised with new slides or commentaries. A tape-slide programme can be shown as a continuous programme or the slides used on their own by trainer supplying his own commentary.

Tape-slide presentation units were available in Lesotho. Both USIT and the RSP had Singer 'Caramate' units which allow the picture to be either projected onto a large screen or back-projected on a small screen for viewing in daylight conditions. USIT had already produced and used with some success a tape-slide programme providing a general introduction to improved sanitation. It seemed appropriate to prepare a series of tape-slide programmes to meet the various educational needs defined in the previous section.

Details of the nine English language tape-slide programmes and a summary of their contents given in Appendix 4. Sesotho versions of each were also produced making a total of 18 tape-slide programmes. The Consultant prepared the English-language scripts in close consultation with USIT. He also carried out the field photography, prepared the caption slides and the trial English language audio-cassettes. The initial versions of the tape-slide programmes were tested by USIT and RSP staff, health workers and curriculum development staff. Modifications were made to slides and scripts and translations into Sesotho then made by USIT and RSP staff. The Consultant then prepared Sesotho caption slides.

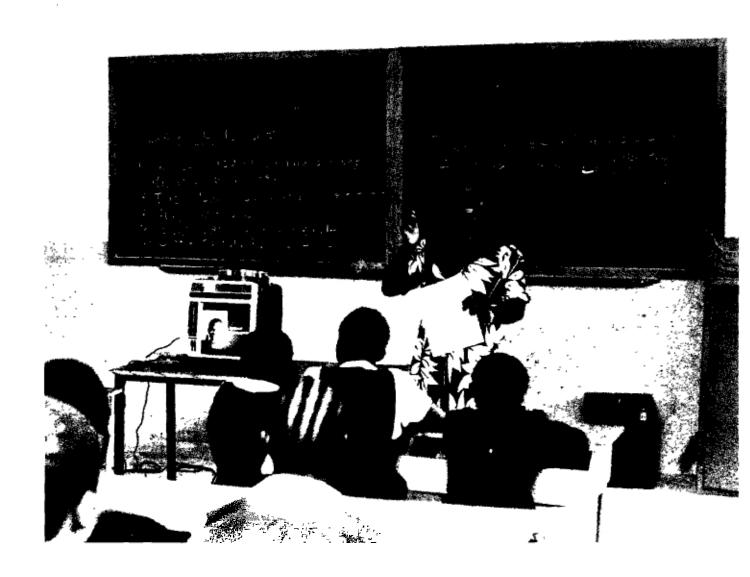
Maximum use was made of local personnel and facilities in the preparation of the tape-slide programmes. Some English language scripts were recorded at Leeds. However most of the English and all of the Sesotho commentaries were recorded and edited in Lesotho using studio facilities at the Instructional Materials Resources Centre (IMRC) of the Ministry of Education. The commentaries were spoken by USIT and RSP staff and the Consultant involved two of the former Leeds trained staff in recording and editing. A song by schoolchildren about VIP latrines was recorded at Khubetsoane Primary School (where most of the photography had been carried out) and was used as introductory music to the education sets. The introductory music to the other USIT sets was a Zulu working song 'Shozaloza' sung by USIT building labourers recorded at the IMRC.

A set of training notes were prepared by the Consultant for the children's sets and the Working for Health Series.

### 3.2 OVERHEAD PROJECTOR

The wide range of briefing seminars that USIT staff will be undertaking suggested that the overhead projector would be a helpful learning aid -particularly when it is difficult to achieve a black-out. Overhead projectors are beginning to be used in Lesotho and equipment and spare bulbs are available.

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Testing the Sesotho version of 'New Start for Health'. This tape-slide programme explains the use of VIP latrines and the Ten Point Programme for promoting sanitation and hygiene. Miss Nomsa Dlangamandla is one of USIT field staff and is currently at Leeds Polytechnic taking the Diploma Course in Health Education in Developing Countries.

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Following recommendation from the Consultant, the ODA authorised the local purchase for USIT of an overhead projector. The Consultant prepared for USIT a comprehensive selection of overhead transparencies as well as supplied a kit of pens/transparencies/coloured film. The prepared overhead transparencies included overlays on VIP structure, full colour transparencies and diagrammes as well as texts from the English and Sesotho tape-slide programmes.

### 3.3 VIDEO

Video offers the opportunity to produce locally appropriate materials at a simpler cost than film. The powerful attraction of familiar people and places can considerably make up for technical shortcomings. Thus even relatively inexperienced persons using cheaper domestic VHS format video cameras and recorders can generate educastional materials which can attract considerable interest and attention.

Following recommendations by the Consultant, the ODA authorised the purchase of domestic quality portable VHS camera, recorder, television and a supply of recording tape. By the time of the Consultant's third visit, USIT project staff had begun to take this equipment out with them to record various activities and their simple results were attracting considerable interest.

Broadcast quality U-matic format video and editing facilities were present at the IMRC and the production staff expressed an interest in assisting USIT in preparation of a more professional promotional film which could be converted to VHS format and shown to communities on the VHS equipment owned by USIT. The Consultant initiated a discussion by USIT on the content of a proposed promotional film and brought with him for comparison a video film from Zimbabwe on construction of VIP latrines. The Consultant prepared a script outline and liaised between USIT field staff and the IMRC video production crew over the locations and schedule. USIT supplied the 'actors' from their field staff and their own building labourers. Editing was carried out by the IMRC with assistance from USIT. The promotional film was prepared in Sesotho and an English language version was also prepared. A complete set of colour transparencies corresponding to different stages in the video film was provided by the Consultant to USIT. A synopsis of the video film is given in Appendix 5.

### 3.4 RADIO AND DRAMA

Radio is a valuable medium for communicating simple information quickly to large populations at low cost. It is especially useful with non-literate populations.

USIT had already used radio in promoting sanitation. It was decided that the Consultant would not have a direct involvement in producing health education radio programmes. Indirect assistance was provided through one of the two students - Miss Mpho Masienyane- receiving training in health education at Leeds Polytechnic. An introductory radio course is provided in the health education course. Miss Masienyane did her course project on radio and received advanced training from Leeds staff. On return to Lesotho in July 1985 she was able immed iately to apply her radio/recording skills by working with the Consultant on the final stages of tape-slide production and video work.

Drama is an effective medium of communication in Africa. Considerable interest was expressed in Drama at a seminar on communication materials held by the Consultant and USIT for health workers. The main outlet for drama is likely to be in radio productions.





A scene from the promotional video film 'Mathabo Improves Her Latrine' produced with the assistance of the Instructional Materials Resource Centre of The Ministry of Education. USIT field woker Mrs Manuna Klein is explaining to Mathabo the workings of the VIP latrine and how USIT can help.

### 3.5 PROVISION OF EQUIPMENT AND MATERIALS

During the course of the Lesotho Health Education Consultancy the Consultant provided USIT with an extensive range of equipment and materials. It was the intention of the Consultant to provide USIT with sufficient materials to prepare exhibitions and continue to develop audio-visual materials in the future. In addition USIT was provided a set of the recently published Collier Macmillan magnet board learning aids on sanitation and hygiene education. This had been prepared with assistance from UNDP and has been tested in a range of African Countries but not Lesotho.

A summary list of items supplied to USIT is given in Table 1.

The work for the RSP involved production of tape-slide programmes and only a limited range of materials was provided which included slides, black-and-white prints, slide storage files and overhead transparencies.

### TABLE 1

### EQUIPMENT AND MATERIALS SUPPLIED TO USIT

### **EQUIPMENT**

VHS camera, tripod, recorder, monitor Overhead projector Kodak 'Diacase' tape-slide presentation unit Portable light box

### MATERIALS AND RESOURCES

### Photographs

Selection of slides taken by Consultant, slide mounts, slide storage wallets, Carousel magazines, kodalith film/developer

# Audio/video-tapes

U-matic format (20) and VHS format (40) reel to reel tape, audio cassettes

# Drawing/graphic materials

Various pens, letra-set, art board, cutting knives, steel rules, fixing tape, spray glue

### Exhibition Materials

Colour and black and white prints, large art boards, lettering, caption enlargements

# Overhead Projection Materials

Prepared transparencies, OHP pens, acetate sheets, thermal transparencies, full colour photograph transparencies

# Collier Macmillan Magnet Board System

For sanitation/hygiene education

### 3.6 TRAINING OF LOCAL PERSONNEL

On the Consultant's first visit two persons were selected for training in health education at Leeds Polytechnic. Their projects at Leeds were supervised by the Consultant and were directly related to the needs of USIT and RSP. On their return to Lesotho in July/August 1985 they were fully involved in the recording and editing of tape-slide scripts, the video filming and editing and the field work for the RSP programme. One of these trained health educators is attached to USIT and the other to the Health Education Unit with responsibilities for sanitation. During his final visit the Consultant liaised with USIT and the Village Water Supply Programme for two more persons to be released to train in health education at Leeds Polytechnic with funding from World Health Organisation. Thus USIT and the other agencies have trained personnel who should be able to both develop learning materials themselves and liaise with media production facilities such as the IMRC to commission productions. The interest shown in the project suggests that there is a still greater need for trained health education specialists and this will be discussed in the next section.

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Mr Dan Makhetha from the Health Education Unit tries out a model of the VIP latrine which he developed as part of his special project work on the health education diploma course (1984/5) at Leeds Polytechnic.

# 4 CRITICAL ISSUES IN THE EXPANSION OF SANITATION/HYGIENE/HEALTH EDUCATION IN LESOTHO

## 4.1 EXPANSION OF SANITATION/HYGIENE EDUCATION IN SCHOOLS

The Consultant assisted the school sanitation work of USIT by preparing tape-slide programmes for briefing school managers and pupils respectively. Schools are potentially extremely important for the promotion of sanitation and hygiene/health education and there is considerable need for further work in this area. Possible additional activities could include

- a review of the primary school health education curriculum and the potential for strengthening of sanitation/hygiene components
- assessment of the needs for pre-service and in-service training of teachers to enable them to more effectively take on sanitation/hygiene/health education
- development of additional non-projected learning aids eg models, wall charts

The Consultant held seminars showing the tape-slide programmes at the National University of Lesotho and the National Curriculum Development Centre. (NCDC) Considerable interest was shown by both institutions in sanitation/hygiene (NCDC even his two health education advisors). An additional resource agency there is the National Teachers Training Centre (NTTC) which the Consultant did not have time to visit. These institutions have access to the considerable facilities of the Instructional Materials Resources Centre.

As the number of schools improving their sanitation increases, the small USIT staff - even if assisted by the RSP - will not be able to provide the kind of classroom teaching required. It would seem appropriate to involve the various resource agencies described above and that the Ministry of Education provide some teachers to assist in commissioning schools with newly acquired latrines with USIT taking an advisory role.

A programme of considerable potential relevance to the above discussion is a research project being undertaken by the Health Education Unit financed by the Intenational Development Research Council in Canada. This programme will be exploring the influences in school sanitation uptake in ten schools as key change agents. The Health Education Unit does not have the necessary expertise to properly supervise this programme and it is essential that close liaison is made with RSP, USIT and the variours Curriculum Development Centres and training institutions referred to above.

# **RECOMMENDATIONS**

- 1 The development of sanitation/hygiene/health education in schools requires careful attention. Local expertise exists within USIT, RSP, HEU, the National Curriculum Development Centre, National Teacher Training Centre and the National University of Lesotho. Close liaison between these agencies should be encouraged. A useful exercise would be to hold a two week curriculum development workshop for sanitation/hygiene education.
- Consideration should be given by the Ministry of Education to the release of key staff for training in health education in Britain. Suitable staff would be health education advisors at the National Curriculum Development Centre or teacher trainers at the National Teacher Training Centre.

# 4.2 DEVELOPMENT OF LOCAL CAPACITY IN PRODUCTION OF COMMUNICATION SUPPORT MATERIALS

One of the main advantages of shifting the original terms of reference for the Consultancy from a three month block period to a series of visits was that it helped develop local capacity in the production of educational materials. This was achieved through encouragement of USIT (and later RSP) staff to participate in discussions on content, field work, translations, recording of scripts and field testing of completed materials.

Local capacity was further enhanced by the training in health education at Leeds Polytechnic of two persons (from USIT and HEU) in 1984/5 and two persons (from USIT: Village Water Supply Project) in 1985/6.

The other important component of self-reliance is media production equipment and the need for technician support.

The Lesotho Health Education Project made extensive use of facilities and expertise at the IMRC - especially sound recording, video production and editing, typesetting and the photographic copy stand. The IMRCs role is to support Ministry of Education programmes and we are grateful for the considerable assistance they provided. However, as more demands are made on the IMRC it may not be possible to use their resources to the same extent in the future. Other government media resources are the Lesotho Distance Teaching Centre and Radio Sesotho but these also have many demands on them.

It may be necessary to establish some production capacity within the Ministry of Health. Careful consideration should be given to the location of any facility to ensure that it is properly used and maintained by trained persons and accessible to all groups. The Health Education Unit of the Ministry of Health would be the obvious location for such a facility but would need extensive re-organisation to carry out this function properly. It already has considerable photographic/printing facilities which are under-utilised. A possible alternative location could be the proposed new Health Training Centre.

## RECOMMENDATION

3 There has been considerable development in local capacity to produce educational materials. Future demand from sanitation and other health sectors may require additional media production facilities within the Ministry of Health. Careful consideration should be given to the location of this facility to ensure it is properly used and maintained.

### 4.3 TRAINING OF PERSONNEL IN HEALTH AND COMMUNICATION SKILLS

The Lesotho Health Education Project raised many important implications for training.

Through their involvement in the production of the tape-slide programmes and other media the USIT staff received a practical on-the-job training in many aspects of production of media. However although detailed written notes as well as books on teachingwere provided, there was insufficient time to hold structured training workshops on the use of overhead projector and teaching methods with slides. It would be a valuable exercise for RSP, USIT and other key persons to come together for a short training workshop to consider in detail the use of the Lesotho Health Education Project materials and acquire appropriate teaching skills.



Recording tape-slide scripts at the Instructional Materials Resource Centre. Miss Mpho Masienyane studied health education at Leeds Polytechnic (1984/85). She specialised in her project work on the use of radio in the promotion of hygiene.

The promotion of rural sanitation involves the effective mobilisation and involvement of all field workers to provide continuous reinforcement through their daily contacts with communities. An important group identified in the Lesotho Health Education Project was health workers especially nurses and health assistants. These carry out much of the organisation of health care services in Lesotho and supervise the work of village health workers. The 'Working for Health' series of tape slide programme was prepared for USIT for health worker training. The 'Improving Sanitation in Your Community' was produced for RSP as a training package for health assistants. It is essential that maximum opportunity be provided for using these materials in training programmes where health workers can both acquire the necessary knowledge and health education/communication skills.

It had been repeatedly brought to the Consultant's attention that the present training of health assistants is not adequate to enable them to fulfil their important role in the promotion of sanitation in rural areas. It would seem appropriate to undertake a detailed curriculum review of the training of health assistants in sanitation, hygiene and health education. From this review could emerge a revised syllabus for sanitation/hygiene/health education components of their training identifying content, teaching methods, learning resources and training personnel. The curriculum review could be carried out in the form of an extended workshop (eg 2 weeks) out of which a revised curriculum document could emerge. Participants at this workshop could include persons from USIT, MINRUDEV, RSP, HEU, NUC as well as external resource persons from health assistant training programmes in Zimbabwe or Zambia.

Persons with specialist health education training are needed not only to develop educational materials but to plan health education activities and train field workers in communication skills. There is a need for more specialised health education resource persons within the HEU, public health services, nurse training, primary health care, and teacher training. A planned manpower strategy should be prepared to allow for the phased release of suitably qualified persons for training in health education at courses such as offered by Leeds Polytechnic. Consultations should be held with the British Council representatives to discuss timing of applications.

### RECOMMENDATIONS

- 4 Consideration should be given to improving the training of fieldworkers in sanitation/hygiene/health education.
- 5 Suitable persons should be selected for training in health education/communication skills at courses such as the Leeds Polytechnic Health Education Diploma Course.

### 4.5 THE NEED FOR EVALUATION

A preliminary assessment of the usefulness of the various educational materials was made by the Consultant during various meetings where he showed tape-slide programmes to USIT/RSP field staff, health and education workers. A longer-term assessment of the Lesotho Health Education Project would be valuable not only for evaluating the project but also for providing lessons on the use of media for promoting social change.

The usefulness of the various learning aids must be examined within the context of the programmes. Thus an evaluation should cover more than the materials themselves. Some of the questions that should be taken into account are:

How many times were the different media actually used?

Which learning aids did the field staff find most useful?

Did any difficulties arise in the use of the materials?

Did field staff use the materials properly?

How reliable was the equipment?

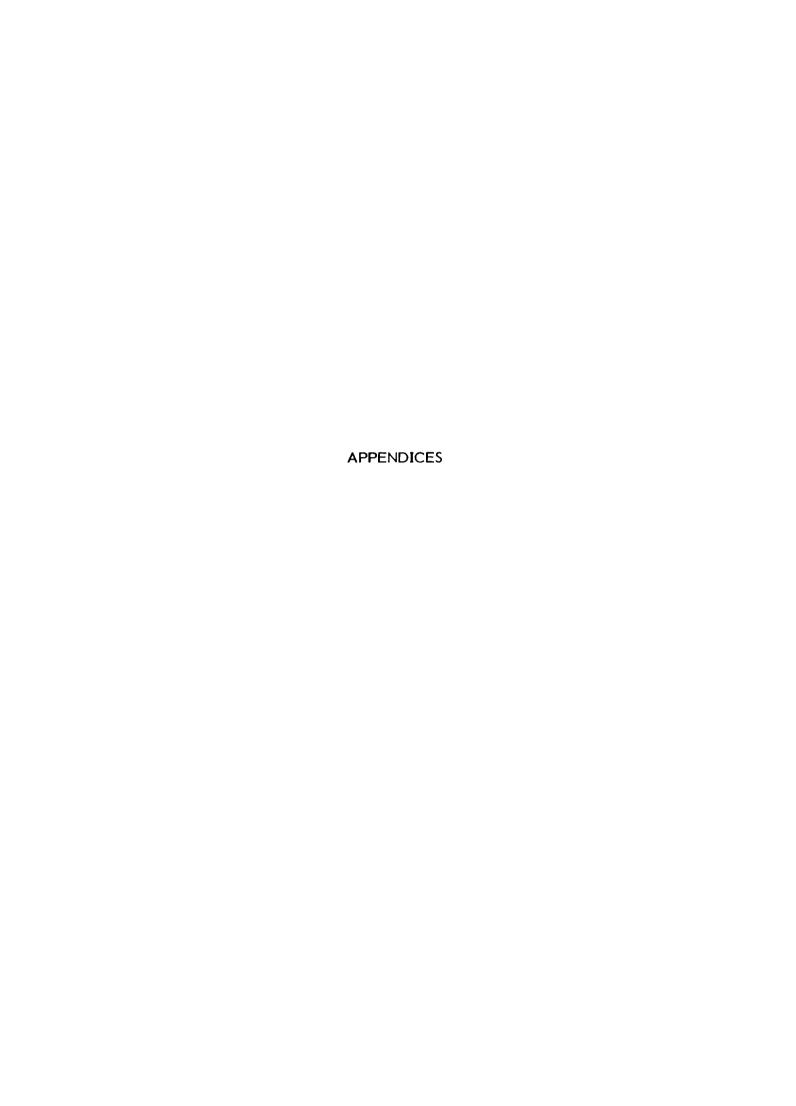
Have USIT/RSP used their newly-acquired skills and trained personnel to produce further educational resources?

Was the Leeds training adequate to meet the local needs?

RSP and USIT should include the above questions in their on-going monitoring and evaluation process. The Consultant would welcome any feedback and will respond to simple requests for modification of slides. The Consultant would be willing, if requested, to participate in any long-term follow-up and evaluation of impact.

### RECOMMENDATION

6 An evaluation of the long-term impact of the Lesotho Health Education Project should be carried out. This evaluation should include not only an assessment of the actual materials produced, but also the equipment supplied, effectiveness of training provided and the follow-up activities directly attributable to the project.



### APPENDIX I

### TERMS OF REFERENCE

Title: Short-term Consultant to Develop Health Education Material

<u>Scope</u>: To develop and test appropriate health education materials (eg poster, pamphlets, flip-charts, tape-slides, video) for motivation, user education and basic hygiene education for owners and potential owners of improved latrines.

To train local staff in the use of these materials to support latrine improvement programmes.

To procure appropriate equipment to display materials.

Background: Significant advances have been made in the provision of improved sanitation in urban Lesotho. Suitable technologies have been identified and are being promoted. A limited amount of supporting health education material has been developed but more is needed especially in different media. The Health Education Unit of the Ministry of Health is fully committed to its own work and needs assistance to carry out materials development for other agencies such as the Urban Sanitation Improvement Team.

Responsible Government Agency: The Urban Sanitation Co-ordinator, USIT, Ministry of Interior, Private Bag A41, Maseru.

(Work would be carried out in close collaboration with the Chief Health Educator, Ministry of Health.)

Institutional Support: The consultant would work with two existing teams, USIT, which includes a sociologist and senior community development officer, and the Health Education Unit which includes a graphic artist and other experienced personnel. Other available resources are Lesotho Distance Teaching Centre and the Instructional Materials Resource Centre.

Duration: Three months

Starting Date: ASAP

# Government Inputs

i Personnel: Sanitation Co-ordinator 1mm

SCDO 3mm CHE & Artist  $1\frac{1}{2}$ mm Field Staff 3mm

ii Equipment: Office space

Photocopier etc

Transport

Camera, taperecorder

video

iii Funds: Miscellaneous printing

Sector Development Performance: There is considerable interest in low-cost sanitation. Properly designed programmes have been operating for three years and a central government team has been created to administer and guide future developments. There are plans to bring low-cost sanitation programmes to most urban dwellers within the next ten years.

<u>Outputs</u>: Project outputs will include complete, tested health education materials in several media to support motivation, user education and hygiene education to complement sanitation improvements. Also, local staff will have been trained in their production and use in the field.

Government Priority and Commitment: Government wishes to bring improved sanitation to all urban dwellers. Several urban development projects are planned or under way. The need for quality complementary software is recognised by all.

Benefits: Complementary software will enable the potential health benefits of improved sanitation to be achieved by all those families who invest in improvements.

Prepared by: B M Jackson. Urban Sanitation Adviser

# TERMS OF REFERENCE FOR EXTENSION OF PROJECT TO INCLUDE ASSISTANCE TO RURAL SANITATION PROJECT

No formal terms of reference for this extension were received from the ODA. The Consultant received confirmation of willingness of ODA to fund this extension at the beginning of his final visit in July 1985. The following extract is taken from the correspondence between the Consultant and ODA which outlined proposed tasks and costings.

# Health Education Input to Rural Sanitation Project

- 1 New tape-slide programmes to be produced
  - 1.1 introductory tape-slide programme on the need for sanitation in rural areas.
  - 1.2 briefing tape-slide programme for health assistants and village health workers.

The consultant will prepare English language scripts and recorded commentary and slides for the English language versions. The Rural Sanitation Project will furnish Sesotho translations of slide captions and the Consultant will prepare Sesotho slides. The RSP will be responsible for translation of the scripts into Sesotho and will record the Sesotho commentaries locally. The Consultant will train RSP staff to carry out these recordings and pulse the sound cassettes.

Copies of English and Sesotho tape-slide programmes will also be supplied to the Urban Sanitation Improvement Team of the Ministry of Interior.

2 Rural versions of existing tape-slide programmes

English and Sesotho versions of the following tape-slide programmes will be provided to the RSP:

"New Start for Health" - for primary school children

"Sanitation, Hygiene and Health in our Schools" for teachers and school managers

"Working for Health - Part One" for health

"Working for Health - Part Two" workers

"Working for Health - Part Three"

Where appropriate, slides will be substituted in the above to make them more suited to the rural context.

## Appendix 2

#### ITINERARY AND LIST OF PERSONS CONSULTED

Wed 17th Sept arrival Maseru 5pm: evening meeting with V.Tobin (RSPN) (1986)

Thurs 18th Sept. am meeting in Maseru with: V.Tobin (RSPN) and R. Pollard, Dr P. Evans, W. Sampson (RSP)

briefing from D. Quinn, British High commission

meeting with Brian Chennery, British Council

pm various consultations with:

Mrs Rakhetla, Acting Chief Health Educator, HEU Mr Morapedi Raditapole, Health Educator, HEU

Mr Teboho Mathaba, Village Health Worker Programme Coordinator, HEU

Brian K. Aldinger, Peace Corps Volunteer in charge of audio-visual section of HEU

Dr Edward Douglass, Healthcom Project Consultant to HEU

Fri. 19th Sept. visit to Leribe with V. Tobin

meeting with staff including

Marisa Ernst, Regional engineer Miss Matlomelo, Mr Rangoaka, health assistants

pitso for selection of builders for training

attending closing ceremony for village health worker training session including meeting with former Leeds students D. Makhetha and M. Ntepe working as health educators for VWS.

Sat 20th Sept. am/pm consultations with V. Tobin

Sun 21st Sept Concluding meetings with V.Tobin, R. Pollard, W. Sampson and Dr P. Evans

Monday 22nd Sept am. Meetings with USIT staff including:

B.M.Jackson, Urban sanitation Advisor
T. Khakhetla, Urban Sanitation Coordinator
Mpho Mathebula, Health Educator (Leeds-trained)

2pm departure from Maseru

#### APPENDIX 3

# ACKNOWLEDGEMENTS AND LIST OF MAIN PERSONS CONSULTED

I would like to express my thanks to the many persons in Lesotho who gave up their time to advise or directly assist in the development of educational materials. In particular I would like to thank all the staff of USIT as well as the staff of the Instructional Media Resources Centre of the Ministry of Health who were so generous with the photographic, recording and video facilities. The following were only some of the many consulted during the three visits.

## DEPARTMENT OF INTERIOR

Barry Jackson Urban Sanitation Advisor
Thabo Khaketla Urban Sanitation Coordinator
Seetella Makhetha Public Health Engineer

Nomsa Dlagamandla Community Development Officer Manuna Klein Community Development Officer

Malefetsoane Maseru Urban Project Mpho Masienyane Health Educator

## BRITISH HIGH COMMISSION

Brian Robertson Secretary Dennis Quinn Secretary

# **BRITISH COUNCIL**

Brian Chennery Representative for Lesotho and Swaziland

#### NATIONAL UNIVERSITY OF LESOTHO

Dr Patrick Whittle Science Education

### MINISTRY OF HEALTH

Dr Maruping Director of Health Services Mokuba Petlane Chief Health Educator Morapedi Raditapole Health Education Officer Dan Makhetha Health Education Officer Robert Lesei Chief Health Inspector Administrative Secretary Thabo Mosetse Rick Pollard Rural Sanitation Project Dr Phil Evans Rural Sanitation Project

# INSTRUCTIONAL MEDIA RESOURCE CENTRE

Bob McMachin Printing Department Advisor

Bob Eiger Audio-Visual Advisor Ramoane Sequane Audio-visual Department

#### MINISTRY OF EDUCATION

David Daniels National Curriculum Development Centre

Ash Hartwell Educational Planning Advisor

# **APPENDIX 4**

#### THE LESOTHO TAPE SLIDE SERIES

Each is available in Sesotho and English

# A PRODUCED FOR URBAN SANITATION IMPROVEMENT TEAM (USIT)

1 IMPROVING SANITATION AND HYGIENE IN OUR TOWNS (THIRTEEN TOWNS SETS)

Part One: The set is intended for local officials in the urban areas and explains the need for improved sanitation and briefly describes the VIP latrine. Examples are presented of families who have upgraded their latrines to VIP and VIDP latrines.

Part Two: The work of USIT and the Thirteen Towns Sanitation Programme is described. The organisation of the various project teams and different components of the programme outlined including: replacement of bucket latrines and upgrading of sanitation in homes, schools and public places as well as improvements in hygiene in homes and eating place.

2 SANITATION HYGIENE AND HEALTH IN OUR SCHOOLS (SCHOOL MANAGERS SET)

This set is intended to help the management committees of schools plan the improvement of sanitation and hygiene in their schools. The need for various decisions on the following are presented: the numbers of latrines, type of latrine, choice of a builder, cost of materials and labour, the need for maintenance, hygiene facilities and health education. It concludes by describing the procedures for contacting USIT and services that USIT can offer.

3 NEW START FOR HEALTH (SCHOOL PUPILS)

This set is intended for children in primary schools which have installed VIP latrines. Children are asked what they would like to be when they grow up. Health is shown as samething important for doing well at school and achieving their goals. Their new VIP latrines are introduced as important for health and their workings briefly described. The use of these latrines is described through a 'ten point programme' covering use, maintenance and hygiene practices and learning from their health education in classes.

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#### 4 WORKING FOR HEALTH (HEALTH WORKERS)

The aim of the series is to brief a wide range of health workers on their role in the promotion of health through improved water supply, sanitation and hygiene.

# Part One

Introduces the role of faeces in spreading disease and explains why provision of safe water supplies alone is not enough to prevent disease. The major routes by which faeces reach a person are shown and the different ways this transmission can be interrupted eg by latrines, water hygiene measures. The mechanism of the VIP and VIDP latrine is shown and its advantages over the traditional bucket and pit latrines.

## Part Two

Three key roles for the health worker are examined in detail - these are promotion of improved water supplies, VIP latrines and the correct use and maintenance of VIP latrines.

# Part Three

Diarrhoea is introduced as a serious problem affecting the health of children. The different hygiene measures in the home are described by which diarrhoea can be prevented including washing of hands, preparation of food, storage of drinking water. Special attention is placed an child care measures including disposal of children's faeces, breast-feeding and oral rehydration. These are linked to preventive health measures including immunisation, attendance at child health clinics and the work of the village health worker in primary health care programmes.

# B PRODUCED FOR RURAL SANITATION PROJECT

#### 1 RURAL SANITATION IN LESOTHO

An introduction is given of the need for improving sanitation in rural Lesotho. The advantages of the VIP latrine are described and range of VIP using locally available materials are shown. The need to properly use and maintain VIP latrines is discussed as well as the importance of hygiene measures such as hand washing, cleaning and food preparation. The activities of the Rural Sanitation Project in promoting sanitation and hygiene are described.

#### 2 IMPROVING SANITATION IN YOUR COMMUNITY

The aim of this extended tape-slide programme is to brief health assistants on the methods involved in the planning, implementation and evaluation of sanitation/hygiene programmes in their community.

## Part One Knowing Your Community

Various kinds of information are described that the health assistant requires in order to plan sanitation programmes. This includes not only information on health/sanitation/hygiene practices but also details of existing beliefs and channels of communication and influence eg shopkeeper, traditional healers the the health assistant can utilise. The importance is emphasised of working with primary health care personnel eg nurses and village health workers.

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# Part Two Promoting Improved Sanitation

An outline is presented of a strategy for promoting VIP latrines in a community. This includes selection of sites for demonstration VIPs, training builders, arranging credit facilities as well as motivating individuals and speaking at meetings and schools. The benefits are described of briefing and involving teachers, clinic nurses and village health workers. The use of simple learning aids such as models and posters is shown as well as following up radio programmes on sanitation.

# Part Three Planning and Management

A brief review is given of key issues in planning and management of sanitation programmes. These are: involvement of the community, making priorities, setting objectives, planning effective use of time, working as a team with other workers and evaluation.

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#### APPENDIX 5

#### MATHABO IMPROVES HER LATRINE

This short video film (20 mins) is intended for members of the general public and describes the workings of Ventilated Improved Pit Latrines (VIP) including both single and double pits variety. The film is in Sesotho and an English version is available.

The film is about Mathabo who lives in Maseru and has an unimproved pit latrine. She looks after her grandchildren, one of whom had severe diarrhoea earlier in the year. A neighbour comes and advises her to improve her latrine. Mathabo goes to the USIT office and a field worker explains the workings of a VIP latrine using a model and picture. She shows her a short video film on which shows every stage in the construction of the VIP double pit latrine. Mathabo is then given a plan and advised how to contact a builder.

In the final scene, the fieldworker comes to inspect the VIP double pit latrine that Mathabo has built. She explains to Mathabo the importance of everybody, including children, using the latrine. She also explains the need for hygiene measures such as cleaning the latrine and washing hands after use. Finally she reminds her to check the flyscreen for any damage.

(Video filming and editing by staff of Instructional Materials Resource Centre, Ministry of Education. Acting, commentary and script by staff of Urban Sanitation Improvement Team (USIT) of Ministry of Interior with assistance from the Consultant.)

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