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WATER AND SANITATION  
SECTOR REVIEW  
AND ACTION PLAN  
1990-95

National Steering Committee  
International Drinking Water Supply  
& Sanitation Decade

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## PREFACE

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## CONTENTS

### SECTOR OVERVIEW

1. INTRODUCTION.....	1
2. SECTOR PROGRAMMES.....	2
3. TARGETS & ACHIEVEMENTS.....	2
3.1 Fourth Five-Year Development Plan.....	2
3.2 Rural Water Supply.....	7
3.3 Rural Sanitation.....	7
3.4 Urban Sanitation.....	8
3.5 Urban Water Supply and Sewerage.....	9
4. PROGRAMME FINANCING.....	9
5. INSTITUTIONAL AND MANPOWER DEVELOPMENT.....	10
6. SECTOR COORDINATION.....	11
7. IMPLEMENTATION TARGETS, 1990-95.....	11
8. SUMMARY.....	12

### SUB-SECTOR PROGRAMMES

A. RURAL WATER SUPPLY.....	A.1
A.1 Background.....	A.1
A.2 Targets and Achievements.....	A.1
A.3 Programme Financing.....	A.2
A.4 Institutional and Manpower Development...A.5	A.5
A.5 Operation and Maintenance.....	A.7
A.6 Village Level Management.....	A.9
A.7 Health Education.....	A.9
A.8 Integration with Rural Sanitation.....	A.10
A.9 Water Supply Targets, 1990-95.....	A.10
A.10 Action Plan.....	A.12
B. RURAL SANITATION.....	B.1
B.1 Background.....	B.1
B.2 District Programmes.....	B.1
B.3 Programme Financing.....	B.1
B.4 Credit Schemes.....	B.5
B.5 Institutional & Management Arrangements..B.6	B.6
B.6 Implementation Procedures.....	B.9
B.7 Manpower Development & Training.....	B.9
B.8 Latrine Coverage.....	B.11
B.9 Health Education.....	B.13
B.10 Schools Sanitation.....	B.14
B.11 Monitoring & Evaluation.....	B.15
B.12 Action Plan.....	B.16

C.URBAN WATER SUPPLY AND SEWERAGE.....	C.1
C.1 Background.....	C.1
C.2 Targets and Achievements.....	C.1
C.3 Programme Financing and Cost Recovery....	C.2
C.4 Urban Water Supply.....	C.3
C.5 Urban Sewerage.....	C.5
C.6 On-Site Water-Borne Sanitation.....	C.8
C.7 Institutional and Manpower Development...C.9	
C.8 Action Plan, 1990-95.....	C.11
D.URBAN SANITATION.....	D.1
D.1 Background.....	D.1
D.2 Targets and Achievements.....	D.1
D.3 Programme Financing.....	D.3
D.4 Institutional and Manpower Development...D.4	
D.5 Implementation Procedures.....	D.6
D.6 Bucket Latrine Replacement Programme....D.6	
D.7 Lesotho Bank Credit Scheme.....	D.7
D.8 Schools Sanitation.....	D.8
D.9 Health Education.....	D.8
D.10 Monitoring and Evaluation.....	D.9
D.11 Action Plan, 1990-5.....	D.9
E.SECTOR COORDINATION	
E.1 Background.....	E.1
E.2 Sector Coordination Unit.....	E.1

# SECTOR OVERVIEW

## 1. INTRODUCTION

In 1977 Lesotho joined a major international effort to extend access to safe drinking water supply and adequate sanitation to all the world's population lacking these basic services, by agreeing to participate in an International Drinking Water Supply and Sanitation Decade (IDWSSD).

A global action plan for the IDWSSD, to commence in 1981, was formulated in March 1977 at Mar Del Plata, Argentina, at a United Nations sponsored conference. Lesotho was one of many countries which endorsed the aims and objectives of this plan and undertook to establish intensive national development programmes in this vital sector.

Since Independence in 1966, national efforts to improve both urban and rural water and sanitation service levels had been hampered by severely limited resources and the lack of a well developed institutional and strategic framework within which acceptable levels of provision could be achieved.

The establishment, and international endorsement, of the IDWSSD created a new climate within which major steps could be taken to rectify this situation, and unprecedented levels of multilateral and bilateral resources could be sought to support sector development programmes.

Preparations for a major expansion of the sector in Lesotho began immediately. By 1981 an inter-ministerial National Steering Committee (NSC) for the IDWSSD had been formed. The first Sectoral Action Plan for the decade was published in 1983. During the decade, major programmes have been established in Rural Water Supply, Rural Sanitation, and Urban Sanitation. Urban Water Supply and Sewerage programmes have also been expanded.

This document reviews achievements to date, as the decade draws to a close, and presents an Action Plan and Investment Programme for the period 1990-95 and an overview of objectives to the year 2000.

## 2. SECTOR PROGRAMMES

The broad development objective of the drinking water supply and sanitation sector is:

- \* To contribute to improvements in the health and well-being of the population of Lesotho through the provision of safe drinking water and adequate sanitation for all.

In seeking to achieve this objective, four inter-linked sub-sectoral programmes have been developed:

- \* RURAL WATER SUPPLY
- \* RURAL SANITATION
- \* URBAN WATER SUPPLY AND SEWERAGE
- \* URBAN SANITATION

Overall coordination of these sub-sectoral programmes is the responsibility of the National Steering Committee for the IDWSSD, chaired by the Central Planning and Development Office.

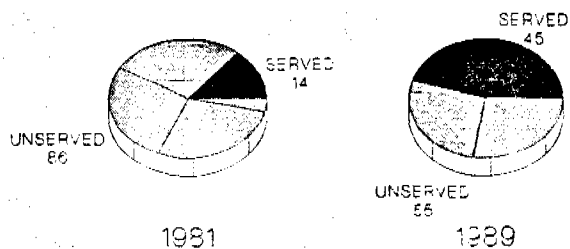
## 3. TARGETS & ACHIEVEMENTS

### 3.1 FOURTH FIVE-YEAR DEVELOPMENT PLAN

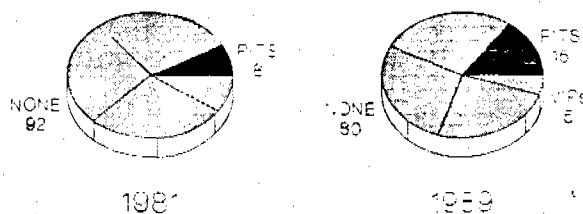
The table below summarizes planned and actual increases in the percentage of the population served with clean water and adequate sanitation during the period 1985-90.

----- TARGETS & ACHIEVEMENTS, 1985-90 -----			
	<u>1985</u>	<u>% Coverage</u>	
		<u>Target</u>	<u>Actual</u>
Rural Water Supply	31%	60%	45%
Rural Sanitation	15%	38%	20%
Urban Water Supply	65%	100%	90%
Urban Sanitation	22%	80%	33%

## RURAL WATER SUPPLY, % POPULATION SERVED



## RURAL SANITATION, % POPULATION SERVED

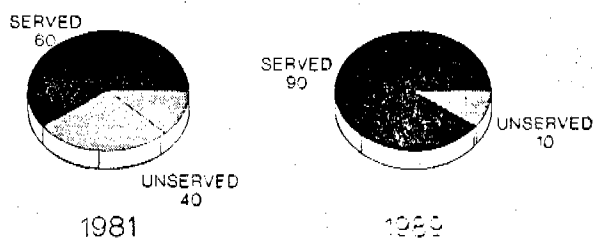


Progress in respect of rural water supplies has been highly satisfactory, despite falling short of the highly ambitious target set for the Fourth Five Year Development Plan period. This has also been true of urban water supply and sewerage provision.

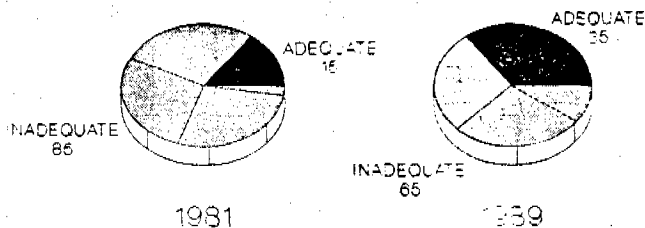
On-site sanitation improvement has proceeded at a slower pace than proposed, in both urban and rural areas.



## URBAN WATER SUPPLY, % POPULATION SERVED



## URBAN SANITATION, % POPULATION SERVED



Physical progress only constitutes a part of sector objectives. The chart below presents in summary form the overall targets and objectives for the sector set in GOL's Fourth Five-Year Development Plan, covering the period 1986/87 to 1990/91. Likely achievements by the end of the plan period are noted.

-----  
 GOL FOURTH FIVE YEAR DEVELOPMENT PLAN, 1986/87-90/91  
 TARGETS, OBJECTIVES, & ACHIEVEMENTS  
 -----

OBJECTIVES

ACHIEVEMENTS

(a) Rural Water Supply

\* provide 350 000 people in the rural areas with improved drinking water supplies

*Target exceeded, with an estimated 450,000 people served during plan period*

\* train village committees in the management of water supply schemes

*Target partially achieved, village-level management capacity not yet satisfactory*

\* accelerate training of professionals and technicians in the Village Water Supply Section of MICARD

*Target partially achieved, still major shortfalls in management and professional staff. Lack of establishment posts a serious obstacle to achieving this objective*

\* strengthen village-level maintenance of water supplies, and increase user input to operation and maintenance costs

*Limited success. Studies undertaken, but implementation as yet limited*

(b) Rural Sanitation

\* promote the construction of up to 70 000 ventilated improved pit (VIP) latrines at rural households and schools

*Target revised to 10 000 in 1987. Expected that 6 000 VIPs will be constructed under auspices of NRSP by 1991*

\* train 2 000 local latrine builders (LLBs) to undertake construction of VIP latrines on a commercial basis

*Target achieved*

\* complete the training and placement of managerial and extension staff for a national rural sanitation team

*Target achieved*

\* establish decentralised district sanitation programmes, supervised and coordinated by a national sanitation team, in all districts

*Target achieved*

\* provide householders with assistance through loan finance, technical advice, and health education

*Partially achieved. Adequate loan finance scheme not developed. Further strengthening of health education component required*

(c) Urban Water Supply and Sanitation++

\* increase coverage of the urban population with safe water supplies from 65% to 100% and with adequate sanitation from 22% to 80%

*Partially achieved. Piped reticulation system available to all Maseru by 1991. Sanitation target not achieved*

\* completely phase out the bucket latrine system and reduce to a minimum the conservancy tank system

*Almost complete. Private sector response not yet known*

\* upgrade fully operational sewerage systems, and develop safe pit emptying in all urban areas

*Partially achieved. Sewerage systems in Maseru upgraded. Pit emptying adequate for current needs, but future expansion required*

\* institute legal control over provision of new sanitation facilities

*Target achieved*

\* improve cost recovery of water supply and sewerage operations and maintenance costs through tighter fiscal control and a more flexible tariff structure *Target achieved*

\* improve accounting functions through computerised billing and the enhancement of systems and procedures *Target achieved*

-----  
 ++ Responsibility in the urban water and sanitation sub-sector is divided between Water Branch and USIT, with the former being responsible for all piped water and water-borne sewerage systems, and USIT responsible for on-site sanitation development and the phasing out of the bucket latrine system.

### 3.2 RURAL WATER SUPPLY

In 1981 it was estimated that only 14% of the rural population had access to safe drinking water. By 1989 this has risen to about 45%.

Progress in rural water supply provision during the 1980s has been highly satisfactory, with the increase in coverage significantly exceeding the expectations of the 1983 Sectoral Action Plan.

Many problems remain to be solved within this sub-sector, but a sound basis has been established upon which the achievements of the decade can be built during the 1990s. Current projections suggest that a goal of clean water for all by the year 2000 is within reach.

Major problems still remain to be solved in respect of cost recovery, operation and maintenance, manpower development, and institutionalization. Close attention will be paid to these issues during the 1990s.

### 3.3 RURAL SANITATION

Prior to the IDWSSD, Lesotho had no effective national programme for sanitation improvement in the rural areas. Efforts to remedy this situation began in earnest towards the end of 1983. Within a relatively

short period of time a National Rural Sanitation Programme (NRSP) has been developed and a framework established for major improvements in this sub-sector during the 1990s.

The programme relies heavily on community inputs and self-reliance. Achievements have been modest but significant, and long-term prospects are promising.

In 1981 only an estimated 8% of the rural population were using even the most basic form of sanitation facility. By 1989 this figure has risen to about 20%, of which a quarter are now using the Ventilated Improved Pit (VIP) latrine, the technology of choice for on-site sanitation in Lesotho.

Given the voluntary nature of the strategy adopted by the NRSP, future development of the programme is hard to predict. On the basis of currently available data, however, the prospect of achieving more or less full coverage by the year 2010 looks viable.

Important issues of management, particularly at district level, and institutionalization remain to be solved. A key proposal is for the closer formal integration of rural sanitation and village water supply programmes. An unequivocal commitment by GOL to the NRSP is required to firmly anchor the programme within the overall framework of the primary health care approach.

### 3.4 URBAN SANITATION

On-site urban sanitation improvement gained momentum with the establishment of the Urban Sanitation Improvement Team in the Ministry of Interior in 1981. This programme pioneered the introduction of the VIP latrine in Lesotho and has made major strides in increasing coverage of acceptable sanitation facilities in medium and low income areas in Maseru in particular, and in other urban and peri-urban centres.

In 1981 it was estimated that coverage of adequate sanitation (including sewerage) in urban areas was no more than 15%. This has risen to approximately 35% by 1989.

During the plan period an accelerated rate of implementation will be required, to achieve a target of about 80% coverage by year 2000.

### 3.5 URBAN WATER SUPPLY & SEWERAGE

Responsibility for urban piped water supply and sewerage lies with the Water and Sewerage Branch of the Ministry of Water, Energy, and Mining.

The 1980s have been a period of major development in Maseru, and important steps have also been taken to improve water and sewerage service levels in other urban areas.

By the end of the decade a major institutional transformation will have occurred, with the establishment of the branch as a parastatal Water and Sewerage Authority. The privatization of urban water and sewerage provision requires that the authority operate on a full cost-recovery basis. Important organizational changes have already taken place in preparation for this, and improved management of billing has significantly increased the prospects of achieving the goal of cost recovery.

By early in the plan period, extensions to the water reticulation system will make house connections available to all Maseru urban residents who can afford to link in to the system. In the long term it is envisaged that public standpipes in low-income urban areas, for which there is at present no cost recovery mechanism, will be phased out.

## 4. PROGRAMME FINANCING

Programme financing requirements are outlined in parts A-D. Major donor inputs are still required by VWSS in order to achieve targets during the 1990s. Significant amounts of funding are also needed by NRSP and USIT.

WSB has already secured funding for most of its major capital development projects for the plan period. During the 1990s, parastatal status will be achieved and the financial burden to government in providing urban water supply and sewerage services reduced to a minimum.

Current projections suggest that during the 1990s, VWSS will require about M.70 millions, of which about M.15 millions has so far been secured. GOL inputs for the decade are expected to total about M.6 millions. NRSP will require about M.6 millions, of which about half

has been obtained. GOL contributions to the NRSP will rise significantly during the 1990s, totalling about M.8.8 millions at current prices for the decade.

USIT capital requirements for the 1990s have largely been met, with a current shortfall estimated at M.2.5 millions.

Increased GOL funding is required by all programmes during the 1990s to support institutional consolidation as major capital programmes reach completion.

## 5. INSTITUTIONAL AND MANPOWER DEVELOPMENT

Institutional development has been mixed during the 1980s. Major sub-sector programmes have been established, and government capacity to implement programmes has been considerably enhanced. Full institutional security for these programmes, however, has yet to be achieved.

A major institutional development anticipated during the plan period is the establishment of the Water and Sewerage Branch of WEMMIN as a parastatal organisation. This should lift a heavy financial burden from the government with the adoption of a full cost recovery policy for urban piped water and sewerage provision, and allow WSB to resolve organizational and management problems within a somewhat more flexible framework.

The Village Water Supply Section, National Rural Sanitation Programme, and Urban Sanitation Improvement Team, all require significant institutional strengthening during the plan period, including a more firm establishing of their staffs.

Manpower development needs within the sector require particular attention in order to reduce dependence on expatriate technical assistance. Manpower problems have been exacerbated within the sector in recent years by the demand for skilled personnel created by the establishment of the Lesotho Highlands Water Authority. A significant stepping up of training programmes will be required in order to create sufficient personnel to meet demand.

## 6. SECTOR COORDINATION

The strengthening of sector coordination is a major concern for the plan period. During the 1980s operational coordination between the various sub-sector programmes has grown significantly, creating a background against which more formal institutional coordination can be established.

Attention will be turned during the plan period to strengthening the role of the Central Planning and Development Office (CPDO), and developing a more consistent role for the National Steering Committee.

During the plan period a Water and Sanitation Sector Coordination Unit will be established in CPDO, with an expatriate adviser being recruited to work on the establishment of this unit with a senior planning officer.

## 7. IMPLEMENTATION TARGETS, 1990-95

The 1990s will be a period of continuing expansion of the water supply and sanitation sector, with the goal of achieving close to full coverage by the year 2000 being a prime objective. This is considered to be in reach in respect of both urban and rural water supply. Urban sanitation is expected to reach close to full coverage by the end of the decade, with rural sanitation being in a strong position to complete its goal early in the next century.

The table below summarizes percentage coverage targets for the plan period 1990-95, and to the year 2000.

<u>IMPLEMENTATION TARGETS, 1990-95</u>			
	<u>1990</u>	<u>% Coverage</u>	
		<u>1995</u>	<u>2000</u>
Rural Water Supply	45%	80%	100%
Rural Sanitation	20%	40%	75%
Urban Water Supply	90%	100%	100%
Urban Sanitation	33%	60%	90%



## 8. SUMMARY

Significant progress has been made in the water and sanitation sector during the 1980s. Since 1981, major programmes have been established and sound implementation strategies developed to provide clean water and adequate sanitation to both the urban and rural populations. In order to achieve the goal of adequate service levels for all, however, much work remains to be done.

The 1990s will be a period of institutional consolidation, with GOL taking steps to ensure that the advances made during the IDWSSD are secured and that a sound structure is established to ensure a viable future for all sector programmes.

Increased resources will be devoted to manpower development, and close attention paid to issues of cost recovery, credit, operation and maintenance, and sector coordination. Donor inputs to most sub-sector programmes will decline during the 1990s. By year 2000 a largely self-reliant sector programme should be in place.

# A.RURAL WATER SUPPLY

## A. RURAL WATER SUPPLY

### A.1 BACKGROUND

Intensive development of village water supplies in Lesotho began in 1979 with the launching of the USAID supported Rural Water and Sanitation Project. Prior to this, GOL had been continually involved in improving rural water supplies, but limited resources had prevented its programmes from having a major impact.

During the period 1979-88, USAID support was in excess of US\$12 millions, constituting about one half of total donor and GOL inputs of approximately US\$27 millions during the decade. These inputs have led to an increase in coverage during the IDWSSD from only 14% to almost 45%, with population served per annum rising almost ten-fold from 8,000 in 1977 to an estimated 78,000 in 1989.

### A.2 TARGETS AND ACHIEVEMENTS

The table below indicates achievements during the period 1977-89 in terms of population served per annum with improved water supplies.

As the table shows, production levels have increased significantly during the second half of the decade, from a mean of 32 000 persons served p.a. during 1980-84 to 86 740 persons served p.a. during 1985-89.

The 1983 Sector Action Plan outlined three alternative scenarios, based on 10, 20, and 35 year plans, aiming at 100% coverage of improved water supplies in the rural areas by 1990, 2000, and 2015 respectively.

On the basis of perceived manpower and resource constraints, the plan recommended that the 35-year time frame be adopted, at least for the first five years of operation. Actual targets achieved during the decade are currently ahead of the 35 year projection by more than five years, and are roughly in line with the 20 year projection. By 1991 the target of 350 000 persons served during 1986-91, set in GOL's Fourth Five Year Development Plan, will be comfortably exceeded.

-----  
**RURAL WATER SUPPLY SYSTEM COMPLETIONS & POPULATION SERVED**  
 1977-89  
 -----

YEAR	POPULATION SERVED	SYSTEMS COMPLETED
1977	8 000	16
1978	4 000	8
1979	15 000	15
1980	13 000	27
1981	17 000	33
1982	24 000	45
1983	44 000	88
1984	62 000	108
1985	94 000	167
1986	105 000	198
1987	72 500	174
1988	84 200	203
1989 (est.)	78 000	---
-----		
<b>TOTAL</b>	<b>620 700</b>	<b>1082</b>
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Source: VWSS Annual Report, 1988

During the latter half of the decade, production of gravity systems has stabilized to an output of approximately 50-60,000 persons served per year. Year by year variations in total populations served are attributable to the more volatile output of handpump systems, which depend on relatively short-term donor inputs.

VWSS has developed a capacity to serve in the region of 70-100,000 people per annum on a consistent basis. Targetting for the 1990s is based on this assumption, with no further expansion of capacity anticipated. Outstanding issues of institutionalization, cost recovery, and village level operation and maintenance are seen as major priorities for the next plan period.

### A.3 PROGRAMME FINANCING

Major donor and capital assistance to VWSS, covering the IDWSSD, is summarized in the table below.

Total capital inputs amount to US\$32.5 millions, of which about US\$27 millions will have been expended by the end of the 1980s. Capital requirements for the plan period 1990-95 amount to approximately US\$18 millions,

of which about US\$5 millions has already been committed by donors. For the remainder of the decade to year 2000, an additional US\$12 millions at current prices will be required. Donor support to the tune of US\$25 millions thus needs to be obtained to achieve targets set for the 1990s.

GOL financial inputs to VWSS during the 1980s will have totalled more than M.4 millions, a figure which includes the estimated value of voluntary community labour to assist with water supply installation. This amount has been inadequate to fully cover manpower costs and there has been substantial reliance on donors to pay daily-paid employees, who make up a large proportion of the VWSS labour force.

During the 1990s, GOL inputs should rise from about M.400,000 to at least M.500,000 per annum during the period 1990-95, and M.700,000 per year from 1996 onwards. A total GOL contribution of M.2.5 millions will therefore be required during 1990-95, and a further M.3.5 millions during 1996-2000, making a grand total for the decade of M.6 millions.

Increased financial resources must be provided by GOL for this important programme in order to provide sufficient manpower and general support to ensure the longer term institutional viability of VWSS.

During 1989 a cost recovery programme for the maintenance of village water supplies was being introduced, requiring communities to meet about 50% of the cost of repairs and maintenance from their own funds.

Through Village Water Committees, communities are required to establish a maintenance fund as a prerequisite for obtaining service. VWSS then bills the community for each repair job, with the community meeting the cost of labour and spare parts, and VWSS covering transport, logistics, and overheads. To maintain affordability an upper ceiling of M.300 has been set for village contributions, with costs in excess of this for any particular job being subsidized.

Village Water Committees will be responsible for topping up maintenance accounts, through community collections, after each bill has been paid. Failure to pay a bill will result in further maintenance work being suspended until the account is settled.

This scheme will require careful monitoring during the

plan period to ensure that it is effective and does not place an impossible burden on communities. A detailed assessment of the system will be undertaken early in the plan period.

-----  
 MAJOR DONOR ASSISTANCE TO VWSS, 1979-90 (US\$)  
 -----

<u>Donor</u>	<u>Project</u>	<u>Amount</u>
USAID	Rural Water & Sanitation Project 1979-89	12,142,000
USAID	Monetized Food Aid, 1985-86	250,000
EEC	Gravity Systems, 1982-85	380,000
EEC	Borehole Drilling Programmes No.1, 1984	380,000
	No.2, 1985	250,000
HELVETAS	Technical Assistance, 1978-91	4,800,000
ODA	Gravity Systems, 1982-85	600,000
	Gravity Systems, 1986-89	1,550,000
	Gravity Systems, 1989-92	1,300,000
CIDA/SASK	Borehole Drilling Programmes No.1, 1984-87	550,000
	No.2, 1988-90	500,000
NGOs	(Estimate) 1981-88	400,000
UNCDF	Borehole/Hand Pumps 1985-87	612,000
	1989-92	2,300,000
CARE	Gravity Systems, 1985-87	750,000
IRISH AID	Boreholes/Hand Pumps No.1, 1987-88	500,000
	No.2, 1988-89	500,000
USCC	Boreholes/Hand Pumps, 1986-87	90,000
GOL	Capital Funds, 1981-87	2,000,000
SDC	Gravity Systems Phase I, 1989-90	1,200,000
	Phase II, 1991-93	1,500,000
TOTAL		32,554,000

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#### A.4 INSTITUTIONAL AND MANPOWER DEVELOPMENT

The achievements of VWSS in bringing about major improvements in rural water supply coverage are impressive and stand as a tribute to effective cooperation between government and donors in bringing a much needed resource to the less well off members of Basotho society. The sustainability of this achievement, however, depends on the development of a strong institutional framework which can continue to support the necessary level of output and, just as importantly, effectively operate and maintain systems once in place.

The reduction of dependence on expatriate technical assistance through local manpower development is a necessary condition for the achievement of this objective.

During the 1990s full attention will be turned to these issues.

A major goal is the filling of senior management positions by local personnel. The staffing position in VWSS at the end of 1988 is shown in the table.

Expatriates make up less than 5% of the total VWSS staff, but dominate in key management positions, occupying 50% of senior engineering posts at headquarters, and 10 out of 13 management posts at Regional and District level. Although short-term reliance on external technical assistance has been difficult to avoid, urgent steps should be taken by GOL to phase out this dependence during the 1990s.

During the 1990-95 plan period, VWSS will aim to fill at least seven of the 10 District Engineer posts, 1-2 of the Regional Engineer posts, and at least one more of the headquarters management posts, with local personnel. By year 2000, all posts should be localized.

In order to achieve these objectives, the management training programme will need to be stepped up, with overseas training being supported by local and in-house programmes. Local training should include, where possible, counterparting of expatriate personnel.

GOL must also take more responsibility for paying VWSS staff. At present, dependence on donors is very high and manpower development consequently constrained.

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 VWSS STAFFING, LOCAL & EXPATRIATE, 1988
 

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	<u>Local</u>	<u>Expatriate</u>
<u>Admin. &amp; Tech.</u>		
Senior Engineer	1	--
Maintenance Engineer	1	--
Sanitation Engineer*	1	--
Construction Engineer	--	1
Development Engineer	--	1
Training Engineer	--	1
Regional Engineers	--	3
District Engineers	3	7
Engineers' Assistants	8	--
Supervisors	18	--
San. Tech. Officers*	4	--
<u>Office Staff</u>		
Lab. Technician	vac.	--
Transport Officer	vac.	--
Personnel Officer	vac.	--
Admin. Officer	1	--
Senior Accountant	1	--
Senior Storekeeper	1	--
Admin. Staff	64	--
<u>Workshop Staff</u>		
Workshop Managers	2	--
Storekeeper	1	--
Mechanics	6	--
Welders	2	--
<u>Field Staff</u>		
Foremen	32	--
Masons	91	--
Drilling Foremen	4	--
Drilling Mason	8	--
San. Technical Assts.*	24	--
TOTAL	272	13

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 \* Assigned to NRSP Source: VWSS Annual Report, 1988
 

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The institutional development of VWSS has been limited during the 1980s. The GOL/Helvetas joint evaluation of VWSS, undertaken in 1987-88, recommended important changes to the structure, particularly at headquarters, with a view to improving management efficiency. These proposals should be examined in further detail during the plan period, and changes made as deemed appropriate.

An important proposal is that for the creation of a post for a Senior Engineer for Resource Planning and Development within VWSS. This position would help strengthen VWSS's overall monitoring capacity, and would also take much of the burden of project preparation and donor coordination away from operational staff.

Some changes in the organizational structure have recently been made at the time of writing. These are reflected in the revised organisation chart of VWSS.

The evaluation report also pointed to institutional weaknesses in respect of coordination, both within the sector and in relation to other sectors with a relationship to water and sanitation activities. This issue is discussed in greater detail in Part E.

An additional proposal is that consideration should be given to the establishment of VWSS as a parastatal organization. Though this seems a distant prospect, a feasibility study could be undertaken during the plan period to investigate this possibility.

#### A.5 OPERATION AND MAINTENANCE

The sustainability of the achievements of VWSS rests to a very large extent on the effectiveness of operation and maintenance (O&M) systems. The issue of O&M has been the focus of increasing attention during the 1980s.

The prospects of developing a fully effective O&M system are closely tied to issues of cost recovery, noted in the section above, and village level management, discussed in A.6 below.

The GOL/Helvetas joint evaluation exercise in 1987-88 underlined O&M as a major concern and warned of the dangers of concentrating on output at the expense of sustainability. During the late 1980s a number of pilot schemes were initiated to look into this issue, including the development of a cost recovery mechanism to ensure financial sustainability.

As the 1990s wear on, O&M will become more and more important as the extent of coverage continues to grow at a rapid pace and systems begin to age. Although technologies have been quite carefully selected in order to reduce maintenance requirements, significant inputs will nevertheless be required.

Along with institutional and manpower development, O&M will be a dominating concern during the plan period and beyond.

#### **A.6 VILLAGE LEVEL MANAGEMENT**

Operation and maintenance is closely linked to issues of village level management. Local responsibility for the care of water systems has been a long-held principle in VWSS, but success in achieving this goal has been very uneven.

A detailed review of local management systems and Village Water Committee training needs was conducted, with USAID support, in 1984, and a village level management handbook developed. The GOL/Helvetas evaluation noted, however, that serious problems still remain.

The further development and strengthening of village level management capacity will be crucial to the success of the cost recovery mechanism, discussed above. These two issues must be closely linked and rapid development will be required during the early 1990s if serious long-term problems are to be avoided.

#### **A.7 HEALTH EDUCATION**

An appreciation of the health advantages of improved water supplies, and the adoption of appropriate behaviours to obtain maximum benefits, are prerequisites to obtaining any significant progress in the espoused objective of reducing the incidence of water and sanitation related disease. Severe manpower constraints have limited the effectiveness of sector

health education programmes, although important progress has been made.

VWSS and the National Rural Sanitation Programme share similar problems in developing effective hygiene education programmes. The adoption of proposals to more closely integrate the two programmes, noted below and further outlined in Part B, should enhance the prospects of greater integration of the health education programmes of these two agencies.

The common location of both VWSS and NRSP health educators in the Health Education Unit (HEU) of MOH should be fully exploited during the plan period and a more integrated and streamlined hygiene education communications programme developed.

#### **A.8 INTEGRATION WITH RURAL SANITATION**

Strong institutional links already exist between VWSS and the National Rural Sanitation Programme, with the employment of the NRSP's technical staff being managed through VWSS. With the NRSP now moving towards a full-scale national programme, real prospects now exist for much closer integration between the two sub-sector programmes.

A good basis for cooperation has already been established at both national and district level. In view of the serious manpower problems faced by both agencies, a more integrated approach would be beneficial to both and may strengthen the prospects of achieving real health benefits from the combined interventions of clean water and adequate sanitation.

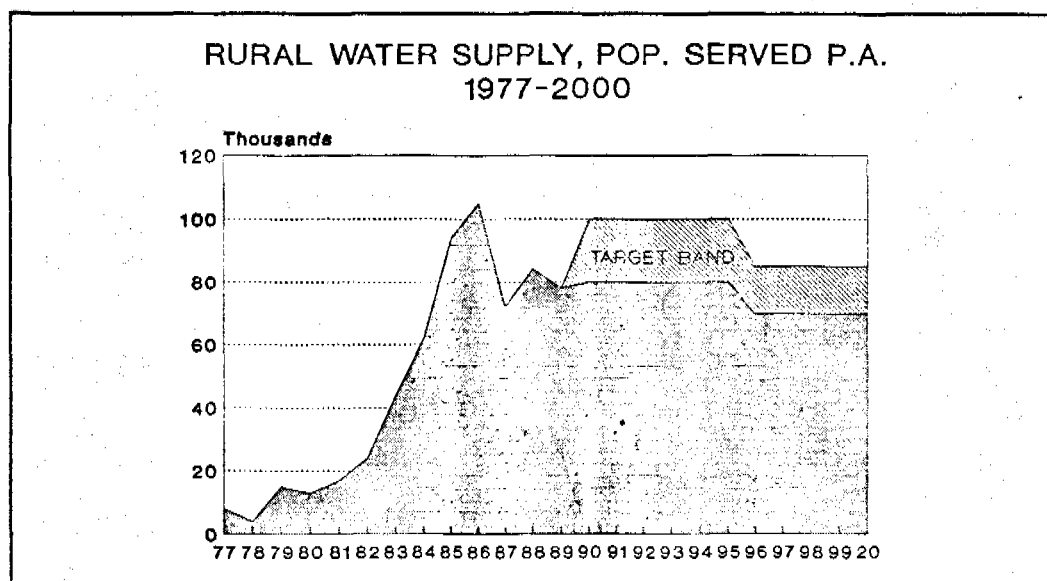
The move towards a more integrated approach has already been agreed in principle between the two agencies and should now be developed into concrete action. The ODA has expressed its willingness to support a pilot testing of an integrated approach in the Northern Region.

The development of an effective integrated approach to rural water and sanitation provision is a goal for the plan period. Current proposals in this respect are discussed in more detail in Part B.

#### **A.9 WATER SUPPLY TARGETS, 1990-95**

During the 1990s fairly constant rates of production

will be maintained, at between 70-100 000 persons served p.a., and greater attention devoted to issues of manpower development, on the one hand, and programme sustainability, particularly in relation to village level operation and maintenance and cost recovery, on the other.



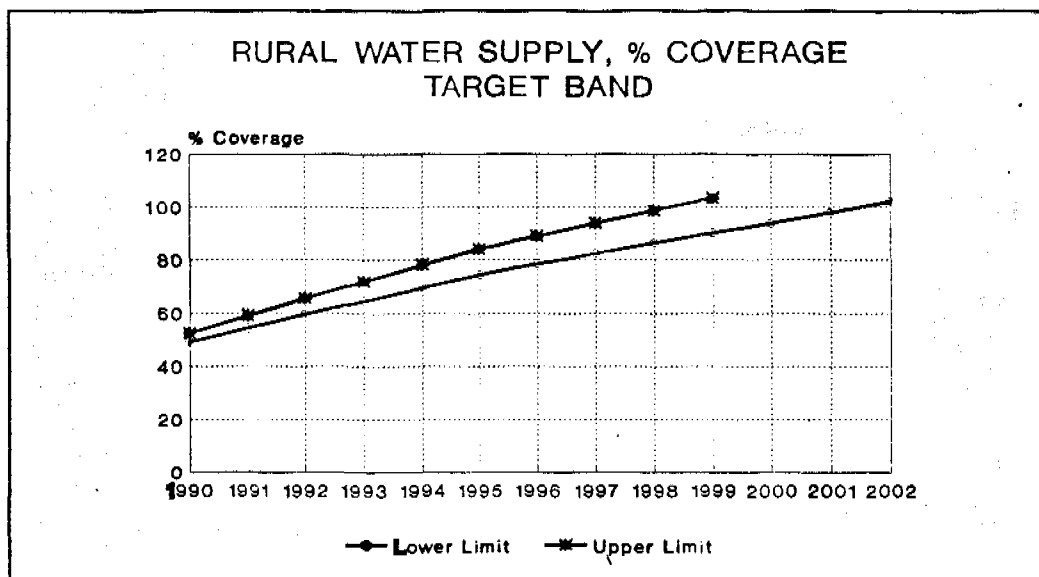
The graph above extends anticipated production levels to the year 2000, set within a target band based on lower and upper per annum production limits. The lower limit of desired output is based on provision of service to 80 000 persons p.a. between 1990-95 and a further 70 000 p.a. from 1996 onwards. The upper limit proposes a level of output based on 100 000 persons served p.a. during 1990-95, dropping to 85 000 persons served p.a. from 1996 onwards.

The upper and lower projections provide a target band of output, allowing for fluctuations in donor funding and the effect of anticipated variance in handpump production.

As the graph below indicates, levels of production within the target band should enable full service in clean rural water supply provision sometime between 1998-2002, in keeping with the 1983 Sector Action Plan's 20 year programme.

The level of output will be reduced from 1996 onwards for two reasons. First, to reduce the pressure on new personnel who will be taking over senior management and technical posts from expatriate advisers. Second, to

allow more time and resources to be devoted to extending existing systems, to allow for population growth, and operation and maintenance, which is likely to become increasingly pertinent as systems begin to age.



During the plan period 1990-95, VWSS will seek to increase the level of coverage of village water supplies to around 80%, with at least 400,000 persons served during this time. Full coverage is expected to be achieved by about the end of the decade, with at least another 350,000 people being served between 1996-2000.

#### A.10 ACTION PLAN

During the plan period 1990-95, VWSS will pursue the following objectives.

- \* village water supply construction will be maintained at a constant output of between 80,000 and 100,000 persons served per year, to achieve a target of at least 400,000 new persons served by 1995.
- \* percentage coverage of the rural population served with clean water supplies will rise from 45% to about 80% by 1995.

- \* additional donor funding will be sought to provide a further US\$13 millions in capital and technical assistance.
- \* GOL financial support to VWSS will rise from an average of M.400,000 to M.500,000 per year.
- \* attention will be paid to local manpower development with the goals of placing nationals in at least seven out of 10 District Engineer posts, two out of three Regional Engineer posts, and at least one more national management post.
- \* the VWSS and NRSP programmes will be integrated, on the basis of agreed revisions to the institutional and management structure of both organisations. By 1995 a fully integrated national programme for rural water supply and sanitation will be established.
- \* close attention will be paid to the further development and strengthening of the hygiene education component of VWSS activities, in coordination with the NRSP and the Health Education Unit (HEU) of MOH.
- \* an effective cost recovery programme, recovering at least 50% of operation and maintenance costs from beneficiary communities, will be established. A thorough evaluation of the current approach to cost recovery will be undertaken early in the plan period.

During 1996-2000, output will continue at a rate of about 70-85,000 persons served per annum in order to reach full coverage between 1998-2000. At current prices, donor inputs of US\$12 millions, and annual GOL inputs of M.700,000 will be required. Institutional consolidation of VWSS will continue, perhaps on the basis of a move to parastatal status if this seems viable. By year 2000, all line posts in VWSS will be occupied by nationals.

# B.RURAL SANITATION

## **B. RURAL SANITATION**

### **B.1 BACKGROUND**

Development of the current National Rural Sanitation Programme (NRSP) began in October 1983 with the launching of the Rural Sanitation Pilot Project (RSPP). Funded by UNDP, UNICEF, and GOL, and executed by the UNDP/World Bank Technology Advisory Group (TAG), the pilot project developed a strategy for rural sanitation improvement based on self-reliance and decentralization.

Expansion to a national programme was endorsed by GOL in 1986. By the end of the IDWSSD all 10 of the country's districts will have established programmes, supported by a variety of donors.

### **B.2 DISTRICT PROGRAMMES**

The NRSP operates on a decentralized basis, with the district as the basic unit of operation. Pilot activities were begun in Mhales Hoek District during 1984 and a district-based implementation strategy developed. By 1990 it is expected that all 10 of the country's districts will have launched rural sanitation programmes.

The chart below summarizes the end-of-decade status of the NRSP, and indicates the phasing of district programmes during the decade and beyond.

### **B.3 PROGRAMME FINANCING**

During the 1980s, the development of the National Rural Sanitation Programme (NRSP) has relied heavily on donor inputs. Due to the implementation strategy adopted, however, these have been modest in relation to the sector as a whole. An unsubsidized approach to VIP latrine construction has also meant that long-term reliance on donor funding for the technical aspect of the programme has effectively been eliminated.

It is expected that after 1995 major inputs from donors will no longer be required to sustain the NRSP. Intermittent inputs will continue to be needed, but the programme as a whole should be largely self-sustaining within the GOL framework.



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 DEVELOPMENT OF NRSP & DISTRICT PROGRAMMES
 

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	83	84	85	86	87	88	89	90	91	92
RSPP	----->									
Support to NRSP									----->*****	
M.Hoek District									----->*****	
Leribe District									----->*****	
B.Buthe District									----->*****	
Mokhotlong Dist.									----->*****	
Quthing District									----->*****	
Berea District									----->*****	
Qacha's Nek Dist.									----->**	
Thaba Tseka Dist.									----->*	
Maseru Dist.									----->	
Mafeteng Dist.									----->	

KEY: -----> Donor supported  
 \*\*\*\*\* GOL supported

The table below summarizes donor support to the NRSP, from the RSPP to the end of the decade, and indicates both committed and as yet uncommitted requirements to the year 2000.

By the end of 1989 a total of about M.4,942,000 of donor funds will have been spent on the development of the NRSP. Per annum donor expenditure should peak at the end of the decade. By 1993, all 10 districts will have completed at least a three-year programme with full donor support.

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 EXTERNAL ASSISTANCE TO NRSP NATIONAL & DISTRICT PROGRAMMES  
 ACTUAL & PROJECTED, 1983-2000  
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PROGRAMME	DONOR	AMOUNT (Maloti)	PERIOD
Pilot Project	UNDP	700 000	10/83-
	UNICEF	900 000	12/86
	USAID+	30 000	
Support to National Team	UNDP	1 200 000	1/87-
	UNDP/PROWESS^	130 000	12/89
M.Hoek District	UNICEF*	32 000	1/87- 12/87
N.Districts (Leribe, B.Buthe, Mokhotlong)	ODA	990 000	3/86- 3/90
Quthing Dist.	USAID++	150 000	6/87- 9/89
Berea District	Irish Aid	600 000	1/88- 12/90
Q.Nek, T.Tseka, Maseru Dists.	SDC	1 600 000	7/89- 7/92
Mafeteng	unconfirmed	600 000	1990 ff
Replacement of capital items	unconfirmed	2 800 000	1993- 2000
TOTAL		9 732 000	

+ USAID funds transferred from Rural Water Supply & Sanitation Project for use in Rural Sanitation Pilot Project

^ UNDP support under the PROWESS project began during 1986, but the bulk of expenditures occurred during 1987/88

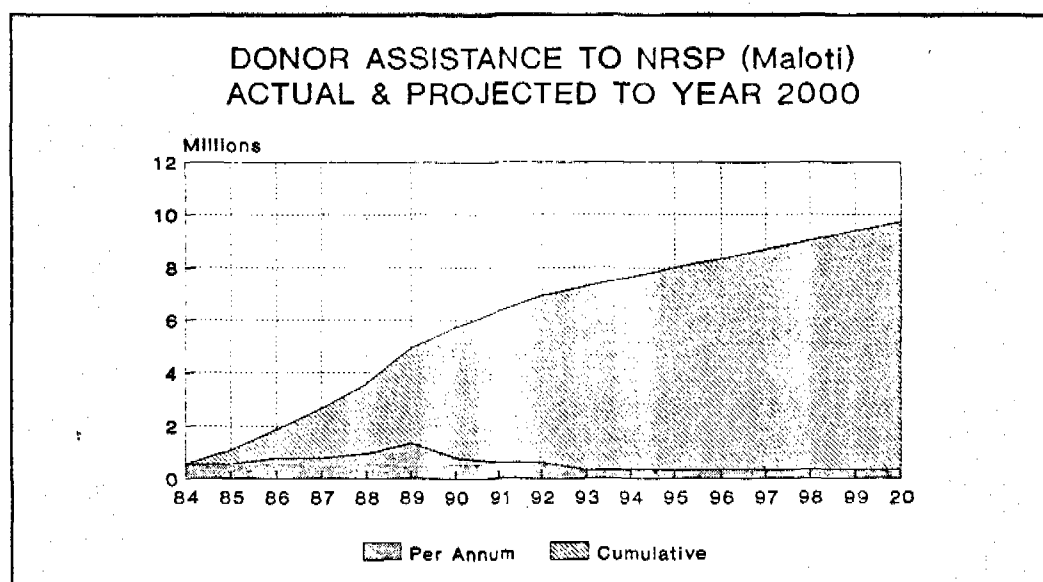
\* Balance of UNICEF funds from RSPP carried over to support M.Hoek District programme

++ Funds carried over from USAID support to RSPP

Once the district programme has been established in this way, it is expected that it can continue without further extensive donor support, and with only relatively modest GOL inputs. An allowance is made, however, for relatively low levels of donor input to assist GOL in the replacement of capital items, particularly vehicles.

From 1993 onwards annual donor contributions of M.350,000, at constant 1989 prices, will be sought in order to replace programme vehicles and other capital items. This figure is based on the replacement costs of one truck and one four-wheel drive vehicle per district at three-year intervals, estimated at M.105 000. On an average per annum basis, this amounts to M.35 000 per district.

To cover these costs, an average donor contribution of M.350 000 p.a. will be required from 1993, assuming that all 10 districts are fully operational by then.



As donor funding tails off during the 1990s, financial inputs from GOL will inevitably rise.

At constant 1989 prices, annual support costs for the national team are estimated at M.72,500. District costs rise incrementally as these programmes are taken over by government, at a cost per district per annum of about M.69,000.

Total costs to government will rise from about M.262,500 per annum at the beginning of the decade, when only two district programmes are fully supported by government, to M.1,022,500 per annum from 1995 when all 10 districts should be government funded.

For the period 1989-2000, total costs to government to support the NRSP at all levels will amount to approximately M.8.8 millions, at 1989 prices.

Community contributions to the construction programme, conservatively estimated, are likely to exceed M.12.5 millions. This figure only accounts for VIP latrines to be built directly under the auspices of the NRSP, calculated at a cost of about M.250 per unit. If likely private sector activity is taken into account (see section B.8 below), the total amount invested by the rural population in improved sanitation during the decade may well be in the order of M.62.5 millions. In this context, GOL inputs can be seen to be quite modest.

#### B.4 CREDIT SCHEMES

The significant burden placed on the rural population for the self-reliant provision of improved sanitation makes the issue of affordability of crucial importance to the long-term sustainability of the programme. At current costs it is estimated that, at any time, about 45% of the rural population can afford to pay for a VIP latrine.

In order to extend affordability, attempts have been made during the late 1980s to develop an effective credit scheme for rural latrine construction, operating through the Lesotho Cooperative Credit Union League (LCCUL). Although this has worked fairly well in some localities, problems have been experienced in building up a national level credit system. At present, it is considered that LCCUL lacks the institutional capacity to run such a scheme effectively.

In the meantime, the Urban Sanitation Improvement Team (USIT) is working on the development of a similar scheme with the Lesotho Bank. In the long-term this may prove to be a more viable option for national implementation.

During the plan period, further thought will be given to credit options, with a view to instituting a scheme towards the end of the decade when close to full

coverage has been achieved of households which can afford to build VIPs without assistance.

The emphasis on self-reliance in the implementation strategy of the NRSP has created a significant spin-off benefit in creating modest, but important, income earning opportunities for rural artisans. A very high proportion of the cash expended on latrine construction remains within the community, in the form of payments to local builders and materials suppliers.

#### **B.5 INSTITUTIONAL AND MANAGEMENT ARRANGEMENTS**

Lead responsibility for rural sanitation improvement is held by MOH, with technical support from the Village Water Supply Section (VWSS) of MICARD.

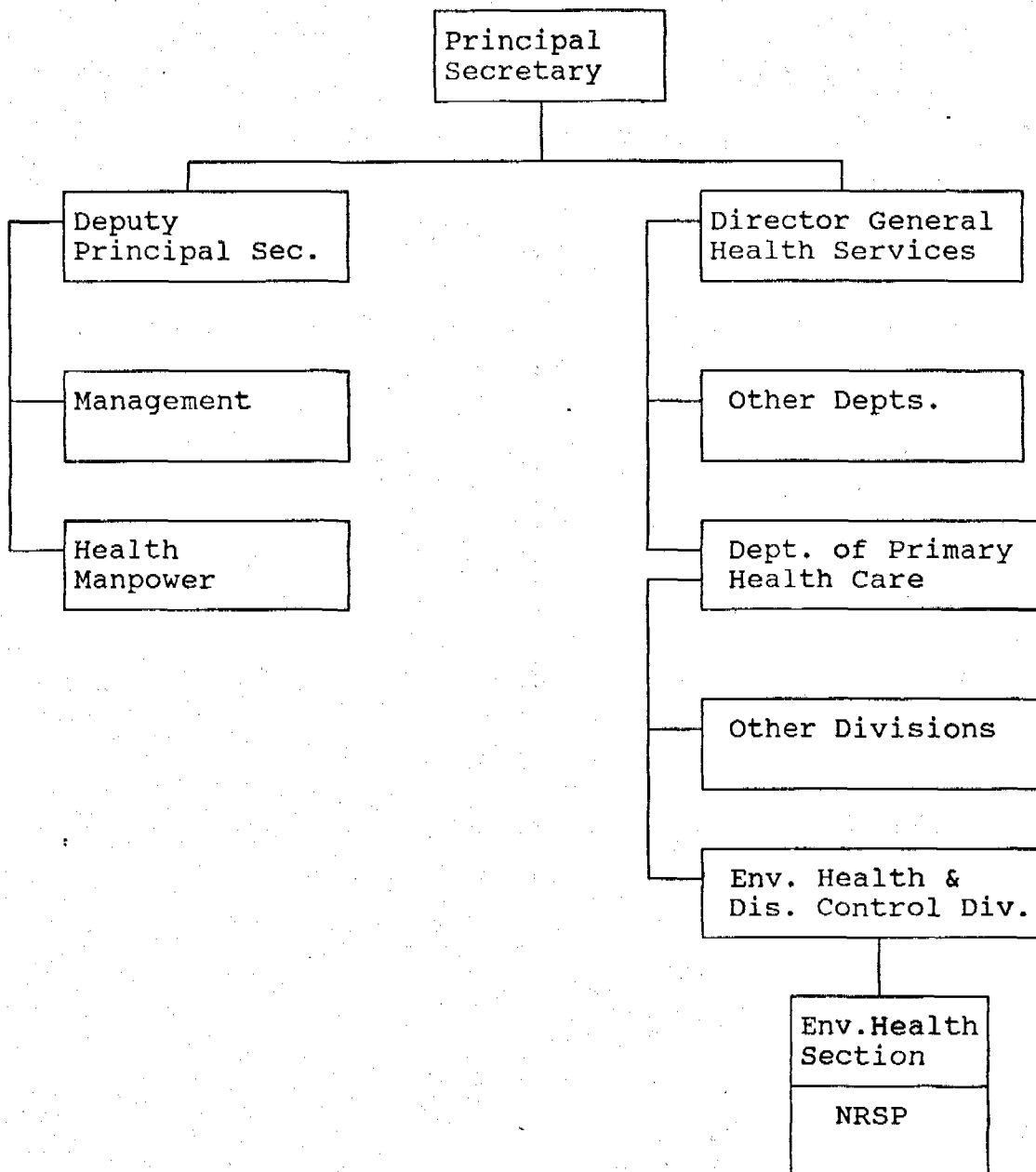
The NRSP forms part of the Environmental Health Section (EHS) of the Environmental Health and Disease Control Division (EHDCD) of MOH. The location of the NRSP within the overall structures of both MOH and MICARD is shown in the summary organization chart below. During the course of the IDWSSD, the NRSP has developed to the extent that it is now a dominant feature of EHS field activity.

National management of the NRSP is the responsibility of the National Rural Sanitation Coordinator (NRSC), drawn from EHS, assisted by a Chief Technical Officer (CTO) in VWSS.

A national On-Site Sanitation Coordination Committee (OSCC) provides forum for guidance for all national on-site sanitation programmes. The OSCC is constituted as a sub-committee of the National Steering Committee.

At district level, programme management responsibility lies with the District Sanitation Coordinator (DSC), usually a Senior Health Assistant (SHA) from EHS. At local level, the DSC reports to the District Medical Officer and District Secretary. Coordination is achieved through regular meetings of the District Sanitation Coordinating Committee (DSCC), made up of senior district officers of all involved ministries and agencies.

MINISTRY OF HEALTH, ORGANISATION CHART



Since 1987 national evaluation and management training workshops have been held for DSCs at the end of each calendar year. These have proven to be very valuable exercises for planning and evaluating the NRSP, providing in-service training, and building morale, and will be continued throughout the 1990s.

District teams are ideally made up of the DSC, four field-based Health Assistants (HAs) and four Technical Assistants (TAs). The latter are hired on a daily-paid basis through VWSS. Due to manpower constraints in MOH, few district teams have their full complement of HAs.

Local level management capacity is a cause for some concern, with DSCs being asked to take significantly higher levels of responsibility than normally demanded of SHAs. The role of TAs is also problematic, due in large part to their anomalous position within VWSS and a lack of absolute clarity as to the division of command responsibility between the DSC and the District Engineer (DE) for VWSS, who supervises all other VWSS staff at district level.

During 1989 a proposal has been tabled which would transfer greater district-level management responsibility to VWSS, and make more effective use of TAs. In summary, the proposal suggests that NRSP TAs should be absorbed into the mainstream cadre of VWSS masons, all of whom would be trained in both village water supply protection and VIP latrine construction. At district level all TAs would be under the direction and supervision of the DE, and be assigned to water and/or sanitation activities as required.

In this way, more effective use can be made of the TA cadre, the management burden would be more evenly shared between the DE and the DSC, and greater integration of the technical aspects of rural water supply and sanitation would be achieved.

The primary responsibility of MOH in NRSP implementation would then be focussed on "software" issues, while responsibility for "hardware" issues would be firmly located within VWSS. An additional advantage is that NRSP TAs would be placed within a framework which provides enhanced career development prospects. Under present arrangements the only option open to TAs who wish to advance their careers is to leave the NRSP.

During the late 1980s work began in the NRSP office on the drafting of a management handbook for the

programme. The departure of the Water and Sanitation Adviser six months earlier than originally envisaged has meant that this document remains to be completed. Funds will be sought from the UNDP support to the national programme to engage a consultant to complete this task as soon as possible. The manual will take account of changes in the management structure resulting from the outcome of discussions between MOH and VWSS.

#### **B.6 IMPLEMENTATION PROCEDURES**

Programme implementation depends heavily upon the effective promotion of the VIP latrine in targetted communities, and the management of technical training courses for Local Latrine Builders (LLBs). Latrine construction is unsubsidized, with the full cost of materials and labour being met by beneficiaries.

The basic approach to implementation developed during the 1980s is sound and will be continued.

Careful monitoring of latrine costs and investigations into ways and means of reducing costs will be an ongoing feature of field operations to ensure continuing affordability.

#### **B.7 MANPOWER DEVELOPMENT AND TRAINING**

By mid-1989 national-level management of the NRSP has been taken over by local personnel, with the departure of the expatriate Water and Sanitation Adviser from MOH. A national core team for the NRSP has been established, comprising a National Rural Sanitation Coordinator, Senior Health Educator, Research Assistant, and two Health Assistants in MOH, and a Chief Technical Officer and four Technical Assistants in the Village Water Supply Section of MICARD.

At present the NRSP is highly dependent on a small number of experienced and trained national staff at the central level. The capacity of this national team to plan and manage the programme without further external support is yet to be fully tested, though indications are generally positive. The level of security of these staff positions under current arrangements, however, is a cause for concern.

In the case of MOH, although staff at national level are in place, their position within the NRSP still



lacks full institutionalization. The key national posts of National Rural Sanitation Coordinator, Senior Health Educator, and Research Assistant at present lack an unequivocal linkage to the programme itself insofar as they draw from the establishments of EHS, Health Education Unit (HEU), and Disease Control Unit (DCU) respectively. The future of the NRSP as a permanent feature of the ministry structure is not yet formalized and staff occupying these positions remain vulnerable to reassignment within the ministry.

During the plan period MOH will seek to establish the NRSP as an institutionalized unit within EHDCCD. Establishment posts will then be directly tied to the NRSP, rather than continuing to rely on secondments from other sections.

In the case of VWSS, the Chief Technical Officer and Technical Assistant posts do not at present fall within the mainstream structure of the section and offer very limited prospects of advancement for incumbents. Retaining experienced personnel in the long term is likely to be problematic. The proposal to increase the involvement of VWSS in the direct management of the technical component of NRSP activities should help to solve this problem.

MOH is faced with serious problems in providing the personnel required for full implementation of the national programme. So far, MOH has made strong efforts to meet staffing requirements, through the assignment of Health Assistants to NRSP activities at district level, but future development prospects look very limited.

In addition, the quality of Health Assistant training remains low. During the 1980s the role of the Health Assistant has undergone significant revision, in line with the development of the Primary Health Care approach in general and the impact of the NRSP in particular, but suitable adjustments to the curriculum have yet to be made. Adjustments are necessary on an urgent basis to allow Health Assistants to acquire enhanced skills in areas such as community development, health education, and field-level monitoring and evaluation.

A comprehensive review of the Health Assistant training programme and curriculum will be an urgent priority early in the plan period.

Greater attention will also be paid to sustaining manpower development in respect of the Health Assistant training programme to ensure that adequate numbers of personnel are recruited into the ministry. Resources and posts will be made available to ensure that HAs are fully utilized on completion of basic training. Serious morale problems have been experienced in the 1980s due to the failure to provide posts, and full salaries, for new graduates.

The current turn-out of new Health Assistants, at a rate of about 15-20 every two years, is inadequate to meet the projected demands of MOH's primary health care programme, of which the NRSP is a part. In an effort to ameliorate this problem the redeployment of this cadre as "generic" Health Assistants, based at Health Service Area (HSA) rather than District level, is being developed as policy by MOH. Care will be taken to ensure that the "generic" status of HAs is maintained, so that they are not merely redeployed to other special interest projects in particular HSAs, and that a structure is maintained which will allow HAs to coordinate their activities with extension workers from other ministries and agencies, all of whom currently operate on the basis of the District rather than the HSA.

#### B.8 LATRINE COVERAGE

The technology of choice adopted in Lesotho for the improvement of on-site sanitation is the Ventilated Improved Pit (VIP) latrine. Prior to the IDWSSD, the only available low-cost option for rural areas was the unimproved pit latrine.

At the start of the decade it was estimated that only 8% of the rural population were using pit latrines, with the remaining 92% having no access to acceptable sanitation facilities.

During the decade, coverage has improved at a modest but significant rate, with an estimated 20% of the rural population using pit latrines of one kind or another by 1989. Of these, approximately one quarter are VIP latrines.

In view of the voluntaristic and self-reliant nature of the approach adopted, progress has been significant and a sound basis has been established for a national programme with good prospects of long-term sustainability.

A major factor in assessing long-term prospects is the private sector response to the promotion of the VIP latrine on a national level, with commercial sales of pre-fabricated models currently adding a multiplier to NRSP latrines of about 5:1.

Private sector sales of pre-fabricated VIP latrines began at roughly the same time as the commencement of the Rural Sanitation Pilot Project following an initiative by the Urban Sanitation Improvement Team (USIT) in providing training courses to commercial suppliers for the upgrading of zinc and timber pit latrine shelters.

The first national count of sanitation facilities in Lesotho was undertaken in 1986 as part of the National Census. Figures were also collected, at about the same time, as part of a Household Incomes and Expenditures survey undertaken by the Bureau of Statistics (BOS). The findings of this study, in respect of sanitation facilities, are shown below.

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HOUSEHOLDS BY TYPE OF SANITATION FACILITY, 1986-87

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	SYSTEM TYPE				
	<u>Sewage</u>	<u>Pit</u>	<u>VIP</u>	<u>Bucket</u>	<u>None</u>
<u>Maseru</u>					
No.	4134	12250	3339	3127	3526
%.	15.7	46.4	12.7	11.9	13.4
<u>Other Urb.</u>					
No.	1511	7064	972	5838	5157
%.	7.4	34.4	4.7	28.4	25.1
<u>Rural</u>					
No.	2004	34851	8860	1150	236744
%.	0.7	12.3	3.1	0.4	83.4
<u>Total</u>					
No.	7650	54165	13173	10115	245427
%.	2.3	16.4	4.0	3.1	74.2

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Source: Bureau of Statistics, Household Budget Survey 1986/87, provisional data

NRSP figures suggest that, at the time of the survey, private sector sales of VIPs were adding a multiplier to programme latrines of about 5:1. It is assumed that the private sector will continue to have a major impact of coverage and that, throughout the 1990s, a ratio of about 4:1 is likely to be maintained. On this basis, prospects look much brighter than if only latrines directly attributable to the programme are counted.

The graph below projects the likely growth in latrine coverage during the 1990s, taking into account NRSP and private sector VIP latrines and unimproved pit latrines and water-borne systems. The projection suggests that, by year 2000, it should be possible to reach a goal of just over 75% coverage.

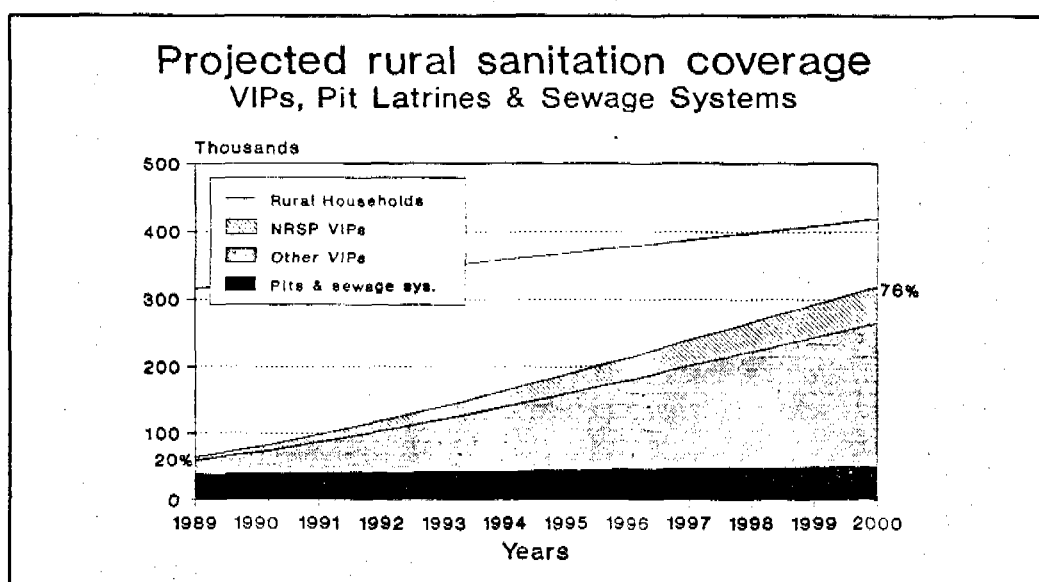


Figure 2

In order to reach this target, NRSP VIP latrine output will have to increase from about 2,500 per annum in 1989 to 4,600 in 1995, reaching a plateau of 5,000 per annum from 1998 onwards.

## B.9 HEALTH EDUCATION

The linkage between technical improvement in the disposal of human wastes in the rural areas, through the introduction of VIP latrines, and the encouragement of major behavioural changes among the population through health education campaigns will continue to be vigorously maintained and further developed.

An important goal set for the NRSP under the UNDP assistance to the development of the national programme was the "progressive elimination of unhygienic excreta disposal practices in rural areas".

This objective links to the long term goal of contributing to improvements in health in the rural areas. Improved latrine coverage clearly contributes to this process, but for full impact needs to be strongly tied in with broad behavioural changes arising from health education inputs.

Early evidence, particularly that from the Health Impact Evaluation study undertaken in Mhales Hoek during 1987/88, indicates that modest progress has been made towards the attainment of this objective, though a decisive impact may still be some way off.

Full attention will be paid to the continuing development of health education inputs, and the consolidation of the participatory approaches developed with assistance from the UNDP PROWESS (Promotion of the Role of Women in Water and Environmental Sanitation Systems) project. If greater management responsibility for technical aspects of the programme is transferred to VWSS, full attention can be given by MOH to the further development of this vital element of programme implementation. Funds are still available under PROWESS assistance for the appointment of a Women's Liaison Adviser in MOH. Filling of this post will be actively pursued.

The health education programme is also of crucial importance in linking NRSP activities with other programmes in the sector, and with the overall Primary Health Care programme.

#### **B.10 SCHOOLS SANITATION**

The provision of adequate sanitation facilities for schools has been a cause for concern throughout the decade. In the absence of an established national programme to address this issue both NRSP and USIT have developed modest schools programmes to complement household-based activities.

New schools being developed under the Training for Self-Reliance Project (TSRP) are all being provided with VIP latrines. Many schools, however, continue to lack even the most basic facilities.

Since the late 1970s, MOH has made two attempts to launch and develop schools sanitation programmes, without success. Further attention will be given to this issue during the 1990s. It appears evident that MOH at present lacks the institutional capacity to implement such a programme.

In the meantime, assistance to schools in programme areas has been given by NRSP, on a cost-sharing basis. Several schools have also benefited from funding assistance from the World Health Organisation (WHO). Until such time as an effective schools programme is developed, *ad hoc* assistance of this kind will continue, and be linked to the broader health education activities of both NRSP and USIT.

As part of its new programme of food assistance to schools, expected to be underway by 1990, the World Food Programme (WFP) intends to link food aid to broader development activities to promote self-reliance. There appear to be good prospects of introducing a schools sanitation element into this programme. This will be explored by MOH and WFP.

#### **B.11 MONITORING AND EVALUATION**

An effective monitoring and evaluation programme is essential to the orderly development of the NRSP and provides indispensable data for effective planning.

The NRSP has developed a monitoring and evaluation programme, based on routine monthly monitoring activities and an annual evaluation cycle. This programme is relatively simple, but depends upon consistent inputs from field staff.

The consistency of reporting has varied considerably from district to district. Steps will be taken by NRSP management to rectify this situation and ensure that all districts provide data in a timely and consistent manner. The effectiveness of the monitoring system will be regularly assessed as part of the annual DSC's programme review.

Annual evaluation exercises are equally important, and are essential in fleshing out the basic data gathered through the monitoring system. The results of annual evaluation surveys will be available for review at the end-of-year workshop. NRSP management will provide the

necessary support to ensure that this timetabling is maintained.

#### B.11 ACTION PLAN, 1990-95

During the plan period 1990-95, the NRSP will pursue the following objectives.

- \* VIP latrine output will increase from 2,500 per annum at the beginning of the plan period to 4,600 per annum by 1995, contributing to an overall increase in sanitation coverage in rural areas from 20% to 45%.
- \* GOL financial inputs to the NRSP will rise from M.262,500 per annum at the beginning of the plan period, to M.1,022,500 per annum by 1995.
- \* donor funds will be sought to cover replacement of capital items essential for the continuation of NRSP field activities.
- \* the NRSP will be firmly institutionalized within MOH, with establishment posts directly linked to the programme.
- \* the NRSP and VWSS programmes will be integrated, on the basis of agreed revisions to the institutional and management structure of both organisations. By 1995 a fully integrated national programme for rural water supply and sanitation will be established.
- \* close attention will be paid to the further development and strengthening of the hygiene education component of NRSP activities, in coordination with the Health Education Unit (HEU) and VWSS.
- \* district level management and monitoring and evaluation programmes will be strengthened.
- \* manpower development within MOH will be strengthened, with particular attention being paid to the appropriate revision of the Health Assistant training programme.
- \* ongoing efforts will be made to reduce VIP latrine costs and increase affordability. Prospects for the development of an effective credit system for

rural latrine construction will be further investigated.

- \* assistance to schools in rural areas will continue until such time as an effective schools sanitation programme is developed.



C.URBAN WATER SUPPLY  
& SEWERAGE

## C. URBAN WATER SUPPLY AND SEWERAGE

### C.1 BACKGROUND

Responsibility for urban water supply provision rests with the Water and Sewerage Branch (WSB) of the Ministry of Water, Energy and Mining (WEMMIN). WSB also takes care of urban sewerage provision on behalf of the Ministry of Interior, Chieftainship Affairs, and Rural Development (MICARD).

During the decade the area of operations of the WSB has significantly expanded, with improved service levels being extended beyond Maseru to other urban areas.

Early in the 1990s WSB will undergo a major institutional transformation with the expected implementation of proposals to change its status to that of a public corporation, operating on the principle of full cost recovery. This transformation will have major implications for the sub-sector. Important changes in the management structure and operating procedures of WSB are already in process in preparation for this change of status.

### C.2 TARGETS AND ACHIEVEMENTS

The Fourth Five-Year Development Plan set the target of improving urban clean water supply coverage from 65% to 100%, and adequate urban sanitation provision from 22% to 80%, by 1991. In addition, the plan proposes the complete phasing out of the bucket latrine system, the reduction of the conservancy tank system to a minimum, the upgrading of sewerage systems to full operational capacity, and the establishment of safe pit emptying systems in all urban areas.

Improvements in cost recovery mechanisms are also called for, through tighter fiscal control and the introduction of a more flexible tariff structure. The development of legislation to control new sanitation facilities is also an important objective.

While the rural sectoral programmes are strongly focussed on actual percentages of population served, the primary objective of the WSB is to develop networks which make higher levels of service available to all urban dwellers. The principle of full cost recovery has created a demand-driven basis for service provision,

with clients buying in to higher levels of service in accordance with their ability to pay.

On this basis, by the early 1990s piped water supply networks will have been extended to most parts of Maseru and to substantial proportions of other urban areas. The central residential areas of Maseru, and varying proportions of other urban areas, will also have access to sewered sanitation by the early to mid-1990s. The exact proportion of the urban population which will elect to hook up to these services is difficult to predict in a precise manner.

In general terms, WSB is likely to meet its IDWSSD target of making clean water available to almost 100% of the urban population.

The improvement of cost recovery by WSB in the latter half of the decade has been remarkable, and is largely attributable to changes in the management structure (see section C.6 below). In FY 1988-89 the branch succeeded in operating at a surplus for the first time in its 11 year history.

In respect of legislated regulation of sanitation facilities, minimum standards and design criteria were at an advanced stage of development by mid-1989 and it is expected that formal control over standards of VIP latrines and water-borne systems will be instituted by the early 1990s.

### C.3 PROGRAMME FINANCING AND COST RECOVERY

Total capital requirements for the period 1986-90 were estimated at M.134.5 millions. Requirements for the next plan period are likely to be far more modest, with the emphasis being placed on extending existing supply networks, and issues of institutional development, linked to the changeover to public corporation status, and operation and maintenance.

Although revenue is not as yet sufficient to meet capital depreciation, the 1988-89 account showed a surplus over operation and maintenance costs of approximately M.0.5 millions. Projections for the 1989-90 financial year also conservatively predict a surplus of at least M.0.2 millions. Even with depreciation taken into account, WSB is operating at very close to break-even point and expects to maintain this record in future as a public corporation.

Tariff adjustments are partly responsible for improved revenue collection, including the introduction of a combined water and sewerage billing system. Under this new approach, charges for sewerage are calculated by adding 75% onto metered water consumption. An equally decisive factor has been a considerable improvement in the efficiency of the branch's billing section, linked to the appointment of a Revenue Accountant in a senior executive position.

Plans are also at an advanced stage for the computerization of the accounting system, which should further enhance the efficiency of the billing section.

The achievement of a surplus is impressive when compared with the operating loss of M.5.6 millions in 1986-87. Obtaining cost recovery is an essential prerequisite to WSB's viability as a public corporation. It is important, however, that maintenance is not neglected in an attempt to balance the books. The Price Waterhouse transformation study did not expect WSB to be in a financially viable position to operate without major government subsidy until close to the end of the century.

#### C.4 URBAN WATER SUPPLY

During the second half of the 1980s, WSB has managed the implementation of a number of major water supply development projects, aimed at increasing piped water supply coverage and water treatment in Maseru and several other urban centres. A summary of projects is shown below.

Most of WSB's major water supply development projects are due for completion by the early 1990s. In principle, this will make piped water supply potentially available to all of Maseru's urban population, with service levels adequate to meet demand until 1995, and large proportions of the populations of other major urban centres.

The long-term aim of WSB is to provide metered water supplies to all urban dwellers, entailing the phasing out of public standpipes. Means of achieving this goal will be explored through the World Bank supported Second Urban Development Project.

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 CURRENT MAJOR WATER SUPPLY PROJECTS
 

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<u>Project</u>	<u>Donors</u>	<u>Cost (Maloti)</u>
FOUR TOWNS WATER SUPPLY Mafeteng, Mochales Hoek, Quthing, Mokhotlong.  <i>Improve intake works;            increase treatment cap.;            provide pumping stations,            water storage tanks, and            reservoirs; provide trunk            and distribution lines;            construct workshops, staff            housing, and offices.</i>	AfDB, Norway, Opec, GOL.	27,000,000
MASERU WATER SUPPLY, PHASE II  <i>New river intake; double water            treatment capacity; provide            pumping stations, water storage            tanks, and reservoirs; provide            pumping and distribution lines;            provide new water supplies to            Roma and Mazenod; construct            workshops, staff housing,            and offices.</i>	AfDB, ADF, GOL.	40,000,000
TWO TOWNS WATER SUPPLY PROJECT  <i>Extension of water supplies for            Butha Buthe and Thaba Tseka.</i>	KfW	?
URBAN II DEVELOPMENT PROJECT  <i>Water component: extension of            skeleton water supply network            to Lithabeneng and surrounding            areas.</i>	World Bank	?

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### C.5 URBAN SEWERAGE

Major sewerage extension and upgrading programmes have been undertaken during the 1980s and will continue into the early 1990s, serving populations in central Maseru and introducing new sewerage schemes in 11 other urban settlements. A list of current sewerage and sanitation projects is shown in the table below.

Under the Maseru Sewerage Scheme, Phase II, a new outfall sewer for the northern suburbs will have been completed during 1989, with assistance from the ODA. Known as the Europa Trunk Sewer, this will also act as an intercept to the Kingsway sewer and provide a gravity bypass to relieve the pressure on Pumping Station No.1, which up to now has been pumping close to 98% of the town's sewage. The service level provided by this new trunk sewer should be adequate to meet demand until at least 1998.

The second part of the Maseru II project, supported with loan finance from the AfDB, is linked to the Maseru Water Supply Project. This aims to minimize pollution levels in the Magalika Dam and Caledon River, upstream of the main water intake plant, through the construction of a skeleton sewer network to serve the Moshoeshoe II, Maseru East, and Stadium Area residential areas. By 1998, sewerage service coverage in these suburbs should reach approximately 60%, 80%, and 50% respectively.

Service in these areas is expected to comprise a mix of sewerage and VIP technologies, with the sewerage component providing the minimum level required to offset the pollution risk. Contracts are expected to be awarded before the end of 1989, with completion due in 1991.

Existing conservancy tanks and septic tanks will be hooked up to the sewerage system. The balance of the population will be expected to use VIP latrines. This project is closely linked to the targetted objectives of eliminating the bucket latrine system and minimizing the use of conservancy tanks.

Current policy is that authority to construct a conservancy tank will only be given in areas which will be served with main sewerage within five years.

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 CURRENT MAJOR SEWERAGE AND SANITATION PROJECTS
 

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<u>Project</u>	<u>Donors</u>	<u>Cost (Maloti)</u>
<b>MASERU SEWERAGE, PHASE II</b>		
<u>Stage 1: Europa Trunk Sewer</u>	ODA	2,000,000
<i>New gravity outfall sewer for waste water collection from Maseru East, Moshoeshoe II, and parts of Stadium area.</i>		
<u>Stage 2: Protection of Water Sources</u>	AfDB	7,000,000
<i>Protect Maqalika Dam by construction of sewer network at Moshoeshoe II, Stadium Area, and Maseru East.</i>		
<u>Stage 3: Greater Maseru San. Project</u>	Kuwait	12,000,000
<i>New sewerage scheme to serve Racecourse, Hills View, and Europa/Thetsane residential areas.</i>		
<b>13 TOWNS SANITATION PROJECT</b>	KfW	11,000,000
<i>Provision of new sewerage systems and treatment works to serve Butha-Buthe, Leribe, Maputsoe, Mapoteng, Teyateyaneng, Roma, Morija, Mafeteng, Mohales Hoek, Quthing, and Mokhotlong.</i>		

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Elsewhere in Maseru, a major sewerage project to serve the southern suburbs was at an advanced stage of development by mid-1989, with contracts due to be awarded and construction expected to begin by the end of the year. Due for completion in 1992, this will provide 100% coverage to the Racecourse, New Europa/Thetsane, and Hills View residential areas, and 30-40% coverage in Europa East. Approximately 5,500 people will be served by this scheme.

Extension of the central sewerage network is linked to the upgrading of the capacity of existing treatment plants, and the construction of a new sewerage works.

It is expected that by 1998, all residents in the inner urban area of Maseru will be served with adequate sanitation, either sewered or VIP latrines. Of those with access to piped water supply, about 35-40% should be connected to sewerage schemes by 1992. By 1992 all capital development requirements for the 1990s in the Western and Central Zones of Maseru will have been completed.

Future development requirements in the South-West, Northern, and Eastern Zones are difficult to predict, being largely dependent of the impact of extended piped water supply networks to these areas. After 1992, however, no major capital projects are envisaged for the remainder of the decade, with attention being concentrated on operation and maintenance and institutional consolidation.

Outside of Maseru, significant levels of new work are being undertaken under the KfW supported 13 Towns Sanitation Project. Sewerage systems, including treatment works, are being developed in 11 towns. The capital development programme is due for completion towards the end of 1990. The table below indicates the approximate service levels expected to be achieved in the towns involved. In six of the towns initial service is confined to institutions, primarily hospitals, and industrial concerns. Future extension of these schemes is envisaged to link households into the systems when demand is sufficiently high.

The 13 Towns project is considered to be an important programme aimed at bringing sewerage service levels in line with those for piped water supply, and is an attempt to fulfill the terms of WSB's mandate to provide service to all District towns, in addition to Maseru. Prior to this project, apart from a few private systems, there were no GOL sewerage schemes anywhere outside of Maseru.

The balance of the populations in these towns will be expected to use either on-lot waterborne systems, currently being developed by WSB, or VIP latrines, being promoted by USIT (see Part D). The on-lot component of the 13 Towns project is scheduled for completion in 1993.



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 13 TOWNS WATER & SAN. PROJECT, SEWERAGE COMPONENT  
 SERVICE AVAILABILITY, 1996  
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<u>Town</u>	<u>Persons Served</u>	<u>%</u>
Butha Buthe	1,450	36
Leribe*	950	n.a
Maputsoe*	1,700	n.a
Mapoteng*	850	n.a
Teyateyaneng	1,850	20
Roma*	1,450	n.a
Moriija*	1,700	n.a
Mafeteng	3,700	45
Mohales Hoek	1,300	28
Quthing*	500	n.a
Mokhotlong	500	30

\* Institutional/industrial provision only at present

Operational coordination between WSB and the Urban Sanitation Improvement Team has grown considerably during the second half of the decade, with their common participation in the 13 Towns Sanitation Project being a major factor in developing this relationship. Under an agreed division of labour, WSB has responsibility for on-site waterborne disposal systems (septic and conservancy tanks, and on-site wastewater disposal), while USIT is responsible for the promotion of adequate non-waterborne on-site sanitation (VIP latrines).

WSB's role in on-site waterborne systems is discussed in the section below. This section should be read in conjunction with Part D.

#### C.6 ON-SITE WATER-BORNE SANITATION

The problem of phasing out the bucket latrine and conservancy tank systems in Lesotho, and improved standards of on-site sanitation systems, has prompted WSB, in conjunction with USIT, to pay increasing attention to on-site issues.

Main sewerage and VIP latrines are the highest and lowest levels of service provision which are considered adequate for urban areas in Lesotho. Between these two options, however, lies the middle range of on-site waterborne technologies. Increasing attention is being paid to this middle range by WSB, in recognition that a

significant proportion of the population are likely to opt for technology choices at this level.

While USIT concentrates on VIP latrine promotion, and has a major role to play in the phasing out of bucket latrines, WSB has been devoting increasing attention to improving standards in respect of on-site waterborne sanitation systems, and on-site waste water disposal.

In keeping with its cost-recovery policy, WSB has recently introduced an on-site waterborne sanitation advisory service, on a charge basis. In the near future, this will be closely linked to legislated standards for sanitation systems.

Under the new building regulations, expected to be in force by early in the plan period, tighter controls will be in force over design standards for septic tank systems. WSB offers a design service for these, and requires a minimum plot size of 600 square metres before advising installation. The service offered includes site surveys, percolation and soil permeability tests, system design, and construction supervision.

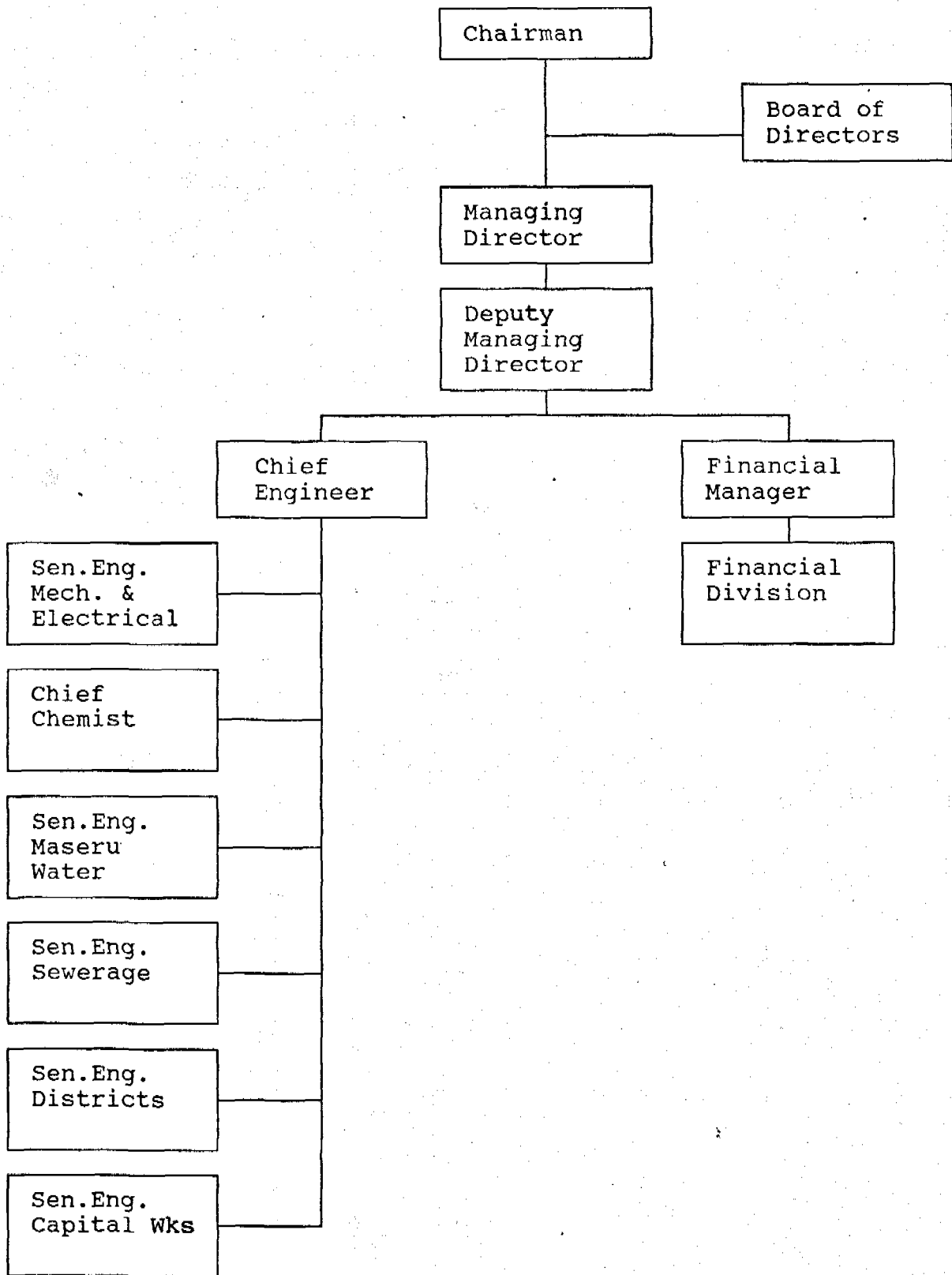
Similar services will also be offered in respect of on-site waste water disposal systems. Experimental work is already underway in the design of evapo-transpiration beds and drainage fields. Improvement of the standards of on-site waterborne systems is an important objective during the plan period.

Tanker emptying services are an important component of this programme. For most of the decade serious problems have been experienced in maintaining the tanker fleet and ensuring an adequate level of service. This situation has improved, however, with the taking over by WSB of the maintenance responsibility for the fleet, with a resultant improvement in availability.

#### **C.7 INSTITUTIONAL AND MANPOWER DEVELOPMENT**

Preparations for the transformation of WSB to a public corporation are being made with financial and technical assistance from the African Development Bank (AfDB). A new top management structure has been developed, with posts being initially filled by AfDB, and other, expatriate personnel. By early in the 1990s it is expected that all senior posts will be filled by nationals.

REVISED MANAGEMENT STRUCTURE, WSB



An important institutional development to be undertaken during the plan period is the establishment of combined water and sewerage management in urban centres outside of Maseru, in conjunction with the development of new services under the 13 Towns Sanitation Project.

During the plan period, a unified management structure at district town level will be developed.

In its present role as a GOL institution, WSB faces similar problems to all other sub-sector agencies in respect of its manning situation. As a parastatal, however, WSB will not face the same problems in respect of establishing staff positions experienced by other agencies in the sector.

#### C.8 ACTION PLAN, 1990-95

The focus of attention during the plan period will be on the institutional development of WSB as a parastatal organisation, with strong emphasis being placed on the localization of management, further improvement of cost recovery, and the strengthening of management systems outside of Maseru.

More specifically, the following objectives will play a central guiding role in WSB's activities.

- \* the establishment of WSB as a parastatal Water and Sanitation Authority, on the basis of full cost recovery.
- \* the development of effective management systems both inside and outside of Maseru.
- \* the completion of capital development projects to make piped water available to 100% of the urban Maseru population, and to large proportions of the population in other towns, and the provision of sewerage to 25% of the urban population by 1995.
- \* the further improvement of billing and accounting procedures, including the introduction of computerized billing systems.
- \* the strengthening of operation and maintenance capacity, and pit emptying services, to keep pace with extensions of service and demand.

## D.URBAN SANITATION

## D. URBAN SANITATION

### D.1 BACKGROUND

The development of improved on-site sanitation in gazetted urban areas lies with the Urban Sanitation Improvement Team (USIT) in the Ministry of Interior, Chietainship Affairs and Rural Development (MICARD).

USIT was established in the early 1980s and successfully introduced the VIP latrine as the most appropriate option for non-waterborne sanitation in urban Lesotho.

Concentration for most of the decade has been on urban Maseru. From 1987 onwards, operations have expanded to extend coverage in most of the country's urban and peri-urban settlements.

USIT is currently implementing two major programmes. In Maseru intensive promotion of the VIP latrine is being undertaken through the Sanitation Improvements in Maseru (SIIM) project and, to a lesser extent, the Greater Maseru Sewerage Project. Outside of Maseru, sanitation improvement in gazetted urban areas is being promoted through the 13 Towns Sanitation Project.

Coordination between USIT and WSB has increased considerably during the 1980s, with the 13 Towns Sanitation and SIIM projects being the focus for close operational liaison.

### D.2 TARGETS AND ACHIEVEMENTS

The 1983 Sector Action Plan estimated that 22% of the urban population in Lesotho was served with adequate sanitation in 1981. According to the definition used, "adequate" sanitation does not include unimproved pit latrines or bucket latrines, but only water-borne systems and VIP latrines.

USIT's long-term objective is to completely phase out the bucket latrine system, replace all unsanitary on-site systems with the VIP as the minimum standard, and extend adequate service to all urban inhabitants. The 1983 plan proposed that the target of 100% coverage (20% waterborne, 80% VIPs) should be achieved by 1990.

This target has proven to be optimistic and it is evident that a significantly extended time frame will be required before full coverage is achieved. The extent of coverage of sewerage sanitation in urban areas is also likely to be higher than originally envisaged.

A major problem faced by USIT in seeking to increase urban sanitation coverage is the rapid growth of Lesotho's urban settlements during the decade. Keeping pace with population growth alone presents a major challenge.

Current USIT projections indicate that by 1990 adequate sanitation coverage will have reached a relatively modest 33% in Maseru and 19% in other urban areas. Target figures for the plan period are 60% and 50% respectively by 1995, and 90% and 75% by year 2000.

Achievement of these targets will require intensive efforts and unequivocal government commitment to the aims and objectives of the programme, both in respect of resource allocations and institutional and manpower consolidation.

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ESTIMATED URBAN SANITATION % COVERAGE

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	1990	1995	2000
<u>Maseru</u>			
Waterborne	18	25	35
VIPs	15	35	60
Total adequate	33	60	90
Inadequate*	67	40	10
TOTAL	100	100	100
<u>Other Urban</u>			
Waterborne	9	15	20
VIPs	10	35	55
Total adequate	19	50	75
Inadequate*	81	50	25
TOTAL	100	100	100

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\* Inadequate sanitation = bucket latrines, unimproved pit latrines, and no sanitation

## D.3 PROGRAMME FINANCING

The table below presents a summary of actual and projected financial inputs to USIT programmes in the period 1984-92. An estimated total of M.5.7 millions will have been expended during this period, of which M.650,000 will have been made up of direct GOL contributions. At least another M.2.5 millions are likely to be required during the plan period if targets are to be achieved.

FINANCIAL ASSISTANCE TO USIT PROGRAMMES ACTUAL & PROJECTED, 1984-1992			
PROGRAMME	DONOR	AMOUNT (Maloti)	PERIOD
Maseru Sanitation Improvements	GOL	270 000	4/84- 3/87
Commercial Latrine Upgrading Project	CIDA	24 000	1983/84
BREVAC Pit Emptying Research Project	ODA	200 000	1985/87
Sanitation Improvements in Maseru (SIIM)+	ODA GOL	1 600 000 380 000	4/87- 3/90
13 Towns Sanitation Project*	KfW	3 000 000	4/87- 3/92
Lesotho Urban Upgrading Project (Teyateyaneng & Mafeteng)	CIDA	32 000	6/86- 3/90
Pit Emptying Testing & Sludge Disposal Proj.	unconf.	60 000	1989/91
Greater Maseru Sanitation Project	Kuwait	150 000	1989/92
TOTAL		5 716 000	

+ Programme underexpenditure anticipated. Request forwarded to ODA to permit 2 year extension on basis of carry-over

\* Need for further two years of support from KfW to cover period 1992-94 anticipated



## D.4 INSTITUTIONAL AND MANPOWER DEVELOPMENT

USIT is established as a section within MICARD, but its long-term viability and effectiveness still remains open to question. Issues of institutional consolidation, closely linked to the establishment of adequate staff posts, should be fully addressed during the plan period.

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 CURRENT STAFFING SITUATION, USIT  
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<u>Post</u>	<u>No.</u>	<u>Established Post ?</u>
Urban Sanitation Coord.	vac.	Yes
Senior Public Health Eng.	vac.	Yes
Chief Technical Officer	1	Yes
Princ. Comm. Dev. Officer	1	Yes
Expat. Adviser	1	No
Community Dev. Officers	4	No
Principal Tech. Officer	1	No
Senior Technical Officers	3	No
Technical Officers	5	No
Technical Assistants	9	No
Senior Executive Officer	1	No
Executive Officer	1	No
Assistant Executive Off.	1	No
Accountant	1	No
Assistant Accountant	1	No
Receptionist	1	No
Office Assistant	1	No
Drivers	8	No
Watchmen/Labourers	10	No
<b>TOTAL</b>	<b>50</b>	

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Government commitment to the manning of USIT has so far been limited, with heavy dependence on donor support for the payment of staff. At present, of a total staff of 50, only two are occupying established posts within government. Of the remainder, 25 are GOL daily-paid

workers, and the remaining 23, including one expatriate adviser, are paid from KfW funds.

USIT currently has only four established posts within MICARD. These are for an Urban Sanitation Coordinator, Senior Public Health Engineer, Chief Technical Officer, and Principal Community Development Officer. Of these, only the last two are currently filled. At the time of writing the Urban Sanitation Coordinator and Senior Public Health Engineer posts were frozen.

All of the established posts are senior management positions, leaving the balance of USIT's staff vulnerable to retrenchment at any time.

Steps need to be taken during the plan period to transfer essential posts to the government establishment in a phased manner.

Under present conditions, major expansions of GOL's establishment are unlikely to occur. In order to sustain USIT's programme, however, it is essential that at least a basic staffing framework is firmly established by 1995.

This consists of the four currently established posts, and a minimum number of other key positions. The balance of staff should be brought onto the establishment in the second half of the decade.

In the first phase, 1990-95, the target is to place the following staff positions on GOL establishment:

- \* 2 Community Development Officers
- \* 3 Senior Technical Officers
- \* 3 Technical Officers
- \* 1 Accountant
- \* 1 Senior Executive Officer

This is considered a bare minimum requirement to ensure USIT's future. Further posts are also necessary, though may not be available during the plan period. As many as possible of the balance of USIT's staff will be brought onto establishment in the second half of the decade. Given the current scale of USIT's operations, staff cuts will be kept to a minimum, though some minor adjustments may be unavoidable.

The practice of using donor funds to pay staff should be eliminated as quickly as possible. The provision of necessary manpower by GOL is a prerequisite for programme sustainability.

As a general principle, donor support for staff positions should not be extended beyond a two-year period, and should only be instigated subject to firm assurances being given of GOL's willingness and ability to support such posts in future. The current dependence of USIT on donor-supported posts makes it unlikely that this principle can be fully implemented in the immediate future, but the achievement of this objective is a priority during the plan period.

#### **D.5 IMPLEMENTATION PROCEDURES**

Both USIT and the NRSP follow similar implementation procedures, basing the VIP construction programme on the private sector activity of latrine builders trained by programme staff. In addition to technical training and supervision, programme staff devote a substantial amount of attention to promotion and health and user education activities.

The implementation framework has proven to be generally satisfactory and no major adjustments are required. Continued attention should be given, however, to further strengthening the "software" aspects of the programme, with clear recognition being given by GOL to the vital importance of such activities.

#### **D.6 BUCKET LATRINE REPLACEMENT PROGRAMME**

The Fourth Five Year Development Plan requires that the archaic and unsanitary bucket latrine system, prevalent in most of Lesotho's urban areas, be completely phased out by 1991. Bucket latrines in government housing represent about 20% of the total in Maseru, and 30-35% in other urban areas.

The table below indicates the draft schedule for the phasing out of the bucket system. The nightsoil collection service will be terminated in each urban centre about one year after the government-owned bucket latrine upgrading programme is complete.

The phasing out of bucket latrines is linked to an upgrading programme to convert existing structures, where possible, into VIPs. Private sector bucket latrine owners will be expected to upgrade to VIP latrines before the termination of the emptying service.

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 DRAFT SCHEDULE FOR PHASING OUT OF BUCKET LATRINES
 

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<u>Town</u>	<u>Govt. Bucket Latrines* Phased Out</u>	<u>Termination of Nightsoil Collection</u>
Maseru	Mid 1991	End 1992
Butha Buthe	Sep 1989	Mid 1990
Mafeteng	Oct 1989	Mid 1990
Quthing	Aug 1989	Mid 1990
Mohales Hoek	Jan 1990	Jan 1991
Leribe	Nov 1989	End 1990
Teyateyaneng	Mid 1990	Mid 1991
Mokhotlong	End 1990	End 1991
Qacha's Nek	End 1990	End 1991

\* There are approximately 500 government-owned bucket latrines in Maseru, and 80-100 in each of the other towns listed. In addition, privately owned bucket latrines serve a further 2,000 households in Maseru and an average of 200 households in each of the other towns.

Maseru is likely to be the last urban centre to phase out the bucket latrine system, for two reasons. First, it has the largest level of bucket service in the country. Second, the phasing out of the programme depends upon inputs from the newly-established Maseru Municipal Council. The newness of this institution means that some delays can be anticipated while capacity is built up.

#### D.7 LESOTHO BANK CREDIT SCHEME

On-site sanitation development in Lesotho is based on self-reliance in both urban and rural areas. This obviously raises concerns about affordability and the capacity of the less well off to afford VIP latrines.

During the 1980s the possibility of developing loan schemes to assist householders to construct latrines was investigated. The experience of trying to develop a rural credit scheme has been discussed in Section B. In urban areas, a latrine construction credit programme operating through a revolving fund in Lesotho Bank has been underway since 1988, following a small pilot-testing exercise in 1987.

The scheme has been operating on a relatively modest scale, with about 100 loans having been extended by mid-1989. The initial experience has been very satisfactory, with repayment rates being excellent. Currently high interest rates and relatively strict deposit requirements appear to have been disincentives to many potential borrowers. The interest rate problem cannot be locally solved. Steps have been taken, however, to loosen loan approval requirements and it is expected that more clients will be attracted to the scheme.

Given the potential of the scheme to assist lower income households, it will be continued. Further investigations will be undertaken into ways and means of extending this facility to as many low-income beneficiaries as possible. Early in the plan period, USIT will undertake an evaluation of the scheme, including an analysis of the socio-economic characteristics of borrowers to assess the extent to which the scheme is assisting the low-paid.

#### D.8 SCHOOLS SANITATION

Recommendations about the continuation of support to schools sanitation programmes have been outlined in Section B, Rural Sanitation.

USIT has done important work during the decade in developing its service to urban schools and has built up an impressive package of technical services and educational inputs for school programmes. USIT's community section should continue to develop this work during the plan period.

Future planning of a national schools programme must take into account the work already done by USIT and others in this important area of operations.

#### D.9 HEALTH EDUCATION

From the mid-1980s onwards USIT has paid increasing attention to issues of health education and has developed a useful range of health and user education materials to support these activities.

The community section of USIT plays an important role in the promotion of the VIP latrine and the management of the "software" aspects of the programme.

Continued attention will be paid to this important area of operations and further close cooperation developed between USIT and NRSP in the strengthening of this work.

#### D.10 MONITORING AND EVALUATION

The broadening of USIT's responsibilities outside of Maseru to cover urban areas throughout the country has underlined the need for well managed information systems. Steps have been taken to improve monitoring of programme progress, particularly in the 13 Towns. Monitoring rates of construction in Maseru is more difficult, given the size of the town and the widespread involvement of the private sector in VIP latrine construction.

During the plan period further attention will be given to management information systems in general, and monitoring of latrine construction and quality control in particular. Monitoring systems will be closely linked to local and national targets, and will take account of private sector development as well as latrines built as a direct outcome of USIT activities.

#### D.11 ACTION PLAN, 1990-95

During the plan period, USIT will pursue the following objectives.

- \* USIT, in conjunction with WSB, will seek to improve coverage with adequate sanitation to 60% in Maseru and 50% in other urban areas by 1995, with the longer-term target of further increasing coverage to 90% and 75% respectively by year 2000.
- \* at least another M.2.5 millions in donor assistance will be sought to support USIT programmes during the plan period.
- \* GOL will create an additional 10 establishment posts for USIT by 1995, and fill currently frozen establishment positions. Staff cutbacks will be kept to an absolute minimum.
- \* attempts will be made to reduce to a minimum the practice of using donor funds to pay staff.
- \* "software" aspects of the USIT programme, including hygiene education and monitoring and evaluation, will be further strengthened.

- \* the bucket latrine system will be completely phased out in all urban areas by 1992, and bucket latrines replaced with adequate facilities.
- \* the Lesotho Bank credit scheme will be continued. Further investigations will be undertaken into ways and means of extending this facility to as many low-income beneficiaries as possible. Early in the plan period, USIT will undertake an evaluation of the scheme, including an analysis of the socio-economic characteristics of borrowers to assess the extent to which the scheme is assisting the low-paid.
- \* steps will be taken to expand pit emptying services to keep pace with demand.
- \* assistance to schools will continue until such time as an effective national programme to address this area of need is established.

## E.SECTOR COORDINATION



## E. SECTOR COORDINATION

### E.1 BACKGROUND

Overall responsibility for sector coordination lies with the Central Planning and Development Office (CPDO). The National Steering Committee (NSC) for the IDWSSD, formed in 1981, was intended as the primary forum through which coordination would be achieved.

During the decade the NSC has overseen the production of a number of key documents for sector planning, but in other respects its effectiveness has been limited, with meetings being irregular. As progress in the sector continues, and programmes become more complex, the need for effective coordination will continue to grow.

### E.2 SECTOR COORDINATION UNIT

A significant strengthening of the coordination capacity of CPDO is an important goal during the plan period. Greater GOL control over the sector as a whole can only be achieved in this way.

At present there is a significant degree of operational coordination between the various sub-sector programmes. Since its inception, for example, the NRSP has developed and maintained close links with both USIT and VWSS. USIT, also, has worked in increasing collaboration with WSB in tackling on-site sanitation issues.

The On-Site Sanitation Coordinating Committee, which has met regularly throughout most of the decade, has also served a useful role as a forum for the discussion of sanitation issues.

A basis has been established during the IDWSSD for the further strengthening of sector coordination, and the development of a systematic approach to sector development as a whole.

In order to support this process, a Water and Sanitation Sector Coordination Unit will be established in CPDO during the plan period. Initial support will be required in the form of expatriate technical assistance, for a 2-3 year period. The coordination

adviser will be counterparted by a senior planning officer.

Precise details of the roles and responsibilities of the sector coordination officer will be worked out early in the plan period. These will include responsibility for the central monitoring and evaluation of all sector programmes, including financial monitoring; production of sector documentation; donor coordination; and the strengthening of the role of the National Steering Committee in guiding sector development.

Detailed discussions will be held with donors with a view to obtaining funds to provide technical assistance. The advisor will be in post during 1990, or early 1991.