

SELF-HELP AND VILLAGE DEVELOPMENT: RURAL DOMESTIC
WATER SUPPLIES IN LESOTHO

Edward Piers Woodrow Cross

A Dissertation Submitted to the Faculty of Arts
University of Witwatersrand, Johannesburg
for the Degree of Master of Arts

Johannesburg, 1980

Abstract

Situated within an analysis of regional underdevelopment the dissertation evaluates a self-help (or community development) rural development programme building water supplies in Lesotho. The social and material achievements of the programme are considered; social and cultural constraints to the acceptability and effectiveness of the programme are discussed; the implications of self-help strategy are investigated; and recommendations are made to improve management of the supplies.

The dissertation illustrates the use of an anthropological perspective in development planning, and is based on an evaluation commissioned in 1975 by the Governments of Lesotho and the United Kingdom. The basic material for the dissertation was gathered in the course of nine months residence in the mountainous Easternmost district of the country, Mokhotlong. Information was obtained by social anthropological fieldwork methods working in a total of fourteen villages.

Results show the programme to have achieved very little. The immediate problems faced are an overstimulation of demand for supplies and the creation of a substantial backlog, and a high rate of breakdown among the supplies installed. The material benefits of the programme are minimal; there has been no change in domestic water use patterns and consequently little impact upon health; water quality has improved but this has

(iii)

had no significant effect upon the unusual disease pattern in Lesotho; and the provision of piped water alone is insufficient to stimulate water-related production. The only clear material benefit of improved supplies is a small time and energy saving which, although offers some relief to women in a society hard-pressed by the exigencies of migrant labour, is of no economic value.

Analysis of the social and political consequences of self-help projects indicate that the programme has fallen well short of its stated social objectives. Water supplies have not been a catalyst facilitating further development activities, and self-help management of supplies has been singularly unsuccessful. Rather than usher in an era of co-operation, self-help management has been characterised by intensified political conflict. Despite stated objectives of the strategy, self-help has been used as a means of extending political control during a period of widespread unrest following the coup d'etat in 1970. The central component of this strategy was found to be the creation of party-appointed committees to manage the development projects. Water supplies became a focus for political dispute between political factions and institutions of village authority. The strategy of self-help itself has created a number of other problems such as its inappropriateness in countering the causes of underdevelopment in Lesotho, and the difficulties it poses in administration.

Finally, recommendations are made to diminish conflict and to improve the effectiveness of the management of village

(iv)

water supplies within the context of self-help policy. It is argued that single-purpose, user associations with voluntary membership and an elected leadership without access to special legal sanction would be the most appropriate form of village management of supplies.

AUTHENTICATION OF DISSERTATION

- (a) Although the fieldwork for this dissertation was undertaken as a member of an interdisciplinary team, the dissertation is based upon my individual contribution to the joint project, and I only am responsible for it. Many people have assisted me in the collection and analysis of material and I acknowledge my debt to them.
- (b) Neither the substance nor any part of the dissertation has been submitted, is being, or is to be submitted for a degree to any other university.
- (c) The information presented in the dissertation was obtained while working under the auspices of the Department of Community and Rural Development (Government of Lesotho), the Ministry of Overseas Development (United Kingdom), and International Voluntary Service (Britain).

ACKNOWLEDGEMENTS

In the course of the five years since I commenced the fieldwork on which this study is based I have been helped by a great many people. At the risk of offending many omitted here I should like to express especial thanks to the following institutions and individuals:

- The then Department of Community and Rural Development in the Government of Lesotho, particularly Mr. J.L. Mphunyane and John Hurst, the Ministry of Overseas Development in the United Kingdom and OXFAM who jointly commissioned the evaluation;
- The nine-person evaluation team with whom I worked closely both in Lesotho and the United Kingdom, particularly Dr Sandy Cairncross, an engineer, who worked with me in Mokhotlong for a period and who helped collect case-histories of water supply implementation, and Dr. Richard Feachem who lead the evaluation and assisted me in innumerable ways;
- International Voluntary Service, particularly Lois Carter, who initially recruited me and under whose auspices I carried out my fieldwork;
- The Ernest Oppenheimer Memorial Trust who helped fund my fieldwork;
- The villagers of Thabang and other villages in Mokhotlong, particularly Chief Mathealira Seeiso, Tseliso Molikoe, Rosalia Tjakata, Moposo Makara, and Eudore Makoro.

- Colleagues who have worked in Lesotho, particularly Colin Murray whose own fieldwork provided a timely source of comparison for my own work;
- The Human Sciences Research Council and the University of the Witwaterstrand for grants enabling me to write up the dissertation;
- Professor W.D. Hammond-Tooke, Dr. Jeremy Keenan and Patrick Pearson of the Department of Social Anthropology at the University of the Witwaterstrand for guidance and encouragement;
- Lynda and Margaret Cross for proof-reading and support;
- Arlene Guslandi and Trish Badham for typing the manuscript at various times, and Kate Hadden for drawing up the figures and maps.

ABBREVIATIONS

BCP	Basutoland Congress Party
BNP	Basotho National Party
Comrudev	Department of Community and Rural Development
DCDO	District Community Development Officer
MFP	Marema-Tlou Freedom Party

GLOSSARY

donga	erosion gully
letsema	communal work party
pitso	general meeting

TABLE OF CONTENTS

	<u>Page</u>
<u>Introduction</u>	2
The Evaluation	4
Fieldwork	5
The Aim and Orientation of the Dissertation	6
The Anthropology of Development	7
Reference Notes	16
 <u>PART ONE: THE SETTING</u>	
<u>Chapter I: Self-Help, Lesotho and Water Supplies</u>	21
Introduction	21
Self-Help Strategy	21
A Historical Review of the Application of Self-Help	26
Criticisms of Community Development	31
Lesotho	35
Economic Conditions	35
Political Parties and Development Strategies	36
Rural Domestic Water Supplies	44
Reference Notes	47
 <u>PART TWO: THE FIELD RESULTS</u>	
<u>Chapter 2: Villages in a Migrant Labour Economy</u>	55
Introduction	55
Mokhotlong District	55
A Peripheral District	55
Historical Perspectives	60
Dependent Villages	62
Village Location	62
Village Populations	63
The Household	68
Household Size and Composition	69
Rural Sources of Wealth and Well-Being	75
Conclusion	97
Reference Notes	99

	<u>Page</u>
<u>Chapter 3: Water in the Mountains</u>	103
Introduction	103
Availability of Water	104
Rainwater	104
Groundwater	105
Water Quality	107
Water Sources in Customary Law	109
The Importance of Water	110
Water in Basotho Cosmology	111
Basotho Perceptions of Water and Water Sources	121
Water Collection and Use from Traditional Sources	122
A Case Study of Water Collection and Use	123
The Overall Picture	126
Conclusion	131
Reference Notes	133
 <u>Chapter 4: Improved Water Supplies: The Material Impact</u>	 138
Introduction	138
Piped Water in Mokhotlong	139
A Note on Methodology	139
The Growth of the Mokhotlong Programme	140
Two Primary Problems	152
A Case History of Water Supply Implementation	156
The Material Impact of the Programme	168
The Availability and Quality of Piped Water	169
Water Use Patterns from Improved Supplies	170
The Health Impact	172
Water-Related Production	175
Time Saving	180
Conclusion	184
Reference Notes	186
 <u>Chapter 5: Village Politics and Self-Help Management in Lesotho</u>	 190
Introduction	190
The Stated Objectives of Self-Help in Lesotho	190
Community Development Policy in Practice in Lesotho	193

	<u>Page</u>
Village-Level Management of the Programme	204
The Politics of Self-Help	204
Self-Help Procedures	230
Conclusion	242
Reference Notes	245
 <u>PART THREE: CONCLUSIONS</u>	
<u>Chapter 6: Managing Village Water Supplies by Self-Help</u>	249
Introduction	249
The Benefits of Self-Help	249
The Critique of Self-Help	257
Appropriate Local Level Management	259
The Choice of Institutional Forms	263
General Purpose or Single Purpose Committees	268
Source of Sanction: Legal Powers of Support of DCDO	269
Appointed or Freely Elected Committees	269
Conclusion	271
Reference Notes	273
 <u>Epilogue</u>	 274
 <u>Bibliography</u>	 280

LIST OF TABLES

<u>Table Number</u>		<u>Page</u>
2.1	<u>De Jure</u> Populations, Numbers of Households and Hut Populations of Case Study Villages.	64
2.2	<u>De Jure</u> and <u>De Facto</u> Mokhotlong Case-study Village Populations including Reasons for Absence.	65
2.3	The Distribution of Mokhotlong Case-Study Households containing recent Migrant Labourers.	67
2.4	The Distribution of Men (18-50) and Migrant Labourers in Mokhotlong Case-Study Villages.	67
2.5	The Composition of Case-Study Households.	71
2.6	The Distribution of Local Salaried Employment in Lesotho amongst Mokhotlong Case-Study Villages.	79
2.7	The Distribution of Fields per Household in Mokhotlong Case-Study Villages.	82
2.8	The Distribution of Household Grain Production in 1975/6 in Mokhotlong Case-Study Villages.	84
2.9	The Distribution of Stock Units in Case-Study Villages.	86
2.10	The Distribution of Households containing members known to be Economically Alive in the 'Informal' Sector in Case-Study Villages.	88
2.11	Mean Household Stockholdings by Grain Production and Mean Grain Production by Household Stockholdings.	94

	<u>Page</u>
2.12 Mean Distribution of Wealth by Size of Household.	95
2.13 Mean Stock Holdings of Absentee and Present Heads of Households.	95
3.1 Typical Water Quality Perceptions for Traditional Sources.	130
4.1 Lesotho Populations Supplied with Piped Water by District.	142
4.2 The Breakdown of Village Water Supplies in Mokhotlong and Lesotho.	155
5.1 Village Management in Mokhotlong Villages.	205

LIST OF FIGURES

<u>Figure Number</u>		<u>Page</u>
1.	Map of Lesotho	1
2.1	Sketch Map of Mokhotlong showing Case-Study Villages.	56
2.2	Histogram Illustrating frequency of <u>De Jure</u> Household Sizes amongst Case-Study Villages.	70
3.1	Round Trip Travel Times to Unimproved Sources.	106
3.2	Sketch Map of Traditional Water Sources in Thabang Moreneng.	124
4.1	Histogram of Village Water Supply Application Dates in Mokhotlong.	144
4.2	Sketch Map of Mokhotlong Showing the Distribution of Supplies constructed between 1961 and 1965.	145
4.3	Sketch Map of Mokhotlong showing the Distribution of Water Supply Applications between 1968 and 1975.	147
4.4	Histogram of Mokhotlong Village Water Supply Completion Dates.	149
4.5	Sketch Map of Thabang illustrating the Improved Water Supplies.	157
4.6	Round Trip Travel Times to Improved and Unimproved Sources in Lowland and Mountain Villages.	181
5.1	Pre-1970 Administrative Structure.	200
5.2	Post-1970 Administrative Structure.	200

MAP 1

LESOTHO

SCALE

5 0 5 10 15 20 25 MILES



5,000' - 7,000'



7,000' - 9,000'



9,000' - 11,425'



Rivers



Roads



Tracks



Railway Lines

South Africa

NATAL

ORANGE FREE STATE

Teyateyaneng

CALEDON

MASERU

Buthe Buthe

Hlotse

Mchhotlong

Matetong

MAKHALENG

Mohale's Hoek

SENOU

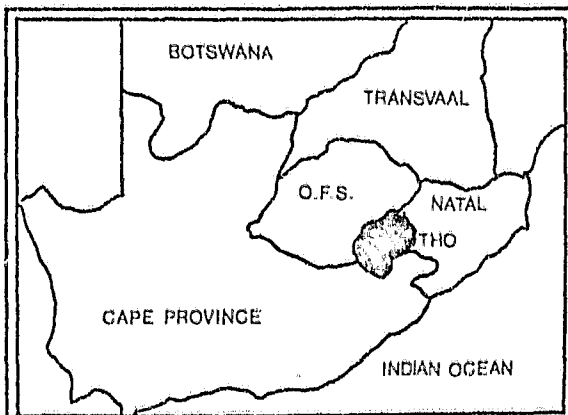
SELOUYAN

SENOU

CAPE

CAPE

South Africa

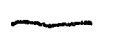
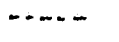
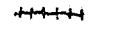


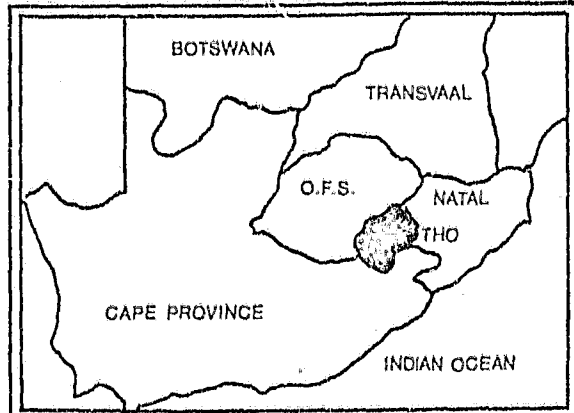
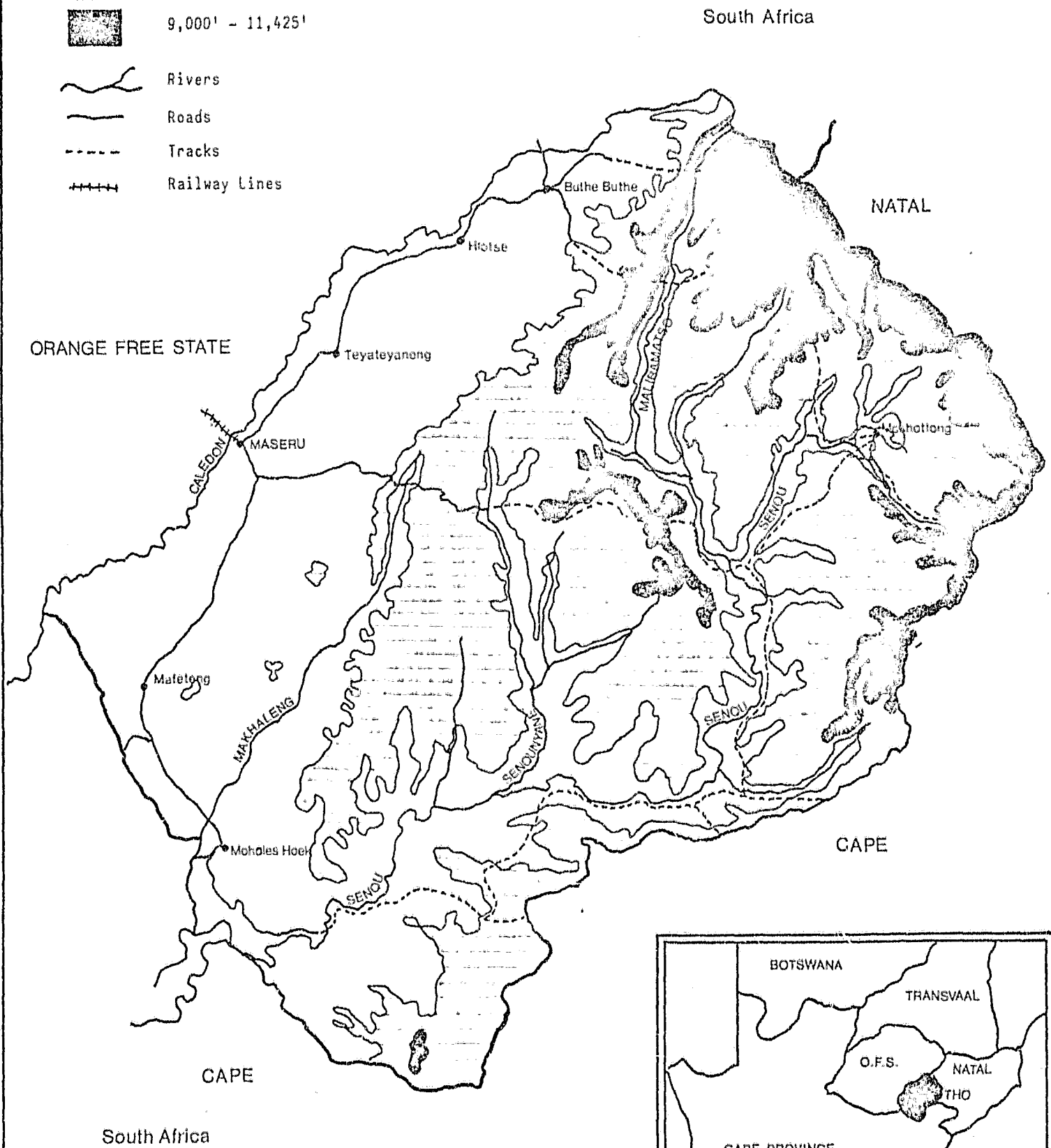
MAP 1

LESOTHO

SCALE
5 0 5 10 15 20 25 MILES

-  5,000' - 7,000'
-  7,000' - 9,000'
-  9,000' - 11,425'

-  Rivers
-  Roads
-  Tracks
-  Railway Lines



INTRODUCTION

Visitors to Lesotho are often struck by the plethora of international development agencies in the country. Ironically, since receiving political independence in 1966 the country has witnessed unprecedented dependence upon foreign assistance. Lesotho now receives amounts of capital aid of the order of its entire domestic product; the numbers of resident expatriate advisors has increased fourfold between 1971 and 1977, and approximately 100 donor agencies are currently listed as benefactors of the economy. Yet despite this flurry of development activity there remain few discernable signs of 'development' among the majority of the population. Several observers have commented on this disparity, none more dramatically than Linden in a journalistic and libellous account of what he dubs as "The Alms Race".¹

A phenomenon of the alms race is an uncoordinated and grossly wasteful process of development planning. The various development agencies, multilateral, bilateral and non-governmental, have differing motives for giving aid², different conceptions of the goals of development, and are bound by a variety of procedures governing the disbursement of aid. As a result agencies invariably undertake their own development planning, and the Central Planning and Development Office plans, as it were, 'from behind' attempting in so far as it is possible to restrict overlap and to match the Lesotho Government's interests with those of the development

agencies.³

Evaluations and appraisals are tools of development planning whose merit is increasingly recognised. A distinction is commonly drawn between an appraisal which is used to assess the suitability of a project design before implementation, and an evaluation which is conducted at the completion of a stage in programme development to assess performance and feed this information back into the planning of the next stage.⁴ In practice in Lesotho, appraisals and evaluations are less useful than the theory would suggest.

Firstly, they are often bound by the limits and interests of a particular development agency and do not take sector or national considerations into account. Secondly, they are invariably staffed by visitors who lack a detailed knowledge of the country and have no grasp of the culture or language. Thirdly, appraisal or evaluation missions are often of far too short a length to undertake independent field studies. And finally, mission teams are dominated by economists and engineers, and social, cultural and institutional issues are rarely examined in depth.

The result of these shortcomings is that many development appraisals and evaluations in Lesotho have tended to be cursory restatements of the opinions of the urban elite for whom they are intended, and are especially lacking in their understanding of development problems as experienced at the village level.

A concrete example of inadequate evaluation is illustrated in the evaluations of the village water supply programme prior to 1975.⁵ While this thesis illustrates that there were numerous

problems in the programme in the early 1970s, as late as 1973 the evaluation reports of the field director of one development agency give the following glowing assessment:

"The human aspect of all these village water supply projects was thrilling to see.... In almost every case therefore, it seems that the implementation of the water project does act as a catalyst for further development and I personally would like....to go on supporting this work as long as we are able to do so."⁶

The Evaluation

The material presented in the dissertation was gathered in the course of an evaluation which came to quite different conclusions from these cited above. It was jointly commissioned by the then British Ministry of Overseas Development⁷, a British charitable organization, OXFAM, and the then Department of Community and Rural Development (Comrudev) in Lesotho,⁸ and funded by the British development agencies. It differed from other evaluations in Lesotho in a number of respects.

One difference, which was to prove significant on presentation of the findings was that although the British development agencies planned to base their village water supply policy in Lesotho on the evaluation's findings, no financial commitments were precisely dependent upon the outcome. Furthermore, the evaluation was to some extent inspired by academic considerations, and this was reflected in the wide terms of reference which suggested that the sector rather than specific projects ought to be examined.

Another distinguishing feature was the interdisciplinary nature of the evaluation team. The team was composed of two civil engineers, a public health engineer, two sociologists,

an economist, a medical statistician, a bacteriologist and a social anthropologist. It was lead by the public health engineer, Dr. Richard Feachem, based at the University of Birmingham and subsequently at the London School of Hygiene and Tropical Medicine. The inclusion of social scientists was also unusual and enabled the team to broaden its perspective on the development programme.

Finally, the team was given a relatively long period in which to reach its conclusions. The study began in early 1975 and the final report was presented two years later in early 1977.⁹ Four members of the team were based in Lesotho for considerable periods of time, while the other members paid shorter visits to the country. Two members of the team spoke Sesotho with some fluency.

The study's exceptional position had both advantages and disadvantages as is evident from what happened following the presentation of the study's findings. The story is completed in the epilogue where some lessons are drawn from the evaluation's approach.

Fieldwork

My fieldwork for the evaluation and subsequently for the dissertation initially consisted of residence in the village of Thabang Moreneng for a period of nine months from September 1975 to July 1976. The village lies to the extreme east of the country in the heart of the Drakensberg in the remote district of Mokhotlong. In the course of the fieldwork intensive studies were conducted in four villages, three subvillages of Thabang

and a neighbouring village, and less intensive studies in another fourteen villages. Many village names have had to be changed to protect informants.

Since July 1976 I have spent a total of six months in the country working on evaluations of a variety of other development projects, though these shorter trips have not involved residence in a village.

The Aim and Orientation of the Dissertation

The dissertation evaluates the impact a self-help village water supply programme has had upon selected mountain villages in Lesotho. In particular it examines:

- (a) The extent to which the programme has achieved the ideals of the 'self-help' policy governing the programme;
- (b) The consequences of self-help policy;
- (c) Social and cultural constraints to the acceptability and effectiveness of the programme;
- (d) How efficient and effective local-level management of the programme (and by inference similar programmes) might best be achieved.

Commentators on the field of development studies, the general field into which this study falls, often draw the distinction between practical, policy-oriented concerns, and a more theoretical, or abstract approach.¹⁰ A critical concern of academics in the field of development studies is to attempt to bridge this

distinction.¹¹ This study supports that concern. Yet, although the study is situated within an analysis of regional underdevelopment, it is primarily an empirical analysis of the effect of a single development programme upon the lives of the inhabitants of a cluster of villages. The study is oriented towards the very practical concern of making those effects more beneficial within the constraints of what the Lesotho government could reasonably be expected to implement and what international aid donors would allow and support.

The study falls specifically into the field of the anthropology of development and the remainder of the introduction is devoted to reviewing aspects of this field.

The Anthropology of Development

This sub-branch of social anthropology is notoriously ill-defined, variously being called "practical anthropology",¹² "applied anthropology",¹³ "action anthropology",¹⁴ "development anthropology",¹⁵ and "constructive anthropology",¹⁶ and has a long and controversial history.¹⁷

In 1956 Mair commented on the "gallons of ink that have been spilt in discussion of the appropriate...relation...between 'pure' and 'applied' science."¹⁸ Since then, political independence, a concern with economic development in the former colonies, and the growth of bilateral and multilateral development agencies has lead to an increase in the numbers of anthropologists employed on development programmes, and revived the debate between protagonists and opponents of an applied social anthropology.

distinction.¹¹ This study supports that concern. Yet, although the study is situated within an analysis of regional underdevelopment, it is primarily an empirical analysis of the effect of a single development programme upon the lives of the inhabitants of a cluster of villages. The study is oriented towards the very practical concern of making those effects more beneficial within the constraints of what the Lesotho government could reasonably be expected to implement and what international aid donors would allow and support.

The study falls specifically into the field of the anthropology of development and the remainder of the introduction is devoted to reviewing aspects of this field.

The Anthropology of Development

This sub-branch of social anthropology is notoriously ill-defined, variously being called "practical anthropology",¹² "applied anthropology",¹³ "action anthropology",¹⁴ "development anthropology",¹⁵ and "constructive anthropology",¹⁶ and has a long and controversial history.¹⁷

In 1956 Mair commented on the "gallons of ink that have been spilt in discussion of the appropriate...relation...between 'pure' and 'applied' science."¹⁸ Since then, political independence, a concern with economic development in the former colonies, and the growth of bilateral and multilateral development agencies has led to an increase in the numbers of anthropologists employed on development programmes, and revived the debate between protagonists and opponents of an applied social anthropology.

In defense of development anthropology proponents argue that the discipline has an important contribution to make in development programmes. This view is supported by the fact that so many development programmes in Africa do not achieve their objectives; the pleas from natural scientists that they cannot control 'the social factor' in development; and the recognition that studies of development programmes require an interdisciplinary approach.¹⁹ Others, less graciously, have argued that a closer association with development work is little more than a convenient role for anthropologists in the post-colonial world, or that the professionalisation of an anthropology of development would provide employment for anthropology graduates from North American universities.²⁰

A great many criticisms of development anthropology are recorded in the literature and only the major criticisms will be mentioned here. In reviewing these criticisms I shall attempt to put forward my position on these issues.

Applied anthropology has connotations of service to colonial and imperial powers and a great many criticisms of applied anthropology concern ethical issues. Beyond the general historical argument that anthropology developed during an era of imperial control, and is necessarily a 'hand-maiden of imperialism',²¹ several instances have been documented where anthropological research has clearly been used for immoral purposes. The most frequently cited case in the literature is the use of social research to formulate CIA counter-revolutionary strategy in Operation Camelot.²² A no less striking example, but one that

is poorly documented,²³ is the South African Government's use of the Ethnology Department which, initially established in 1925 to "help in the smooth administration of native affairs"²⁴ and maintain a cheap labour supply, today continues to sharpen the ideology of 'apartheid'.

The use of anthropology in development programmes designed and implemented by foreign aid donors is criticised in that the discipline may be seen to be promoting a sophisticated mechanism of imperial control. A review of the political economy of aid at a theoretical level is beyond the scope of this study.²⁵ However, highlighting the influence and interest of the development agencies, whether governments or foreign aid donors, does reveal critical problems in some development anthropologists' conception of the reasons for the 'failure' of so many development programmes. Many development anthropologists, for example, the American anthropologists Foster and Erasmus, seem naively keen to work with bilateral and multilateral development agencies, many of whose interests in the underdeveloped world must be open to question. To cut short a discussion which becomes increasingly intractable in the abstract, I would argue that while self-interest is the over-riding motivation for development agencies, it is probably equally true that there are some development programmes, even in countries like Lesotho, whose impact cannot simply be reduced to the establishment of capitalism or the furtherance of international exploitation. In particular instances I would argue that anthropologists can play a part in ensuring that there is popular participation in development programmes and that planners are more informed

of the village perspective on particular problems, and even in exposing exploitative aspects of development programmes. One of the important consequences of this research has been to record aid donors' and Lesotho Government's own interests in the village water supply programme; interests which went beyond the rhetoric of improving the health and wealth of rural people.

Furthermore, I imagine that there is also a small place for social anthropologists in development programmes in socialist countries. A recent review of development problems in Mozambique, for example, indicates that the communal village programme is encountering problems of the kind which have long been regarded the central subject-matter of social anthropology. Hendriksen writes:

"Such deep-rooted customs as scattered cultivating units, spiritual attachments to specific lands, nomadism, ancient work customs of men clearing fields and women planting them - all these pose distinct problems for the planners of communal villages."²⁶

Anthropologists in socialist development programmes may need to approach their subject from a novel perspective, but their presence could, in theory, be beneficial to development planning.

A second source of controversy surrounding the concept of an applied anthropology is its standing with regard to 'pure' or 'theoretical' social anthropology. Foster²⁷ and Bastide²⁸ both seem to argue that applied anthropology constitutes a separate field from the anthropology currently taught in most university departments. Foster argues that the common conception of an interdependence between applied and theoretical anthropology is inappropriate and that applied anthropology should constitute

quite a distinct sub-branch. In opposition to Foster, Mair argues that applied anthropology should not be thought of as an independent subject, and emphasises that all social anthropologists, if they are not to be thought to be "half-baked"²⁴ need to go "through the grind of mastering the principles of social structure."³⁰

Evans-Pritchard, one of many anthropologists who are less sympathetic to the idea of an applied anthropology, expresses doubts "whether anyone can investigate fundamental and practical problems at the same time."³¹ Robertson has recently extended his argument suggesting that anthropology as a discipline is incompetent to broaden its interests to include the application of anthropology to development projects. He admits that:

"There is no doubt that an intelligent development planner could find a use for anthropological informationBut this is not development anthropology, it is the use of anthropology by development planners."³²

But what then does one call anthropologists whose job it is to supply information to such development planners? Clearly one cause of the variety of opinions of the validity of an applied anthropology is the number of different conceptions of what applied anthropologists do. The uses of applied anthropology in development, as described in the literature, fall into four categories.

(a) Modernisation Activists. One conception of applied anthropology refers to the work of Tax, Holmberg, Foster and a generation of other, predominantly American, anthropologists who, as applied anthropologists, actively participate in the management of development projects and in orchestrating community participation. Their

conception of development is largely grounded in modernisation theory. The best documented examples of this approach are Cornell University's notorious 'Vicos project' in Peru,³³ and the American Indian 'Fox Project'.³⁴ The demands of the applied anthropologists in these situations are quite different from those made on the university-bound, 'theoretical' anthropologist, and the applied anthropologist's relation to theoretical anthropologist is similar to that between social work and sociology.

(b) Administrative Assistants. The traditional applied role for proponents of applied anthropology during the colonial era was that in which governments employed anthropologists to act as mediators between themselves and the governed, and as advisors in drawing up and implementing policy. Kuper suggests that applied anthropologists' advice was rarely heeded by administrators even during the colonial era,³⁵ and Cochrane has pointed to the difficulties of anthropologists as administrators.³⁶ The Republic of South Africa is one of the few countries which has retained anthropologists as administrators and these positions have been isolated from academic anthropology.

(c) Radical Activists. A third concept of applied anthropology can be derived from the work of a few anthropologists who are critical of modernisation theory and its proponents, and argue that applied anthropologists should not work from the vantage point of administrators, or outside manipulators, but as political organisers. Stavenhagen, for example, suggests that anthropologists

should go beyond participant observation and take on what he calls "the role....of activist observation, that is, of the militant cum observer."³⁷ Huizer writing in a book on the role of anthropologists in development situations similarly suggests that anthropologists play an active role in revolutionary situations.³⁸ The relationship between radical and conventional applied anthropology is comparable to that between conventional social work and radical social work in the mould of Saul Alinsky.³⁹

(d) Development Planners. A fourth use of applied anthropology is that of advising development planners and development agencies on the basis of anthropological knowledge. Although seemingly a similar role to that of anthropologists as administrative assistants, the use of anthropologists as consultants to planners enables greater separation from bureaucratic issues, greater objectivity, the possibility of independent discussion and publication of findings, and the retention of links with academic anthropology. The issue, raised by Robertson, of whether assisting planners on the basis of anthropological knowledge is correctly called 'development anthropology' is ultimately a semantic point and one which should not obscure the fact that it is a necessary task and one that planners are unable to accomplish themselves. Pocock argues that there is "a need for sociological knowledge at the village level" and that the anthropologists' place is "with the planners."⁴⁰ Similarly, Gillibrand points out that "If it is accepted that on balance it is better to participate in the planning process than shun it" anthropologists do have a contribution to

make to improve the effectiveness of social and economic planning. He writes that:

"Most plans, while excellent according to their technical frame of reference, can be criticised for lacking a proper appreciation of the particular needs and attitudes of a community, and for neglecting the possible harmful consequences both direct and indirect in their concentration on the advantages of innovation. It would be the role of the anthropologist to overcome these deficiencies."⁴¹

The perspective of this dissertation is derived from the use of anthropology in development planning. Applied anthropology in this sense should not be thought of as a separate sub-branch of anthropology, and anthropologists in this field would require a "grounding" in social theory. Although development anthropologists need to know what information planners require, their central function is to analyse society and this inevitably involves the adoption of a theoretical position and possibly enables contribution to academic debate.

A third criticism of applied anthropology concerns the reification of values, beliefs and customs. Whereas economic planners often ignore non-economic considerations, cultural anthropologists, particularly applied anthropologists, working within the implicit framework of modernisation theory, centre their analysis of social change on cultural compatibility. As a result, 'cultural obstacles' of development programmes have been a specific concern to applied anthropologists. A great many criticisms of this approach are recorded in the literature. Hutton and Cohen, for example, bring together a number of critiques of studies of African peasants' resistance to change, and argue that

explanations of change or resistance to change "have been derived not from explanatory variables, but from a selection of dependent variables"⁴² and stem from ahistorical and structural functionalist assumptions which relegate economic facts to a separate sub-system of society.

"Rather than looking to see how peasant producers had become linked to world markets over time, the interest of theorists such as Redfield, Foster and McClelland was bounded by attention to peasants cognitive and value systems. The way the peasant actor defined his situation was seen as far more important than the historical and economic structure of the situation."⁴³

Clearly villagers perceptions of their situation have to be taken into account when analysing social situations as planners have found to their cost when, for example, they attempt to build single household latrines in societies where there are strict avoidance rules restricting all members of a household from using the facility. But this does not justify emphasis of cultural factors to the exclusion of examining underlying causes, and much of the work of applied anthropologists do not do this. The perspective of this dissertation is to analyse responses to a development programme at the local-level within an analysis of the underlying constraints on development. No initial assumptions are made as to whether cultural influences on the development programme - from taboos to sabotage - prevent or are the product of social change. Chapter 4 of the dissertation further discusses the extent to which cultural factors influenced the implementation of village water supply projects in Lesotho.

Reference Notes to Introduction

1. Linden, E. The Alms Race, 1976.
2. See Hirschmann, D. 'The Policies, Interests and Attitudes of Donor and Recipient Countries, and the Role of the Multilateral Aid', in Barratt, J. et al. (eds.) Accelerated Development in Southern Africa, 1974.
3. Hirschmann, D. Planning in Lesotho, 1977, pp. 110-128
4. Cairncross, S. et al. Evaluation for Village Water Supply Planning, 1980, pp. 2 and 3.
5. Feachem, R. et al. Supplementary Report on Administration of OXFAM Aid to Village Water Supplies in Lesotho, 1976, Ch. 3.
6. Ibid., pp. 8-9.
7. Now the Overseas Development Association.
8. The Department subsequently became the Ministry of Rural Development and has recently become the Ministry of Co-operatives and Rural Development. The original title, abbreviated to Comrudev, is used in this study since that was the title used at the time of the evaluation.
9. The final report is: Feachem R., et al. Lesotho Village Water Supplies: an Ex-Post Evaluation, 1977. It is published in a revised form as: Feachem R. et al., Water, Health and Development: an Interdisciplinary Evaluation, 1978.
10. This distinction is drawn, for example, in Uphoff, N.T. and Ilchman, W.F., 'The New Political Economy' in Uphoff, N.T. and Ilchman, W.F. (eds), The Political Economy of Development,

- Theoretical and Empirical Contributions, 1972, pp. 14 and 19.
11. Streeten, P., 'Alternatives in Development' in World Development, 2(2) 1972.
 12. Malinowsky, B., 'Practical Anthropology', Africa, 2(1) 1929.
 13. Mair, L., 'Applied Anthropology and Development Policies' British Journal of Sociology, 7, 1956, reprinted in Mair, L., Anthropology and Social Change, 1969; Foster, G., Applied Anthropology, 1969; and Bastide, R., Applied Anthropology, 1973.
 14. Piddington, R. 'Action Anthropology' Journal of Polynesian Society, 69, 1960, reprinted in Clifton, J. Applied Anthropology: Readings in the Science of Man, Ch. 11, 1970; and Tax, S. 'The Uses of Anthropology' in Tax, S. (ed.) Horizons of Anthropology, 1968.
 15. Cochrane, G., Development Anthropology, 1971; and Rubin, V., 'The Anthropology of Development', in Siegal B. (ed.) Biennial Review of Anthropology, 1963.
 16. Pocock, D., 'Social Anthropology: its contribution to Planning' in Streeten, P. and Lipton, M. (eds.), The Crisis in Indian Planning: Economic Policy in the Sixties, 1968, p. 289.
 17. Foster, op. cit., ch. 9, and Bastide, op. cit., ch. 1.
 18. Mair, L., op. cit., p. 10.
 19. Streeten, P. 'Why Interdisciplinary Studies?' in Pitt, D. (ed.) Development from Below: Anthropologists and Development Situations, 1976.
 20. Almy, S., 'Anthropology and Development Agencies' American Anthropologist, 79(2) 1977.

21. See for example: 'The Social Responsibilities Symposium'
Current Anthropology, 9(5) 1968; Asad, T. (ed.)
Anthropology and the Colonial Encounter, 1973; and Hymes,
D. (ed.) Reinventing Anthropology, 1974.
22. Horowitz, I.L. (ed.) The Rise and Fall of Project Camelot:
Studies in the Relationship Between Social Science and
Practical Politics, 1967.
23. But see comments by Mair, L., op. cit., pp. 21 and 24; and
Webster, D. 'A Review of Some 'Popular' Anthropological
Approaches to the Understanding of Black Workers', South
African Labour Bulletin, 3(1) 1976.
24. Rogers, H., Native Administration in the Union of South
Africa, 1933.
25. But see for example: Hayter, T. Aid as Imperialism, 1971
and White, J. The Politics of Foreign Aid, 1974.
26. Hendriksen, T.H., 'Marxism and Mozambique', African Affairs,
77, 1978, p. 453.
27. op. cit.
28. op. cit.
29. op. cit. p. 8.
30. Mair, L., 'Introduction', Anthropology and Social Change,
1969, p. 3.
31. Evans-Pritchard, E.E. 'Applied Anthropology', Africa, 16
1946, p. 93.
32. Robertson, A.F. 'Applied Anthropology, A Problem of
Disciplinary Competence', Cambridge Anthropology, 2(3)
1975, p. 36.

33. Dobyns, H.F., Doughty, P.L. and Lasswell, H.P., Peasants, Power and Applied Social Change: Vicos as a Model, 1964.
34. Tax, S. 'Values in Action: the Fox Project', Human Organisation, 17, 1958.
35. Kuper, A., Anthropologists and Anthropology: The British School, 1922-1972, 1973, ch. 4.
36. Cochrane, G., op. cit..
37. Stavenhagen, R., 'Decolonialising Applied Social Sciences' Human Organisation, 30(4) 1971, p. 339.
38. Huizer, G., 'The Strategy of Peasant Mobilisation: Some Cases from Latin America and South East Asia' in Pitt, D. (ed.) op. cit..
39. Alinsky, S., Rules for Radicals, 1971.
40. Pocock, D., op. cit., p. 288.
41. Gillibrand, M. 'Anthropology and Development Planning' Royal Anthropological Institute Newsletter, 12, 1976.
42. Hutton, C. and Cohen, R. 'African Peasants and Resistance to Change; A reconsideration of Sociological Approaches' in Oxaal, I. et al., Beyond the Sociology of Development, 1975, p. 108.
43. ibid., p. 116.

PART ONE

THE SETTING

Chapter 1

SELF-HELP, LESOTHO AND WATER SUPPLIES

1. Introduction.

The foremost goal of this study is to examine the effectiveness of the development strategy which guides the implementation of village water supplies in Lesotho. The strategy is known in Lesotho as 'self-help' or 'community development'. The first part of this chapter discusses the aim and implications of the strategy in order to measure its performance in Lesotho in later chapters. The second and third parts of the chapter introduce the two other central concerns of the dissertation: Lesotho and water supplies.

2. Self-Help Strategy.

The term 'self-help' is both an aspect of, and synonymous with the term 'community development'. The terms are used in a variety of ways though they are generally taken to refer to any activity in which beneficiaries work, with a limited amount of outside assistance, for their own advantage. The standard 1956 United Nations definition states that community development refers to:

"the processes by which the efforts of the people themselves are united with those of governmental authorities to improve social and cultural conditions of communities, to integrate these communities into the life of the nation, and to enable them to contribute fully to national progress.

This complex of processes is then made up of two essential elements: the participation of the people themselves in efforts to improve their level of living with as much reliance as possible on their own initiative, and the provision of technical, and other services in

ways which encourage initiative, self-help and mutual help and make these more effective."¹

In the course of the growth of foreign-assisted development programmes after the Second World War the terms 'community development' and 'self-help' gained widespread currency and successive attempts were made to define them more precisely.² Despite these attempts, the definitions retain their 'fuzziness'³ and the generality and contradictions of the early definitions -- for example, "to stimulate and help people to improve their own local way of life"⁴ -- remain.

The salient features of self-help or community development as a development strategy may be summarised as follows:⁵

- (a) "The basic philosophical principle ... is that the common man, however unschooled, possesses wisdom, and that with help he is capable of identifying his major needs and capable of (finding) answers to them. The community development workers' role is that of catalyst, to stimulate village people to meet, discuss their problems and wants, to plan and to take action."⁶

Community development workers are expected to act in a 'pump-priming' manner, the precise selection and planning of development activities are to be achieved through local action. Outside development agencies respond to 'felt needs' and do not impose development schedules or priorities.

- (b) The implementation of a development project should be the joint effort of both the local community and an outside agency: the community normally contributing labour and/or cash, and the outside agency technical skills, new technologies, and/or capital.

On-site management of the activity and maintenance of the technologies are the responsibility of the community.

(c) Community development or self-help programmes have an application in a wide range of fields; agriculture, education, health and welfare services may all be vehicles for community development. Community development strategy hopes to create conditions conducive to setting in motion a chain of development activities which might cover a number of these fields. So an effective community-directed literacy project might lead to an agricultural improvement, or a water supply lead to the establishment of a communal garden.

The concept of community development then contains a thesis of catalysis. But the exact mechanism which facilitates the growth of other activities is not generally made explicit. The catalyst thesis would appear to take three forms:

- (i) The effect of one development activity will materially assist other undertakings; so, for example, a road or water supply potentially assists agriculture in that it enables easier marketing and irrigation.
- (ii) A community's attitudes will be affected by the successful implementation of one self-help project; beneficiaries will grasp the idea that they can help themselves, gain confidence in their own actions and thus maintain an enthusiasm for further initiatives.

(iii) The creation of a community-based leadership to manage one development project provides an institutional base from which to organise the community for further undertakings.

(d) The primary purpose of community development strategy is not material improvement, but moral and social betterment. The moral goals of community development are generally not spelt out and are hidden in phrases such as those in the United Nations definition quoted earlier: "to improve social and cultural conditions of communities" or "national progress". These generalities in practice hide a variety of specific goals. Batten writes of the worth of engendering "good community feeling"⁷ and others stress the fact that community development "teaches and insists upon the use of democratic processes in the joint solution of community problems".⁸ The 1962 United States Foreign Aid Act states that:

"The product of successful Community Development is not only wells, roads, schools, other community facilities, and new crops; it is, more properly, the development of stable, self-reliant communities with an assured sense of political responsibility."⁹

A later commentator draws out the value-judgement implicit in this statement:

"community development (is) rooted in the concept of the worth of the individual as a responsible, participating member of society and, as such, (is) concerned with human organisation and political process. It (is) designed to encourage self-help efforts to raise standards of living and to create stable, self-reliant communities with an

assured sense of social and political responsibility commensurate with basic free world objectives."¹⁰

Community development emerged as a development strategy when modernisation theory was the accepted paradigm of development studies.¹¹ Although never regarded as a single grand theory in its time, the concept of modernisation, defined broadly as "the process whereby less developed societies acquire characteristics common to more developed societies",¹² has acquired that status in the face of a series of severely critical reviews of the state of development studies in the late 1960s and early 1970s.¹³ The protagonists of modernisation theory covered a wide range of disciplines: Rostow in economics, perhaps the most influential modernisation theorist, provided a catalogue of stages of growth towards modernisation; McLelland, in psychology studied attitudes in 'traditional' and 'modern' societies and examined what motivated the need to achieve; Apter and Eisenstadt in political science wrote of 'modernisation', the 'secularisation of political culture', 'differentiation' and 'institutional democracy'; Lerner and a host of sociologists following Parsons examined pattern variables in 'traditional' and 'modern societies'; and social anthropologists such as Erasmus and Goodenough studied cultural barriers to participation in community development or modernisation programmes.¹⁴

There are different emphases between the prominent proponents of the concept of modernisation and community development - particularly in the latter's stance against economic determinism and avoidance of economics in general - but the concept of community development is reliant upon many of the assumptions common to

key tenets of modernisation theory. These are summarised later in the chapter.

3. A Historical Review of the Application of Self-Help.

The concept of community development or self-help was first applied in the 1920s by British Colonial Office officials to "compensate for the shortcomings of the conventional school system"¹⁵ in the colonies, and was later also used in municipal planning in the United States of America in the 1930s.¹⁶ Its use became widespread in the late 1940s when, after the Second World War, it became the vehicle of West European and American foreign policy initiatives in poor countries.

Early community development efforts consisted of adult or mass education programmes, although in the 1950s, the "decade of prominence"¹⁷ of community development, the strategy was applied to a wide variety of activities. The most lauded and ambitious of the era, which was to provide a model for other national programmes, was started in India in 1951 with considerable assistance from Britain and the United States of America. Other programmes blossomed in the 1950s, and by 1960 there were community development programmes in over sixty countries in Asia, Africa and Latin America.¹⁸ In the decade preceding 1962 the United States alone contributed some fifty million dollars in bilateral aid in support of community development programmes in over thirty countries,¹⁹ and the United Nations and Western Europe contributed lesser, but equally substantial amounts.

With increased financial support, interest in community

development grew in the academic world: the concept became the focus of a series of conferences; journals such as the Community Development Bulletin (first issued 1949) and the Community Development Review (first issued 1956) were initiated; a spate of books were published; and a number of training programmes designed around the concept. Reading through early issues of a journal such as the Community Development Bulletin the tone of the writing on community development is optimistic, and idealistic, and the field evaluations are episodic and anecdotal. One critic was later to comment that: "Community development work has a quality that robs the observer of his critical faculties."²⁰

What accounted for the dramatic growth in interest in community development in the 1950s? A number of factors could be cited in the context of the aftermath of the Second World War, but the critical factor is that community development clearly became a tool of western global strategy during the cold war era.²¹ The attempts on the part of community developers to promote stability and reproduce "democratic processes" at the local level were exactly the long-term aims of American foreign policy in its attempt to prevent internal revolt in the 1950s. Community development offered a relatively cheap and seemingly comprehensive means of combatting poverty and thereby preventing dissatisfaction and the growth of nationalist or revolutionary movements. In practice it seems that the extent to which community development programmes were used for this purpose varied; for while community development was openly used as an anti-communist ideology in Asia²² and to a lesser extent in South America,²³ it cannot be

reduced to this in all cases. Community development programmes were initiated in many African colonies not only to attempt to contain the nationalist movements but also as a paternalistic and relatively inexpensive means of bringing some improvement to conditions in underdeveloped territories.

However, by the early 1960s interest in the concept of community development began to wane as it became increasingly obvious that it was not the panacea its early proponents had proclaimed. Community development programmes were satisfying the expectations of neither the politicians nor the community developers, and as a result funds were sharply restricted. Some programmes were abandoned, others greatly reduced in scope, and many became incorporated into larger rural or agricultural development programmes. The failure discredited the political leadership within underdeveloped countries many of whom disassociated themselves from the colonial policy. The aid donors themselves grew sceptical of the strategy as its ineffectiveness in gaining the support of rural communities or influencing the leadership of nationalist movements became apparent.

The disastrous failure of the Indian Community Development programme, once the show-piece of Western foreign assistance, exemplifies the decline of the movement. The objectives of the Indian programme were ambitious: to "transform... the economic and social life of the villagers" by providing for "a substantial increase in the country's agricultural production, and for improvements in the systems of communications, in rural health and hygiene, and village education."²⁴ Community developers

in India had written with fervent hopes that community development would "create in the millions of rural families a burning desire to change their old time outlook, and.... arouse enthusiasm in them for new knowledge and new ways of life."²⁵ The initial appraisals had been positive and the programme was rapidly implemented: by 1959 over sixty per cent, and by 1964 all rural inhabitants were said to have felt the impact of community development in one way or another. But by the mid 1960s, evaluations of the Indian programme²⁶ showed it to be a resounding failure by virtually any criteria:

- food production, the critical 'felt need' in India, decreased rather than increased in the decade. In 1966 Moore writes that despite the community development programme "Indian agriculture.... remains today what it was in Akbar's and still in Curzon's time: a gamble in the rains";²⁷
- there was a negligible impact upon health and education;
- disparities of wealth between large farmers and small farmers grew;
- there was a wide disparity in the distribution of benefits of the programme between accessible and remote villages;
- the community development strategy implied no change in rural social structure and caste, property and power relationships were not threatened or altered. As a result there was no redistribution of power or wealth, the programme staff dealt only with the village elite and the programme benefitted only a small group of 'progressive' farmers;
- the programme was unable to arouse popular participation in

community development activities, attendance at community meetings was often very poor and village contributions towards community development programmes declined to the point where coercion had to be used to muster 'self-help' labour;

- the Indian community development department adopted a centralised bureaucratic approach and the villagers were in practice excluded from planning development activities.

Like many other community development programmes the Indian programme's focus moved across the spectrum of development activities from education, social welfare and public works to the development of local government (the Panchayat-raj) and a greater emphasis on agricultural production and specialised technical developmental services. By the mid 1960s India had adopted an intensive agricultural development programme and community development was dropping from the development planners terminology.

The decline in the popularity of the concept is reflected in the community development journals. By the early 1960s the naive optimism is gone and more critical comments can be found.²⁸ In 1963 the Community Development Review ceased publication, as did the Community Development Bulletin in the following year. When the Bulletin's successor, the Community Development Journal, started publication in 1966 its tenor was greatly subdued and early issues carried recriminations and criticism of the concept and method of implementation.²⁹ Since the 1960s academic opinion on community development has been sharply divided. On the one hand the concept has come under a considerable amount of criticism. The criticism has come from a variety of sources, there have

been few studies which draw these criticisms together in a comprehensive manner. Below I present a summary of the major points of criticism that are evident from the literature. Some of these will be examined in more depth when concluding on the experience of community development in Lesotho in Chapter 6.

4. Criticisms of Community Development

A first group of criticisms of community development exposes the strategy's reliance on assumptions general to modernisation theory.³⁰ The most telling criticisms in this respect are that:

- community development strategy assumes that development does not involve a radical reshaping of social structure and a serious conflict of interest between different social groups or classes;
- community development is assumed to have universal applicability and the strategy is unaffected by the relationship between developed and underdeveloped countries or regions;
- there is a dualist assumption of a 'traditional' and 'modern' society, and development is defined as becoming more like the western capitalist societies;
- an implication of the strategy is that a community is a traditional entity and a closed system, and that the constraints to a community's development lie within the community;
- community development assumes that the essential barriers to development are essentially cultural or psychological; these are, in Hutton and Cohen's terms, "dependent variables"³¹ and the strategy cannot affect relations of property or power

which inhibit development.

A second cluster of criticisms deals specifically with the concept of community development and the effects of its implementation. These may be summarised as follows:³²

- the concept contains a fundamental contradiction as to who in fact has control over a community development project: the community or the outside 'pump-priming' agency. Despite the rhetoric of community control, a great many community development programmes are effectively centrally controlled, and the community is only peripherally 'involved' or is allowed to 'participate' without real power.³³
- The social objectives of community development are formulated in such vague terms as to allow a great variety of interpretations. This has facilitated the use of community development programmes as vehicles for political ideology.³⁴
- The strategy is unclear as to what the optimum mix of 'software' (i.e. educational and motivational) and 'hardware' (i.e. technical services and innovations) components is, and this had generated considerable debate amongst community developmentalists. Early appraisals of the strategy were critical of educational bias and overemphasis on vague social objectives. Subsequently there has generally been a closer association between community development and technical services which has in turn provoked criticism of a neglect of community education.³⁵
- Community developmentalists have a naive and often romantic view of community life and tend to gloss over both the structural

constraints to development and local power struggles within small societies. Community development programmes are particularly prone to political disputes at the local level.³⁶

- The effect of working primarily with a village or rural elite and in many cases encouraging the creation of a class of 'progressive farmers', has been to widen inequality.
- The strategy has been uncondusive to efficient administration.

Schaffer has written of community development as

"anti-administrative....because of its ideological defences against evaluation and feedback, the most urgent requirements of a development administration style. It also fails to provide a solution because it seeks a mere blotting out of the problem: on the one hand it seemed to make evaluation unnecessary; on the other it sought, not to solve the problems of communication, allocation and access, but to be an alternative to administration."³⁸

- Community development offered colonial administrators and new governments an inexpensive and "convenient way of accommodating demands for development which it would be otherwise difficult to satisfy."³⁹ A common result of ambitious programmes has been to stimulate a demand which the administration has not been able to meet.

On the other hand, despite this critique of community development a small band of ardent community developmentalists have continued to argue the merits of the strategy calling for better methods of implementation, more training, more support from aid donors and more patience in awaiting results. Unpopularity of the concept among academics and among the governments of the decolonised world has limited its application in rural communities in underdeveloped countries, and the focus of community development

has to some extent switched to the urban social problems of developed countries. This change of emphasis has tended to push the academic use of community development terminology out of development studies and into the field of social work.⁴⁰

Despite the unpopularity of the concept in the academic world some longstanding community development programmes are still in existence. There has even been a revival of many of the characteristics of community development in the late 1970s. The name 'community development' has been dropped, but the 'integrated rural development' and 'basic needs' strategies, recently adopted by many of the big aid donors such as the United States Agency for International Development, contain assertions and assumptions similar to the community development programmes of the 1950s.⁴¹ The fact that community development is panned as a development strategy in universities and still employed by Governments points to the great gulf of interests between theoreticians and practitioners in development studies.

This study examines a community development programme in Lesotho which has continued for over twenty years seemingly oblivious of criticisms of the development strategy. The application of the concept in Lesotho is discussed in Chapter 5. The following section provides a general and brief background to Lesotho.

5. Lesotho.

(a) Economic Conditions

All analyses of Lesotho have a common starting point. This is the country's poverty and absolute lack of economic independence. As one of the world's most dependent states its survival as an independent country is something of a freak of British colonial history and due largely to the region's lack of resources and the hardships of life in the mountains.

By almost any criterion Lesotho ranks as one of the poorest countries in the world. It is small, arid, mountainous, lacking in mineral and other resources, and overpopulated. The country, of some 11, 716 square miles, is land-locked and wholly surrounded by the Republic of South Africa (see Map 1 in Introduction). Only thirteen per cent of the land surface is suited to crop cultivation and three quarters of the country consists of mountainous basalt peaks cut by deep river valleys. It is the only country in the world with all its territory more than 1,000 metres above sea-level. The climate is unsuited to agricultural production and soil erosion is rampant. Communications within the country are greatly hindered by the topography.

The distressing state of the national economy is simply illustrated by the order of magnitude of two sets of figures: the gross domestic product is only of the order of half the gross national product; and the cost of imports is over fifteen times the revenue received from exports. The country's only exportable commodities are wool, mohair, diamonds and water. Of these only the latter provides a significant economic potential. But

agreement on a settlement regarding the sale of water or power to South Africa has not been reached in fifty years of negotiation, and the prospects for the construction of mountain dams seem as distant as ever.

Yet the economy has not always been at such a low ebb. The economic history of Lesotho indicates an agricultural boom in the 1870s. A century of underdevelopment has transformed the country from a semi-feudal, burgeoning peasant economy, exporting food to the hinterland, to an impoverished labour reserve on the periphery of the regional economy and having to import for all its domestic needs.⁴² The institution central to this transformation has been that of oscillating migration⁴³ to and from workplaces in South Africa. Of the de jure 1976 population of 1.2 million, in the mid 1970s, an estimated 150,000 persons lived or worked in the Republic, and throughout the 1960s and 1970s Lesotho supplied approximately one fifth of the labour requirements of the South African mining industry. In turn the massive outflow of labour has subverted the domestic economy in numerous ways, skewed social institutions, caused considerable family hardship, and created a large and diverse rural proletariat dislocated from its dependents. The effects of migratory labour on the village economy are considered more closely in the following chapter.

(b) Political Parties and Development Strategies.

Political developments too reflect the exigencies of the labour reserve economy. The fact that migrancy is the primary

source of income for Basotho, and yet is at the root of underdevelopment presents a dilemma for both development planners and politicians alike. During the colonial era, one of Britain's few interests in maintaining the Colony was to secure a continuing source of labour for their interests in South Africa. Local political parties developed in the 1950s and before Lesotho received flag independence in 1966, adopted a range of responses to issues of economic development, social justice, and migrant labour. The two dominant political parties in the country are the Basutoland Congress Party (BCP) and the ruling Basotho National Party (BNP).

The BCP, now banned as a formal political party within the country, has a considerable pedigree in radical African politics. Founded with the support of South African nationalist, the party incorporates earlier political movements in Lesotho, including the Progressive Farmer's Association established in 1907, the Lekhotla-la-Bafo (Commoner's League) established in 1913, and the Basutoland African Congress created in 1952. The BCP leadership has been drawn from commoners who, through trade or education, achieved a position from which they could challenge the traditional institutions of authority: the chieftainship and clergy. Since the party has never held power it is by no means certain that the leadership would implement their stated policy, but from electioneering and other statements BCP policy has been one of democratic reforms, in particular the BCP claim to stand for popular participation in Government, social justice and an aggressive stance against apartheid. The following items are listed among others as the chief aims and objectives of the

BCP:

- "1. To strive for the unity between chiefs and commoners and also amongst people of all denominations.
2. To fight oppression, exploitation and discrimination in all its manifestations unless where the interests of the Basotho are protected (sic).
3. To encourage the establishment of workers unions."⁴⁴

The BCP has not posited a coherent alternative economic development strategy to that pursued by the BNP, and, indeed, has not stood on a platform of 'development' at all. But from general statements the BCP would appear to prefer "to disengage as much as is practically possible (from the international economic system)"⁴⁵ and has articulated a more stringent policy on migrant labour.⁴⁶

Although widely predicted to win, the BCP lost the first general election in 1965, apparently through poor electioneering. Their outspoken opposition to the chieftainship and the clergy lost them considerable support in the rural areas. Between the elections the BCP opposed the Government at every turn, but neither an alliance with the King and elements of another party, the Marema-tlou Freedom Party, nor a brief flirtation with violent confrontation in 1966, enabled them to wrest power away from the BNP.

The 1970 elections were the turning point in the country's recent political history. Two days after the general elections Radio Lesotho reported that the BNP and BCP stood neck and neck each with twenty three seats. No further election results were

announced and the following day the Prime Minister, Chief Leabua Jonathan announced a 'state of emergency' and suspended the constitution. In a book on the 1970 coup d'etat B.M. Khaketla compiles the full election results which show a landslide victory for the BCP.⁴⁷ The suspension of the constitution was followed by a period of mass arrests and witch hunts for BCP leaders in which the King himself was placed under house arrest, while Chief Jonathan decided to rule by Ministerial decree for a three year period. In 1973 when an Interim National Assembly was constituted in which the BCP were effectively excluded from power, the majority of the party leadership went into exile from where they planned the violent overthrow of the illegal government. In 1974 a counter-coup was ruthlessly put down by the BNP's Police Mobile Unit, and the latter years in the decade have seen renewed efforts on the part of armed insurgents to weaken the BNP's position.

The BNP was established in 1958 as an alternative to the radicalism of the Basutoland African Congress and later the BCP. The party represented the interests of the established authorities, the chieftainship and the clergy, and was bitterly opposed to the BCP, often referring to them as 'puppets of Moscow and Peking'. The BNP constitution includes the following items under its aims and objectives:

- "1. The Party will oppose anybody, any organisation or other party from interfering with the religious affairs of any church.
2. The Party is firmly opposed to the communist ideology and detests anybody who aligns himself with it or who propagates that ideology.

3. The Party will strive to promote the development of Lesotho in all possible ways."⁴⁸

From the outset the BNP have stood on a platform of rapid material economic development in Lesotho, and their vision of 'development' contains several distinguishable features which have changed little over the years since they came to power in 1965. Firstly, BNP development strategy has been characterized by its concern with large-scale, capital intensive, high status, development projects. One of the first acts of the BNP Government when it came to power in 1965 was to embark on a bitumenised road, the Leabua Jonathan Highway, leading from the capital North East closely by-passing the Prime Minister's own village. Subsequent policies have continued this trend, more recent examples being the plans for an international airport and considerable Government expenditure on a Lesotho Hilton hotel. The BNP's attempts to use prestigious development projects to enhance the party's image was made clear in a pre-election speech delivered in 1969 by Chief Jonathan. He said then:

"If you think that the roads we have constructed are a good thing return us (i.e. the BNP) to power. If you think the electricity we have brought to Lesotho is a good thing, return us to power. If you think the industries we have brought to Lesotho are a good thing, return us to power.... If you reject the BNP, then you reject the development we have achieved."⁴⁴

All the undertakings mentioned in this speech are capital intensive and have little direct benefit to the rural population.

The BNP have had no identifiable response to the country's position as a peripheral labour reserve; rather they have assumed

the country to be in a state of undevelopment requiring capital development. This is illustrated in Government's policy on migrant labour. On the face of it Government's intentions in both the First and Second Five Year Development Plans have been to reduce dependence upon migration by the creation of opportunities for domestic employment. In practice the policy has been one of laissez-faire and no steps have been taken to protect the rights of migrant workers, to establish unions, to consider disengagement, or even to create a cartel of labour supply states.⁵⁰

On the other hand, despite considerable international assistance little domestic employment has been created. Out of a target of 7,000 jobs to be created during the course of the Second Five Year Development Plan, 1975-80, barely 2,000 new work-places were created, insufficient to absorb the natural increase in the work-force let alone offer an alternative to migration.

Within this general framework two stages of BNP policy can be distinguished. The first covers the period from independence to the early 1970s. In this period BNP development strategy was particularly characterised by its emphasis on industrialisation and by its close association with industrial, political and military interests in South Africa. A corner stone of Government economic development was the creation, in 1967, of the Lesotho National Development Corporation, following the advice of the South African Industrialist, Anton Rupert, and originally under the control of another South African, Wynand van Graan. The Corporation's task was to encourage small-scale industry and it set about

attempting to attract foreign investment from South African and international investors. A Corporation publication designed to attract investment describes the concessions Government made to attract foreign investors:

"Lesotho ... has the entire South African Market on its doorstep ... There are no duties, restrictions, monetary or exchange controls. There is no problem about the repatriation of capital and profits ... There are concessions unique in Africa ... The tax shelter provided by the Government for new industries (including a choice of either six tax-free years of specific completely tax-free allowances) is one of the most comprehensive and generous in the world ... Lesotho has one of Africa's most able, stable and economic labour forces ... The traditional Basotho hat has been changed for a construction helmet."⁵¹

In this first stage BNP development strategy was aimed at exploiting what Government saw as the 'reality' of Lesotho's situation, and rather than tempering Lesotho's dependence upon South Africa, Lesotho's economic policy merely attempted to derive what it could by co-operating with the Republic. In 1967, for example, BNP development policy was summarised as follows:

"The economic prospects of Lesotho are dim and in the short run it has virtually no hope of becoming commercially viable or independent of South Africa ... The needs of both countries thus hang together and sound economic reasons dictate that everything possible should be done to improve the links that have already been forged between the two nations."⁵²

'Improving links' meant close political, military and economic co-operation between the two countries. This relationship is illustrated by the number of South African advisors attached to the Lesotho Government at this period. In 1968, for example, no less than sixty seven South Africans held posts in Maseru:

a great many of them in very senior positions, including the chief justice, director of prosecutions, the attorney general, military advisors, and most significantly, bearing in mind the events of 1970, the chief electoral officer.⁵³

A significant shift in BNP policy occurred following their coup d'etat in 1970. Firstly, it was apparent from the election results that the BNP had lost support in the rural areas. There was a need both to contain the widespread unrest in the rural areas and to win back rural support. And secondly, the policy of attempting to attract multinational and South African investment was failing. At various times Lonrho, Rio Tinto, Anglo/De Beers and the Holiday Inns group had invested in the country, but in general the dearth of exploitable resources, the high infrastructural costs of investment in a peripheral position, and Lesotho's land laws which prohibit private land ownership meant that the level of commercial foreign investment had fallen far below expectations.⁵⁴ Moreover, Lesotho's close association with South Africa was precluding other alliances.

Accordingly, from the early 1970s relations between the two countries appeared to deteriorate. Hirschmann has described this growing hostility and the war of words and minor incidents in some detail,⁵⁵ and it is only necessary here to point out that this change of policy carefully avoided action which would jeopardize migrant labour. Moreover, it coincided with a dramatic increase in the amount of overseas foreign aid received by Lesotho. The numbers of donors, the amounts of aid and the numbers of expatriates working in technical assistance in Lesotho grew

dramatically in the early 1970s to the point where the domestic economy is now unable to absorb all the assistance proffered.

Furthermore, government has supplemented attempts at industrialization with a more vigorous rural and agricultural development policy. Until the early 1970s rural development in Lesotho consisted of a number of diverse and unco-ordinated attempts to improve agriculture and stimulate cottage industry, and the random building of access tracks, vegetable gardens and occasional water supplies. From the early 1970s considerably more effort was put into ambitious area-based agricultural schemes, and a major effort in implementing village water supplies was launched. Building rural water supplies became by far the most important activity of the Department of Community and Rural Development. The growth and consequences of this important development programme are the central issue discussed in Chapters 3 to 5.

6. Rural Domestic Water Supplies.

The final section of this chapter briefly introduces the third element of the study: rural domestic water supplies.

Water is a daily necessity, its supply is vital to human existence, to health, to food production, to a great many productive processes, and hence to all economies. In many societies, the whole structure of a society may pivot on the supply of this critical resource. In Egypt, Wittfogel has argued that the social organisation of water supply formed the basis for the social divisions of the whole society.⁵⁶

Yet despite the importance of water to well-being, the distribution of domestic supplies is markedly uneven. The World Health Organisation estimated that in 1971 eighty six per cent. of the world's rural population, that is, over 1,000 million people were inadequately supplied with water.⁵⁷ The world's unsupplied population consists almost entirely of the rural populations of the underdeveloped world, and includes almost the whole of Africa; whereas over eighty per cent. of Northern Europe and North America are adequately supplied with a safe, accessible water source, the same can only be said for eleven per cent. of the 152 million rural people in Africa.

In 1972 the World Health Organisation set targets to improve the situation. It was hoped that by 1980 a quarter of the world's rural population would be reasonably supplied. But the rate of increase in the numbers of people supplied since these targets were set show that they are not even keeping up with the rate of population increase. And to this must be added the fact that about one third of the rural water supplies built in the last decade are estimated to be out of order and that a further third work only intermittently.

The global outlook is dismal. Nevertheless, in recent years some advances have been made. Prior to the 1970s little concern was shown for domestic water supplies: the development strategies used for installing rural supplies were similar to those in use in the colonial era, and in general the technologies used were inappropriate to the conditions in which they were implemented. The publication of Drawers of Water in 1972 marks a turning point

in thinking on domestic water supplies, for in it the authors examine the range of choices that development planners have to make in designing a domestic water supply.⁵⁸ They illustrate how factors of cost, the desirability of water, and precise health and other needs have to be taken into account in design. A strength of the study is that the authors consider the viewpoints of both the users and the providers of water, and offer a mode by which the most urgent needs can be met in the quickest and most cost-effective manner.

The evaluation of domestic water supplies in Lesotho, on which this study is based, took a similar approach and studied the desirability and feasibility of the full range of technical, environmental, health-related, social, economic and political considerations, taking into account both user and Governments viewpoints before setting forth suggestions for the most appropriate solutions. The present study describes the sociological considerations in the rural domestic water supply programme in Lesotho.

Reference Notes to Chapter 1

1. United Nations Economic and Social Council, Principles of Community Development, 1955, quoted in Du Sautoy, P. The Organisation of a Community Development Programme 1962, p. 121.
2. For further discussion on definitions see, for example: Batten, T.R., Communities and their Development, 1957; Biddle, W.W. "The 'Fuzziness' of Definition of Community Development" Community Development Journal 1(2), 1966; Du Sautoy, P. op. cit., Appendix I; and Griffiths, H., "The aims and objectives of Community Development", Community Development Journal 9(2), 1974.
3. Biddle, op. cit.
4. Batten, op. cit., p. 4.
5. There is a large literature on community development, little of which is now in common use. The summary of the characteristics of the development strategy is drawn from the following sources: Batten, T.R., op. cit.; Batten, T.R. "The Major Issues and Future Direction of Community Development", Community Development Journal 9(2), 1974; De Schlippe, P., "Theory of Community Development" in Ponsioen, J.A. (ed.) Social Welfare Policy, 1962; De Sautoy, P., op. cit.; Foster, G., Traditional Cultures; and the Impact of Technological Change, 1962; Holdcroft, L.E. The Rise and Fall of Community Development in Developing Countries, 1950-65: a Critical Analysis and Annotated Bibliography,

1978; and Miniclier, L. "Community Development as a vehicle of U.S. Foreign Aid " Community Development Journal 4(1), 1969.

6. Foster, op. cit., p. 99.
7. Batten, op. cit., 1957, p. 48.
8. Holdcroft, op. cit., p. 10.
9. Quoted in Miniclier, op. cit., p. 9.
10. Holdcroft, loc. cit.
11. Foster-Clark, A. "From Rostow to GunderFrank: Conflicting Paradigms in the Analysis of Underdevelopment", World Development 4(3), 1976.
12. Lerner, D. "Modernisation" The International Encyclopaedia of the Social Science, 1968, p. 386.
13. See, for example: Frank, A.G. Sociology of Underdevelopment and Underdevelopment of Sociology, 1971; Bernstein, H. "Modernisation Theory and the Sociological Study of Development" Journal of Development Studies 7(2), 1971; and Bernstein, H. "Breakdowns of Modernization" Journal of Development Studies 8(2), 1972.
14. Rostow, W.W. The Stages of Economic Growth: a Non-Communist Manifesto, 1960; McLelland, D.C. The Achieving Society, 1961; Apter, D. The Politics of Modernization, 1965; Eisenstadt, S.N. Tradition, Change and Modernity, 1973; Lerner, D., The Passing of Traditional Society: Modernizing the Middle East, 1958; Erasmus, C.J. Man Takes Control: Cultural Development and American Aid, 1961; and Goodenough, W.H. Cooperation in Change: an Anthropological Approach to Community Development,

- 1963.
15. Hodge, P. "The Future of Community Development" in Robson, A. and Crick, B. (eds.) The Future of the Social Services, 1970, p. 66, quoted in Manghezi, A., Class, Elite and Community in African Development, 1976, p. 40.
 16. Holdcroft, op. cit. p. 5.
 17. ibid. p. 15
 18. ibid.
 19. ibid. p. 18.
 20. Blaug, M. "What Price Community Development?" Community Development Bulletin, 15(3), 1964.
 21. Holdcroft, op. cit. p. 8-9 and Poston, R.W. Democracy Speaks many Tongues; Community Development around the World, 1962
 22. See Mason, E.S., Promoting Economic Development - The U.S. and Southern Asia, 1955.
 23. See, for example, Huizer, G. "The Strategy of Peasant Mobilisation: Some Cases from Latin America and South East Asia" in Pitt, D. Development from Below: Anthropologists and Development Situations, 1976.
 24. Dube, S.C. India's Changing Villages, 1958, p. 8 quoted in Karunaratne, G. "The Failure of the Community Development Programme in India" Community Development Journal 11(2) 1976, p. 95.
 25. Krishnamachari, J.T. quoted in Karunaratne, ibid.
 26. The rise and decline of the Indian community development programme is well documented (Holdcroft, op. cit. contains an extensive bibliography). The reasons for decline cited

here are drawn from: Berreman, G.D. "Caste and Community Development" Human Organisation 22(5), 1963; Desai, A.R. "Community Development Project - a Sociological Analysis", Sociological Bulletin 8(2), 1958; Karunaratne op. cit., Nair, K. Blossoms in the Dust: The Human Factor in Indian Development, 1966; and Moore, B. Social Origins of Dictatorship and Democracy; Lord and Peasant in the Making of the Modern World, 1966, pp. 392-410.

27. Moore, ibid., p. 397
28. See for example, Blaug, op. cit.
29. See for example, Sahay, B.N. "Leadership, Conflict and Community Development" Community Development Journal 1(4), 1966; Mitchison, N. "What Community Development is Not" Community Development Journal 2(5), 1967; Biddle, W.W. "Deflating the Community Developer" Community Development Journal 3(4), 1968.
30. The summary of criticisms is drawn from Bernstein, op. cit.; Frank, op. cit.; Hutton and Cohen, op. cit.; Manghezi, op. cit., ch. 2; Wertheim, W.F. "The Rising waves of Emancipation - from Counterpoint towards Revolution" in De Kadt, E. and Williams, G. Sociology and Development, 1974.
31. Hutton and Cohen, op. cit., p. 108.
32. These criticisms are drawn from: Biddle, op. cit., 1968; Holdcroft, op. cit.; Huizer, G. "A Community Development Experience in a Central American Village" American Indigena 24(3), 1964; Huizer, G. "Community Development, Land Reform

- and Political Participation" American Journal of Economics and Sociology 28(2), 1969, reprinted in Shanin, T. (ed.) Peasants and Peasant Societies, 1971; Huizer, op. cit., 1976; Lamb, G. Peasant Politics, 1974; Manghezi, op. cit.; Moore, op. cit.; Schaffer, B.B. "The Deadlock in Development Administration" in Leys, C. (ed.) Politics and Change in Developing Countries, 1969; and Stavenhagen, R. "Changing Functions of the Community in Underdeveloped Countries" in Bernstein, H. (ed.) Underdevelopment and Development, 1973.
33. Extreme examples of this are the community development activities of the governments of the Republic of South Africa and pre-independence Zimbabwe. For the latter see: Kinloch, G.C. "Problems of Community Development in Rhodesia" Community Development Journal 7(3), 1972, and Bratton, M. Beyond Community Development: The Political Economy of Rural Administration in Zimbabwe, 1978.
34. For discussion of community development as an ideology in the cold war see Poston, op. cit., and Mason, op. cit. For other commentators on the use of community development as a political ideology see: Lamb, op. cit., ch. 4; Manghezi, op. cit., ch. 3; Biddle, op. cit., 1968, p. 191; and Phillips, A.M. "The Contribution of Community Development to Political Stability" Community Development Journal 4(4) 1969.
35. See for example, Karunaratne, G., op. cit. on lack of education in the India programme.

36. See for example, Lamb, op. cit., ch. 4.
37. See Huizer, op. cit., 1964; op. cit., 1969; and op. cit., 1976; and Stavenhagen, op. cit., 1973.
38. Schaffer, op. cit., p. 205.
39. Lamb, op. cit., p. 80.
40. See for example, the dominant issues discussed in the Community Development Journal, now based at a Department of Social Administration. Also see Hodge, op. cit.
41. Holdcroft, op. cit., pp. 26-28.
42. The economic history of Lesotho is discussed in Murray, C. "From Granary to Labour Reserve: An Economic History of Lesotho" South African Labour Bulletin, 6(4) 1980; Spray, P. "A Tentative Economic History of lesotho from 1800", 1975; and Leys, R. "Lesotho: Non-development or Under-development: Towards an analysis of the political economy of the labour reserve", 1974; and Kimble, J. "Aspects of the Economic History of Lesotho, 1830-85", 1976.
43. Wilson, F. Migrant Labour in South Africa, Preface, 1972.
44. Macartney, W.J.A. (ed.) Select Documents on the Government and Politics of Botswana, Lesotho and Swaziland: Volume 2, Lesotho, 1971, p. 199.
45. From an interview with the BCP leader, Nstu Mokhehle, in 1975, quoted in Winai Strom G. Development and Dependence in Lesotho, the Enclave of South Africa, 1978, p. 62.
46. Leys, op. cit., p. 23.
47. Khaketla, B.M. Lesotho 1970: An African Coup under Microscope, 1971, p. 211.

48. Macartney, op. cit., p. 229.
50. Gray, J., Robertson, N. and Walton, M. "Lesotho: A Strategy for Survival after the "Golden Seventies" " South African Labour Bulletin, 6(4) 1980.
51. Lesotho National Development Corporation, The Sky is the Limit in Lesotho, undated, pp. 1-3.
52. Quoted in Leys, op. cit., p. 6.
53. Weisfelder, R.F. "Lesotho" in Potholm, C.P. and Dale, R. (eds.) Southern Africa in Perspective: Essays in Regional Politics, 1972, p. 133; and Khaketla, op. cit., 1971.
54. Winai Ström "The Influence of Multinational Corporations on Lesotho's Politics and Economics", The African Review 5(4) 1975.
55. Hirschmann, D. "Changes in Lesotho's Policy Towards South Africa", African Affairs, 78(311) 1979.
56. Wittfogel, K.A. Oriental Despotism: A Comparative Study of Total Power, 1957.
57. World Health Organization, World Health Statistics Report, 1973, 26, pp. 720-783.
58. White, G.F., Bradley, D.J. and White, A.U. Drawers of Water: Domestic Water use in East Africa, 1972.

PART TWO

THE FIELD RESULTS

Chapter 2

Villages in a Migrant Labour Economy.

1. Introduction

This chapter has two sections: the first introduces the district of Mokhotlong, the site of the fieldwork: and the second examines the social and economic features of villages in the district.

The material for the chapter was gathered in the course of fieldwork in Mokhotlong; the village survey data presented in the second section is derived from a study of four villages: Molungoa, Thabang Moreneng, Terata and Sekhutlong (the latter three are distinct sub-villages of the whole village of Thabang). The village studies are supplemented by recent and established literature on village life in Lesotho.¹

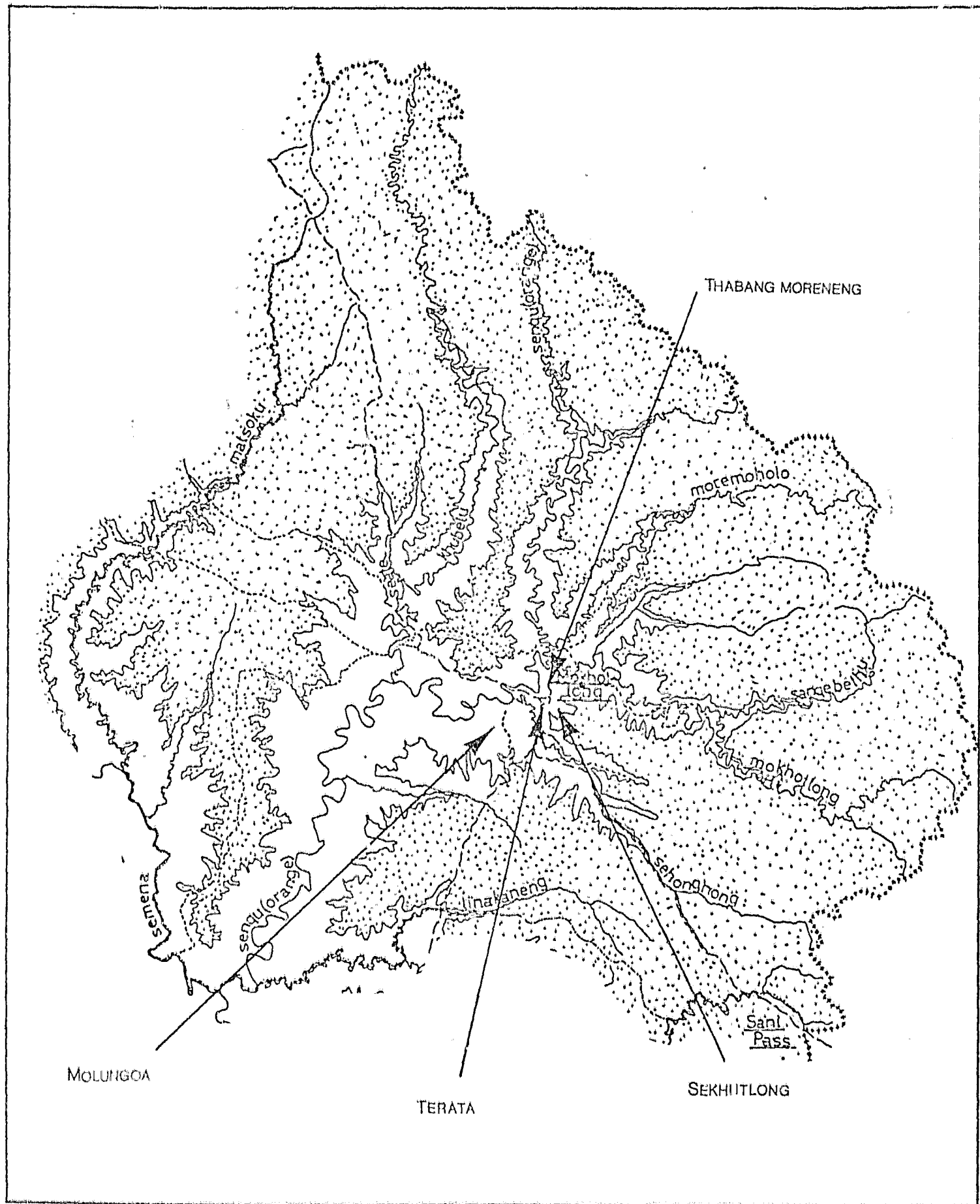
2. Mokhotlong District.

(a) A Peripheral District.

Lying to the extreme East of Lesotho the district of Mokhotlong (see Figure 2.1) is one of the most inaccessible and least hospitable areas in Southern Africa. The region is little known outside of Lesotho and is notorious only for its harsh environment. A popular novel of the 1920s tells the tale of a young Englishman, a First World War hero, who retreats to the district to anguish over moral problems amid the bleak and barren mountains:² in it Mokhotlong is depicted as the most far flung corner of the Empire, a place of refuge only, a land

Figure 2.1

Sketch Map of Mokhotlong showing Case-Study Villages



of darkness, waste and death.

In recent times many of these associations are no less valid: not simply by comparison with the glory of the British Empire as it was seen in the 1920s, but as a result of a century of underdevelopment. Mokhotlong typifies an underdeveloped periphery in its climatic and geographic extremes, and its social and economic institutions.

Climatically, the district experiences some of the lowest temperatures in Southern Africa. The district capital, Mokhotlong, (known as Mokhotlong "Camp") has an annual mean temperature of 11.2°C ³, and an annual average of ninety days with minimum temperatures of below 0°C . Rainfall is higher in Mokhotlong than the rest of the country, but it is undependable, concentrated and highly localised (see Chapter 3). Snow, especially on the mountain peaks and high slopes falls, on average, eight times a year during the long winter months.⁴ Mokhotlong contains one of the few populations in Africa that has had to adapt to snow conditions.

The climatic extremes are caused by the district's mountainous topography. The entire district is covered by granite peaks mostly above 10,000 feet (the district contains the highest point in Southern Africa, Thabana Ntlenyana, at 11,452 feet) interspersed by a series of river valleys which have cut into the volcanic shelf. The Orange river, called the Senqu in Lesotho, and several of its tributaries, the Semena, Khubelu, Moremoholo, Mokhotlong and Sehonghong being the most important (see Figure 2.1), also have their source in Mokhotlong.

The district's inhospitality is apparent in the regional population growth rate statistics. In recent years Mokhotlong has had the slowest growth rate in the country: in 1976 the district was estimated to have a de jure population of 71,764, and an intercensal growth rate (from 1966) of 1.78, a figure substantially lower than the national rate of 2.27⁵. The district is the least densely populated in Lesotho.

The population figures are indicative of the lack of economic opportunities in the area. The district contains no industrial activity, with the exception of a small diamond mine at Letseng-la-Terai, and the range of commercial activities is very limited indeed. Even the mine, employing only some 200 people (many from the lowlands) and situated in the uninhabited west, is of little benefit to the rest of the district. The main road from the lowlands up to Mokhotlong has only been improved up to the mine, reaching hardly any of the district's inhabitants.

The prospects for agriculture are extremely limited and will be discussed below at greater length. The chief farming activities in the district are stock farming (cattle, sheep and goats) and the production of staple grains (wheat, maize and sorghum) and pulses (beans and peas). The mountains have long been regarded as the national grazing lands and Mokhotlong is even known as "Nameng" (the place of meat). Yet today a great many of the district's households are without any stock at all, and the size of the large herds is such that overgrazing is now a critical problem. None of the products from stock rearing, meat, milk, skins, wool and mohair, provide the basis

for district-based manufacture. Wool and mohair, the most commercially valuable products, are processed in the Republic. Moreover, the district is singularly unsuited to crop production. The percentage of arable land in Mokhotlong is very small indeed; a 1974 planning memo puts it at just ninety two square miles or five per cent. of the district,⁶ and in addition Lesotho's staple, maize, is not suited to the cold climate, and when grown the crop invariably fails. Summer wheat is more successful, though the short growing season means that only one crop can be cultivated a year. In the production of pulses Mokhotlong records the lowest district figures.⁷

Low food production necessitates the importation of large quantities of food into the district. In January 1976, for example, the shortage became so acute that the Government placed an emergency order requiring that every truck entering the district from South Africa (up Sani Pass) should carry food rather than other goods. Yet transport in the district is also very poor. Even the most important trunk roads in the district become barely passable in the rainy season. There are no buses in the district and the only road users are traders and a handful of Government vehicles. When the weather is suitable, Lesotho's national air authority has a regular flight from Maseru to Mokhotlong. Indicative of the orientation of the district economy, the most efficient form of communication with Mokhotlong is a flight which operates eight trips a day, to and from Ladysmith in Natal, transporting migrant workers. Within the district itself the jagged topography does not make for easy communication and the

standard forms of travel are on foot or horseback.

With virtually no resources, an intemperate climate, and no realistic prospects in the domestic economy, the overwhelming majority of the workforce earn an income for their family's survival in Mokhotlong by becoming migrant labourers in the Republic. The extent to which migrant labour dominates social and economic life in Mokhotlong is apparent in the village studies presented below.

In conclusion, Mokhotlong is a peripheral labour reserve which at best seems to have been bypassed by the economic growth surrounding its borders to the East and to a lesser extent to the West. The following section presents an historical introduction to the district.

(b) Historical Perspectives.

Mokhotlong has not always been a byword for backwardness. Indeed, for most of the last 100 years it was considered a place of wealth and prosperity.

Prior to the late nineteenth century the present district boundaries were virtually uninhabited and it was mostly used as a place of refuge. San groups inhabited the river valleys, though little is known about their numbers. During the lifaqane groups of Nguni-speaking peoples fled from Natal up through precipitous passes into the safety of the mountains. Temporary refugees who settled briefly in the district include the Matiwane⁸ and chief Langalibalele and his followers.⁹

Settlement of the area eventually came about from the West.

Boer containment of Moshoeshoe's kingdom in the western lowlands lead to increased pressure on the land. By the 1860s it became common practice for lowlanders' cattle to be taken up to the mountain districts for summer grazing. The mountain grasses were well suited to grazing and the area acquired the reputation of containing considerable wealth in cattle. But it was not until the major changes of the 1870s, when the lowland economy began its long slow decline, that Basotho began to settle up in the mountains.¹⁰ The loss of much lowland territory to the Boers exacerbated the shortage of land in the lowlands. Pressure on the land was increased further when the Batlokoa, once fierce opponents of Moshoeshoe, though defeated by him in 1853, were granted land in the 1880s in return for their support in opposing the British Government's attempt at disarmament in the Gun War.¹¹ Initially the Batlokoa settled in Mhales Hoek¹² but, when this proved to be an inadequate site, they were allotted mountain land, in what became Mokhotlong, from the East of the Semena river up to the Senqu. Thus it was chief Lelingoana, Sekonyela's grandson, who first established a settlement in Mokhotlong. Soon after this, in the 1890s, also for reasons of land pressure, chief Rafolatsane was sent to establish a Basotho settlement East of the Senqu river. Mokhotlong's population is to this day administratively and culturally divided by the Senqu river into two sections, the Batlokoa to the East and a conglomeration of Basotho clans, derisively called the Bakhalahali by the Batlokoa, to the West.

The establishment of Mokhotlong proper dates from the establishment in 1905 of a police post and a tax collection centre in what is now the district centre. The district population increased gradually through the early twentieth century as cattle posts became permanently settled, and villages grew up along the river valleys. But beyond a handful of traders and wealthy stock owners, few households in Mokhotlong in the twentieth century have managed to make a living from activities within the district. Mokhotlong, despite its isolation remains completely dependent upon outside production and employment. The very creation and development of society in the district occurred as a result of the underdevelopment of the lowland economy. An added touch to this paradox is the fact that although society in Mokhotlong was largely established as a result of colonial wars, the district is now regarded as the most 'traditional' area in the country.

The following section examines the salient features of villages in Mokhotlong in more detail, in examining the constraints and potentials for village development.

3. Dependent Villages

(a) Village Location.

A village in Lesotho usually consists of a compact cluster of households with a distinctive social and geographical identity. Larger villages such as Thabang may be broken up into a number of geographically and administratively distinct sub-villages. The clustering of houses into village or sub-village units is

particularly accentuated in the mountain districts, largely as a result of the dramatic topography and the shortage of suitable village sites. All the households in Thabang Moreneng, for example, are clustered within a diameter of 400 metres (see Figure 3.2).

Villages in Mokhotlong are most commonly situated on plateaux on the sides of river valleys or on saddles between hill-tops. Two of the four case-study villages, Molungoa and Sekhutlong are clustered on lower mountain slopes, while both Thabang Moreneng and Terata are situated on a flattish plateau which lies between steep mountain slopes soon rising to a height of over 9,000 feet towards the South East, and a sheer 1,000 foot drop down to the Senqu river to the North West. All four villages lie at a height of approximately 7,000 feet on the sides of the Senqu river valley.

(b) Village Populations.

Village populations in Lesotho vary from forty to over 1,000, those in the mountains generally being smaller. Table 2.1 contains details of the size of Mokhotlong case study villages. Thabang Moreneng is a large village by mountain standards and is the home of the District Chief. The village is within six kilometres of the district capital and is located at the junction of the three main roads in the district. By contrast Molungoa is typical of a remote mountain village. Aerial photographs of the area taken in 1962 show that the position of the case study villages has not altered since that date and that the

Table 2.1

De Jure Populations, Numbers of Households and Hut Populations
of Case Study Villages

Village	De jure pop.	No. of hseholds.	De jure pop. per hsehold	No. of houses		Hse. growth rate
				1962	1976	
Molungoa	116	23	5.0	-**	-	-
Thabang Moreneng	332*	64	5.1	129	169	2.2%
Terata	99	20	5.0	20	34	5%
Sekhutlong	110	19	5.8	40	51	1.9%
TOTAL	657	126	-	189	254	2.4%

Notes

* Excludes eight households permanently absent during fieldwork.

** No Aerial Photograph available.

growth rate in houses between 1962 and 1976 is comparable with the national population growth rate.

All discussion of population figures in Lesotho must take into account the effect of oscillating migration. The extent of oscillating migration can be shown either synchronically or diachronically. This distinction is seldom drawn and the extent of migrant labour is normally assessed synchronically by simply comparing de jure¹³ and de facto population estimates.

VILLAGE	De jure pop.	De facto pop.	No. of Absentees	Absentees as % of De jure pop.	No. of Absentees						
					Working elsewhere in Lesotho	Herdng	At School	'Visiting'	Not known	In RSA	% in RSA
Molungoa	116	99	17	15%	6	-	1	-	-	10	59%
T. Moreneng	332	289	43	13%	3	5	2	5	3	25	58%
Terata	99	80	19	19%	3	3	2	-	-	11	58%
Sekhutlong	110	102	8	7%	1	-	2	-	-	5	62%
Total	657	570	87		13	8	7	5	3	51	
Mean %				13%							59%

Table 2.2

De Jure and De Facto Mokhotlong Case Study Village Populations
including Reasons for Absence.

Table 2.2 illustrates this rating for the Mokhotlong case study villages and tabulates reasons for absence. Calculated synchronically approximately thirteen per cent. of the de jure population is away at any one time. This rate of outflow is subject to a small seasonal variation though the variation in Lesotho is less than that suggested by Wilson for migrant labourers from within the Republic of South Africa. January and November are the periods

of greatest exodus from Lesotho.¹⁴ The reason for the peak in November is that by then the men have finished their main contribution to the agricultural cycle; the January outflow contains many migrants who have spent Christmas at home.¹⁵

The figure of thirteen per cent. de jure absence appears to be of the same order of magnitude as the eighteen per cent. figure reached by Murray¹⁶ in a study of five lowland villages in 1974. But Murray goes further and shows that these synchronic estimates gravely underestimate the true extent of migrant labour.¹⁷ Murray does not attempt to give a diachronic estimate from his material, but the diachronic incidence of migrant labour in Mokhotlong is illustrated in Tables 2.3 and 2.4: Table 2.3 demonstrates that approximately fifty eight per cent. of households have had at least one migrant labourer over the last five years. But the full extent of the crippling effect of migrant labour on Lesotho's villages becomes even clearer in Table 2.4 which illustrates the prevalence of migrancy among men between the ages of eighteen and fifty.

Diachronic analysis reflects a much greater level of migrancy than does the number of absentees at any one time, for it begins to take into account the extent to which migrancy moulds the life-cycle of rural Basotho. Table 2.4 indicates that on average over seventy per cent. of the men in the case study villages have worked on the mines at some point in their adult life. Moreover, this figure is almost certainly an underestimate since Thabang Moreneng, which provides the greatest percentage of the case study population, is in the unique position of

Table 2.3

The Distribution of Mokhotlong Case Study Households containing
Recent Migrant Labourers

Village	No. of households	No. Households with Migrant labourer having worked some-time in RSA since 1971			% Households with at least one migrant
		0	1	1	
Molungoa	23	9	11	3	61%
Thabang Moreneng	64	29	30	3	55%
Terata	20	6	14	0	70%
Sekhutlong	19	9	9	1	53%
Total	126	53	64	9	58%

Table 2.4

The Distribution of Men (18-50) and Migrant Labourers in Mokhotlong
Case Study Villages.

Village	No. of men 18-50	Men (18-50) having worked sometime in RSA		Men (18-50) having worked in RSA within the last 5 years	
		No	%	No	%
Molungoa	24	19	79%	17	71%
Thabang Moreneng	77	47	61%	41	55%
Terata	15	15	100%	14	93%
Sekhutlong	15	12	80%	11	73%
Total	131	93	71%	83	63%

having a high percentage of its male population employed in local government or by local traders. By contrast, in neighbouring Terata at some point in their lives every man has worked in South Africa.

(c) The Household

The basic domestic unit in the village is the household. Physically, village households in Lesotho are clearly defined and, in Mokhotlong commonly consist of one or two stone circular huts with thatched conical roofs and an area of at least five to ten meters surrounding the buildings. Often two huts in the same household are bound by a curved stone-wall, or, more rarely in the mountains, by a reed fence, a seotloana, which demarcates the household's territory and allows a greater degree of privacy. But the social definition of a household presents more of a problem as previous anthropologists writing on Lesotho have shown.¹⁸ If it is defined as a co-residential group engaging in joint activities then most migrants must be excluded since the average length of time migrant labourers spend working in the Republic varies from between sixteen and thirteen years.¹⁹ While migrants may not spend a great deal of their adult lives in their village homes, they are nevertheless responsible for funding many household activities, or are at least expected to contribute to the household, and it would be unsatisfactory to exclude them all from the definition. The most ambiguous members are migrants who are absent for years without contributing to the household. No clear definition could be established in these cases, but

a migrant's continued membership depends upon: (i) whether he contributes to the household economy; (ii) whether the migrant establishes long term commitments in the Republic; and (iii) the frequency of visits 'home'. It is equally difficult to reduce the household to kinship criteria for there is a great difference in kinship composition between households and within households over time.²⁰ For present purposes the definition adopted here is householders own perception of who does or does not belong to the unit.

(d) Household size and Composition

Most households in the case study villages have been four and seven de jure members and the mean household size is 5.3 (from Table 2.1). Mean figures, however, obscure the peaking of household sizes at two, four and five, and to a lesser extent eleven, illustrated in Figure 2.2.

The factors affecting household size are manifold. An explanation for the peaking in Figure 2.2 follows from the categorisation of the case study villages according to household composition. This is presented below in Table 2.5. The difficulties in representing household composition in a situation where the household extends to the mine compounds of the Orange Free State and Transvaal Mines are obvious. In Table 2.5, while the de jure household population is accounted for, households are categorised according to their de facto composition; separate categories have been devised for households with and without migrant labourers. The most striking fact about Table 2.5 is

the wide range of forms of household composition. The table has employed two devices in order to attempt to understand the variety of household forms. Firstly, a distinction has been drawn between 'whole' and 'disrupted' households. 'Whole' households are those that conform to ideal customary types, and 'disrupted' households are those that do not. Secondly, an attempt has been made to isolate households that contain migrant labourers. Migrant labourers are defined in the Table as adults who worked in the Republic in the last five years.

What causes the wide range of household forms? The Table illustrates that the great majority of households vary greatly from the ideal conception of how households should be composed.

Figure 2.2

Histogram illustrating frequency of De Jure Household
Sizes amongst the Case-Study Villages

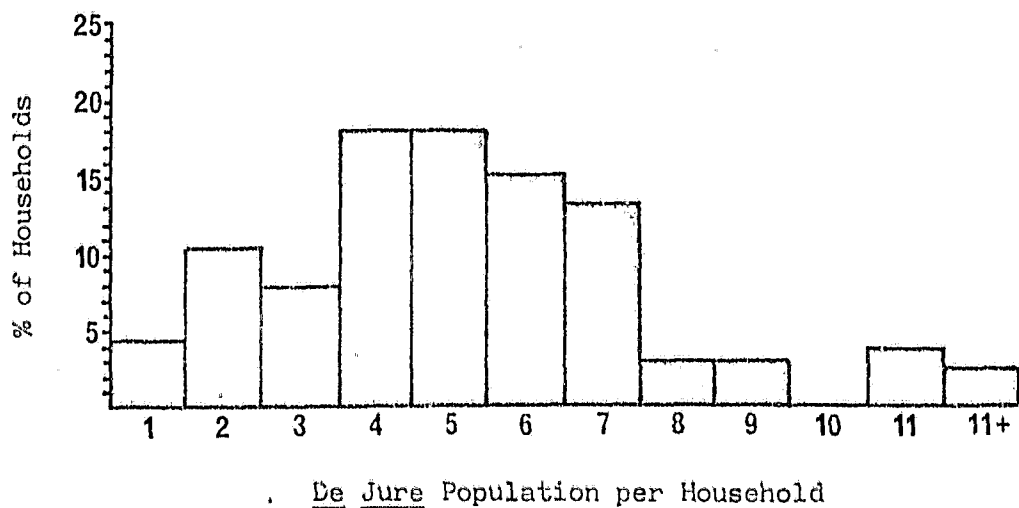


TABLE 2.5.

THE COMPOSITION OF CASE-STUDY
HOUSEHOLDS ^{A/}

			Thabang Moreneng	Terata	Molungoa	Sekhutlong	Total	%	Migrant Labourers headed by Household Heads "Permanent" Women and "Temporary"
Single-Occupant Households	M on own:	Never married;	-	-	1	-	1		-
		Only at work in Thabang; ^{B/}	2	-	-	-	2		-
		Deserted/Divorced	1	-	-	-	1		-
	W on own:	Widow;	1	-	-	-	1		-
		Never married	1	-	-	-	1		1
		Deserted/Divorced	1	-	-	-	1(7) 5.3		1(3) 1(3)
Nuclear Families	Whole	M + W (no C)	1	1	1	-	3		-
		M + W + C	14	2	4	4	24(27) 21.4		-(0) -(0) -(0)
	Disrupted	M + W + ML + C	-	1	-	-	1		-
		W + ML + C	15	6	4	3	28		28
		W + ML (no C)	1	1	-	1	3		3
		M + C	-	1	-	-	1		-
		W + C	8	3	5	1	17(50) 39.7 (61.1)		17(17) 17(48)
Extended Families	Whole	GF + GM + CC	1	-	-	1	2		-
		M + W + C + other kin ^{C/}	2	1	1	2	6(8) 6.3		-(0) -(0) -(0)
	Disrupted	GM + CC	3	-	1	2	6		6
		GM + W + M + C	-	-	-	3	3		3
		GF + GM + W + ML + C	2	-	-	1	3		-
		GM + 2W + 2ML + C	3	-	-	-	3		3 ^{E/}
		GF + W + ML + C	1	1	-	-	2		-
		CM + W + 2M ^{D/}	1	-	-	-	1		1 ^{E/}
		GM + W + ML + C	2	-	-	-	2		2 ^{E/}
		GM + ML + C	-	2	-	-	2		2 ^{E/}
		GGM + GM + M + W + C	-	-	1	-	1		1 ^{E/}
		M + W + ML + other kin	-	-	1	-	1		-
		W + ML + C + other kin	1	-	3	-	4		4
		GF + M + W + C + other kin	1	-	-	-	1		-
		GM + 2ML + C + other kin	-	1	-	-	1(30) 23.8		1(18) 1(19) 1(23)
Double Nuc. Fam.		2W + 2ML + C	1	-	1	1	3(3) 2.4		3(3) -(0) 3(3)
Polyg. Fam.		M + 2W + C	1	-	-	-	1(1) 0.8		-(0) -(0) -(0)
TOTALS			64	20	23	19	126	100	53(42.1%) 39(31%) 77(61.1%)

Key.

M. Adult man cc. Grandchildren GGM Great grandmother
W. Adult woman GF. Grandfather ML. Migrant Labourer
C. Child or Children GM. Grandmother (defined as having worked
in RSA in the last 5 years)

Notes.

- A/ Excluding eight permanently absent households.
B/ This category refers to two men who were employed in the local court as the court prosecutor and court clerk-cum-treasurer. While they lived in Thabang Moreneng they were not eligible for fields in the area and their families remained in their lowland homes.
C/ Other kin refers to relations other than a grandparent or sibling.
D/ Both the two males in this household were absent working elsewhere in Lesotho.
E/ It is assumed in these households that the Grandmother headed the household even when the migrant man left home. In a few cases old age meant that in effect the younger migrants assumed the household headship when home 'on leave'.

A major cause of the fragmentation of actual household composition is the high rate of absenteeism of adult men at work in the Republic. Forty two per cent. of case-study households have been directly affected by the loss of at least one adult male for varying periods of time over the last five years. This figure underestimates the effect of oscillating migration on household composition since it omits households which have been disrupted by the loss of migrants having been killed on the mines, dying as a result of occupational disease of mine labour, or having settled permanently in the Republic. The matrifocal bias of household composition, whereby thirty one per cent. of households in Table 2.5 are permanently headed by women, is largely a result of oscillating migration to the South African mines. The percentage of households disrupted by labour migration is over sixty if households with 'permanent' and 'temporary' women heads of households are included.

The overall picture presented in Table 2.5 is that sixty one per cent. of households consist of one or another form of nuclear family, while there are fewer other household types: extended families thirty one per cent.; single-occupant households five per cent.; double nuclear families two per cent.; and polygynous families under one per cent..

How do these household types conform to the peakings recorded in Figure 2.2? It is a rough fit, but it would seem that the peaking of households at four and five contain the majority of nuclear families with children and the smaller extended families. The peaking at two contains either elderly couples whose children

have established their own homesteads or disrupted small nuclear families. The slight peaking at eleven contain the polygynous, double nuclear, or large extended families.

Household composition has here been represented in a form which differs from the typology suggested by Sheddick.²¹ Rather than explain household formation in terms of idealised conceptions, i.e. nascent, primary (nuclear), residual and rejuvenated household types, the development of the household and the variety of forms that it takes are largely determined by access to economic resources. The phenomenon of oscillating migration is crucial in sustaining families in Lesotho and accounts for the diversity of household composition found in the previous Table. Below, a paradigm of household development is presented which illustrates how different household forms are produced.²²

The average adult Mosotho man takes his first migrant labour contract between the ages of eighteen and twenty²³ and usually marries in his twenties when he has earned enough to cover an initial bohali (marriage payment). But he may not immediately move out of his parents' household to establish his own homestead. A man in his twenties is often almost permanently away on mine contracts and will not have the time, or be able to afford to build a new house. Because of this, and possibly because of a delay on his part in fulfilling bohali payments, a migrant's wife (and any children) may either return to her natal home or remain in her affinal home (following the principle of virilocality in Basotho marriage). Access to land is another important consideration when establishing a new household. Nowadays

most families do not move too far away from their parents' home as it is easier to acquire land in an area in which one has grown up than in a new area. Many of the offspring of families in Thabang Moreneng, for example, elect to establish new households in neighbouring Terata (hence the differing growth rates in Table 2.1).

Most offspring eventually establish their own separate homesteads. The new household approximates the nuclear family, but it is rarely able to remain this status for long. The high rate of oscillating migration means that most households are in fact headed by women. Murray points to the irony in the situation whereby "the viability of the nuclear family as an independent household depends on the man and wife living apart."²⁴ Moreover, the long periods of separation and the conditions of economic hardship, which result in unfulfilled payments, facilitate conjugal instability. A woman may return to her natal home, or alternatively, leaving her children in the care of a parent, she may herself attempt to seek work out of the village, possibly in the Republic. If bohali payments have been satisfactory she may leave her children in her affinal home. The role of grandparents here is crucial, for in times of economic hardship they can provide a home base for their grandchildren while their sons and daughters work out of the country to support the whole family in Lesotho.

In conclusion, it appears that the actual form of village households in Lesotho is far from the ideal. Families need not be virilocally-based, are very often managed by women and may

remain in a complete nuclear form for only a very short stage of the household's development. The essentially pragmatic answers Basotho have found to the question of household composition reflect strategies for survival in conditions of economic hardship in the rural areas.

(e) Rural Sources of Wealth and Well-being.

It is convenient to divide potential sources of income for Lesotho villagers into four categories:

- (i) Migrant labour
- (ii) Local salaried employment
- (iii) Farming
- (iv) 'Informal' sector activities.

In this subsection each source will be discussed in turn, followed by discussion on (v) The relative importance of different income sources, and (vi) Poverty and social differentiation.

(i) Migrant labour

The previous section has illustrated how widespread migrant labour is in the case-study villages, and has touched on some of its social effects. Mokhotlong was only settled as a result of the underdevelopment of the lowland economy and cannot support its population. Migrant labour is the lifeblood of the district. Villagers' central dependence on migrant labour is illustrated by the fact that remittances from absent migrants constitute

an increasing proportion of Lesotho household incomes. Whereas in 1967/69 remittances in cash and kind accounted for twenty four per cent. of the average household's income, in 1973/73 they accounted for fifty nine per cent. and the proportion has certainly increased since then.

The rise in mine wages in the mid 1970s has had the effect of increasing the relative dependence on migrant earnings. Murray has collated the available data on the incomes of rural households in Lesotho and shows that although the average household's annual income has risen from an estimated R214 in 1967/69 to R486 in 1973/4, an increase of about sixty per cent. in retail prices has hidden the real effect of these increases.²⁵

It is difficult to estimate the exact amount migrants send home. The irregularity of remittances and a reluctance or inability on the part of village women to disclose precise figures over a period of time makes it impossible to make reliable estimates from village surveys. McDowall estimated that about twenty five per cent. of migrants' earnings was sent home, while the miner was away, and a further forty per cent. was brought home in cash and kind on his return.²⁶ These figures conceal both the wide variation between individuals (some never send remittances) and the effect that this form of income has upon household budgeting. In the absence of their migrant husbands, women become the household managers. But there is little formal recognition of their new responsibilities, and women have little control over income. Remittances may be irregular and migrants may wish to set aside portions of their earnings for special purchases rather than

allow their wives to invest the money in the household.

The costs of migrancy are substantial. Households are disrupted, marriages undermined, the institution of marriage distorted, children uncared for, men are placed in dehumanizing conditions and their dependants are made to endure arduous, insecure circumstances. Migrancy does not merely entail a temporary absence of labour force. Most migrants spend the most productive years of their lives away, only returning permanently when they are too old or are declared medically unfit for work. No statistics regarding the loss of life sustained through migrant labour are available, but village opinion has it that a great many men have died while on the mines or as a result of their work there. A striking fact which emerged from the village surveys in Mokhotlong was that while there were thirty nine households in which a wife or grandmother lived permanently without a man (often occasioned by death), only eight households contained a non-migrant man at home (see Table 2.5). Unlike many similarly poor countries, the major debilitating communicable diseases in Lesotho, respiratory diseases and parasitic and infective diseases (including sexually transmitted diseases), have their origin in, or at least are encouraged by, the conditions of migrancy. Similarly, other forms of ill-health, such as the high incidence of alcoholism among village men, and a range of common disorders afflicting women, reflect the social consequences of migrancy.

Dependency on migrant labour not only causes social disruption to household and community, but it impedes and determines the

viability of other sources of migrant labour. These effects are discussed below.

(ii) Salaried Employment in Lesotho.

In comparison with the numbers of households with migrant labourers, the number of households dependent on the earnings of a locally-employed salaried worker are minimal. Table 2.6 presents their distribution in the case-study villagers, indicating that just over a quarter of households have a member in local salaried employment. But this figure considerably over-estimates household dependence on local salaried employment. As Table 2.6 illustrates, when the actual number of local salaried employees is compared with the number of potential local employees, it appears that only thirteen per cent. of the adult population in the eighteen to fifty nine age group are local salaried employees. Even this latter percentage may also overemphasise the minimal dependence on local salaried employment in these remote areas of Lesotho. The reasons for this are, firstly, that the notion of salaried employment is misleading. The majority of villagers tabulated in the previous table earn extremely low salaries. Traders' shop assistants, for example, earn between R10 and R15 a month, and the salary of headmen is only R20 per month. On the other hand, only a handful of households earn substantial local incomes. The main trader in Thabang has a monthly turnover of over R500, and has over R17,000 invested in four-wheel drive vehicles with which he transports goods bought in the Republic to his chain of stores in Mokhotlong.

VILLAGE	No. of households containing at least 1 person per form of employment			Total no. of households with local salaried employee	Total no. of households	% of households with local salaried employee	Total number of local salaried employees	De Facto adult (18-59) population	% of adult population (18-59) in local salaried employment
	In Government	As or by a Trader	As or by a Chief						
Molungoa	0	6	1	7	23	30%	7	57	12%
Thabang Moreneng	10	3	6	19	64	30%	27	169	16%
Terata	2	1	1	4	20	20%	4	41	10%
Sekhutlong	1	2	1	4	18**	22%	4	40	8%
Total	13	12	9	34	125	27%	42	317	13%

Notes

* Salaried employment here excludes herding for which payment is often made in kind.

** The occupations of one Sekhutlong household are not known.

Table 2.6

The Distribution of Local Salaried Employment* in Lesotho
amongst Mokhotlong Case-Study Villages

Secondly, the proportion of salaried employment in the sample is probably higher than in other villages in Mokhotlong. Well over half the total number of salaried employees in the sample are resident in Thabang Moreneng, where the chances of finding local employment are far higher than in less fortunate villages.

The range of salaried employment among all the case-study villages is remarkably small. The only established salaried jobs in the area are in government, the very few jobs attached to the District Chief, and employment as or with a trader. Jobs in the first two categories are very hard to come by and are often restricted politically (see Chapter 5). Traders pay notoriously poor wages, and it requires a substantial amount of capital to purchase a four-wheel drive vehicle which is essential to establish a trading store. The high capital cost of establishing a trading post restricts the number of traders, but once established, the absence of local production enables traders virtually to set profit margins at the level of their choosing.

(iii) Village Farming.

Conventional wisdom in Lesotho has it that agriculture is crucial to the national economy.²⁷ It is certainly true that the substantial grain production in the 1870s indicates that agriculture production has been an important means of livelihood for Basotho in the past. In 1867 Basutoland was described as "the granary of the Free State and parts of the (Cape) Colony",²⁸ so great were its exports of wheat and maize.

The importance of agriculture in the national economy has, however, declined ever since that date²⁹ to the extent that today it is entirely bound up and dependent on migrant labour earnings. A recent report concludes that the pattern of agriculture in Lesotho:

"is precisely the pattern we would expect from consumers and home makers and is not the pattern we would expect from serious farmers. Serious farming....is prevented by the poor distribution of fields around the village, by the lack of tools and ploughing power, by the lack of labour, by the lack of such modern inputs as good seeds and fertilizer and by the erratic climate. It is no wonder that the rural resident is not a serious farmer when we consider all the obstacles to effective farming he faces. It may well be simply the necessity to plough the fields in order to maintain rights over them is all that leads the rural resident to do crop farming at all."³⁰

This important conclusion needs some substantiation though only some of the central problems of agriculture will be discussed here.

Firstly, land distribution: the distribution of fields among Mokhotlong case-study households is presented in Table 2.7. According to custom a married Mosotho is entitled to the use of three fields.³¹ But as Table 2.7 illustrates actual household and land holdings fall far short of this and the mean landholding is just under half that prescribed by custom. One fifth of all households have no land at all and over half the households have one field or less.

Table 2.7

The Distribution of fields per household in Mokhotlong
case-study villages.

Village	No. of fields per No. of households					Totals
	0	1	2	3	4	
Molungoa	3	9	3	6	1	22*
Thabang Moreneng	13	21	17	11	2	64
Terata	8	6	4	2	0	20
Sekhutlong	1	10	3	5	0	19
Total No. of households per No. of fields	25	46	27	24	3	125
Total No. of fields	0	46	54	72	12	184

Mean
Holding:
1.47

Note

* The holdings of one Molungoa household are not known.

But the major constraint to agricultural production that both Gay and Murray point to is not land shortage but lack of capital to invest in the means to improve agriculture.³² Traction, fertilizer, good quality seeds, tools and transport are the means to higher yields and are all costly. For the majority of house-

holds capital can only be acquired by migrating to work on the mines. It is for this reason that the viability of serious agriculture is dependent on migrant labour. Even where migrant labour remittances are forthcoming, as has been suggested above, they may be earmarked for other purposes, or may not arrive in time for a crucial agricultural investment.

Migration not only offers the promise of resuscitating agriculture, but also plays an important part in its decline: the lack of manpower especially during the ploughing and harvesting periods precludes maximum productivity; dependence on migrant labour breeds a dependent consciousness which initiates against expending effort in agriculture. Murray, for example, argues that the higher migrant labour earnings following the recent mine wage increases will not necessarily entail increased agricultural production as:

"higher wages in South Africa combined with declining productivity of the land in Lesotho, will expose the relative futility of engaging in agriculture at all, at a point where migrants can satisfy household consumption requirements by buying food directly instead of investing cash in the uncertain effort of growing food at home."³³

Gay provides evidence that this has indeed happened; concluding a study of farmers attitudes he writes that while:

"farming is clearly an activity which requires high investment farmers do not in general choose to invest their money available (sic) in farming, but seem to prefer to use their cash for other purposes. If farmers recognise the (agricultural) supplies needed, and at the same time do not buy them, it can be inferred that farming is relatively low among farmers priorities."³⁴

The difficulties Mokhotlong households encounter in agriculture are confirmed by the results of a survey among the case-study villages which measured the production of staple food grains for the summer of 1975/6. The staple grains grown in the mountains are maize and wheat, though sorghum may also be grown. Table 2.8 tabulates the numbers of bags collected of any of these staples.

Table 2.8

The Distribution of Household Grain Production in 1975/6 in Mokhotlong Case-Study Villages.

Village	Bags of Grain*								Total
	0	1	2-5	6-10	11-20	21-50	51+	not** known	
Molungoa	4	3	4	3	1	0	1	7	23
Thabang Moreneng	13	7	12	9	5	1	1	16	64
Terata	5	1	8	4	2	0	0	0	20
Sekhutlong	3	2	4	6	3	0	0	1	19
Total No. of households	25	13	28	22	11	1	2	24	126

Notes

* Grain = either Wheat, Maize or Sorghum.

** Only 102 households had harvested their crops by the time the survey was made.

Out of 102 households for which data on grain production were available, about a quarter produced no grain at all and some sixty per cent. produced ten bags or less. Only three households produced more than twenty one bags. The low production that these figures represent becomes clear when one considers that the average household in Lesotho of 4.4 persons requires approximately fourteen bags of grain to provide its carbohydrate requirements for a year. Few households in the villages studied are able to feed themselves throughout the year from their own agricultural production.

But what of livestock? The ubiquitous references to livestock in Lesotho indicate a devotion to pastoralism.³⁵ To what extent does livestock farming supplement agricultural production?

Livestock in Mokhotlong and elsewhere in Lesotho are divided into distinct categories; horses, donkeys and occasionally mules are used in and around the village for transport; cattle, sheep and goats make up the chief measure of wealth in the traditional economy and are also slaughtered for commercial and ritual purposes; oxen are also used for ploughing; dairy cattle, pigs and poultry are kept for commercial production. In the mountains, however, livestock are less associated with commercial exchanges than is the case in the lowlands.³⁶

It is generally accepted that the mountain districts have more livestock than the lowlands, but this does not necessarily mean that they are sufficient or evenly distributed to make a meaningful contribution to the average household's income.

Table 2.9 represents the results of a survey of stock units in the Mokhotlong case-study villages.³⁷

Table 2.9

The Distribution of Stock units* in Case-Study Villages.

Village	Number of Stock Units							Total
	0	1-10	11-25	16-50	51-100	101-500	500+	
Molungoa	5	3	15	4	2	1	2	22**
Thabang Moreneng	22	6	10	7	9	7	3	64
Terata	13	3	0	0	3	1	0	20
Sekhutlong	7	1	2	2	4	2	1	19
Total	47	13	17	13	18	6	6	125

Notes

** The household holdings of 1 Molungoa household are unknown.

* 1 Stock unit = 1 sheep or goat or 1/6 cow

Over a third of all the households surveyed had no cattle, sheep or goats, while just under half had less than ten stock-units. At the other end of the scale, over half of all stock units are held by the best endowed ten per cent. of households. The association of Mokhotlong as 'the place of meat' is a reflection of the stockholdings of a small minority of households, not an

assessment of the livestock holdings in all mountain households. Most households eat fresh meat less than five times a year.

Stock ownership necessitates capital, and the only opportunity to purchase livestock is to become a migrant labourer. Yet paradoxically the very exodus of men to obtain 'cattle' is a major reason for the declining quality of the national herd. Migrants often bring inferior breeds and breeds unsuited to the harsh mountain climate in from the Republic; and, moreover, the absence of men means that their sons have to forgo school to herd the stock (Gay's phrasing is that "herding and schooling are antithetical activities"³⁸), while the livestock are deprived of expert adult care.

(vi) 'Informal' Economic Activities.

Householders with irregular and insufficient remittances or without a migrant labourer or a member in salaried employment live by 'informal' sector activities. The 'informal' sector refers to legal and illegal economic activity outside of regular wage-earning employment.³⁹

Table 2.9 tabulates the known range of and distribution of households engaged in informal sector activities in case-study villages during 1975/6.

The only cash earning activity which features predominantly in village life is the brewing and sale of home-made beer, joala. Beer brewing has become a constant and not insubstantial economic activity in villages. It is usually conducted as a commercial enterprise, though women do brew for home consumption and when

VILLAGE	Private builder	Traditional Medical Practitioner	Sale of knitted tailored items	Brewing	Sale of milk eggs or bread	Sale of spirits or tinned beer	Sale of vegetables	Miscellaneous
Molungoa	0	0	1	14	0	0	2	2*
Thabang Moreneng	3	1	4	44	5	4	13	1**
Terata	0	2	0	11	0	0	4	1***
Sekhutlong	1	0	3	17	2	0	1	0
Total	4	3	8	92	7	2	20	3

Notes

* Collects and sells kindling and firewood

** Buys and sells vaseline

***Repairs leatherwork on a small scale.

Table 2.10

The Distribution of Households containing members known to be economically active in the informal sector in case-study villages.

participating in a letsema, a village work party. Just under three quarters of all case-study households brewed for sale at least once during 1975/6 in the case-study villages. An attempt was made to establish the average frequency of brewing but it was found that its frequency depends upon several factors. Firstly, sufficient grain, or cash with which to buy grain or commercial brewing-base, is necessary. As a result brewing varies with the agricultural cycle and the receipt of migrants' remittances. Secondly, sufficient time is needed. Families with heavy agricultural workloads and small labour forces do not brew during the periods of intensive agricultural labour. Thirdly, a specific need for cash might lead a woman to brew. Women very often brew specifically in order to purchase a particular household need. Some households clubbed together to form a mochaello (rotating credit association) so that each household might in turn have a reasonable sum of money. Each household used the mochaello to procure the materials necessary for a setokofele (a party), at which both food and drink would be sold, and the profits go to special purchases.

The high incidence of beer brewing is symptomatic of, and sociologically well-suited to an economy based on migrant labour. It is something women can do; it creates a flow of money from returning migrants with cash in hand to women who have little alternative source of income; it provides an essential source of income for widows and others who for one reason or another are without supporting kinsmen (a common answer to a query as to the frequency of brewing from otherwise destitute women was

"re pheliso ke ho ritella", "we live by it"); it is a local product sophisticated workers still want and its production may multiply the value of field crops.

Yet while brewing is a widespread and a time-consuming activity, few manage to earn a substantial amount from it. Estimates of the profitability of brewing vary greatly and it is clear that a thriftless brewer could easily lose rather than make money by brewing. An average estimate of the earnings of a brewer in Thabang would be as follows:

Sorghum or <u>Mtombo</u> (a commercial brewing base)	
Sugar	RO.70
Water collection	20 minutes
Firewood/Dung collection	4-6 hours
Trip to cheapest trader	30 minutes
<u>Brewing/Selling time</u>	2-3 days
20 litres of <u>joala</u>	

Twenty litres of joala would sell for approximately RI. 20, a cash profit of fifty cents over four days.

Other activities do not meet the constraints of the dependent economy with such ease. Quite a few households in the sample (sixteen per cent.) sold vegetables, mostly fresh, from private or 'communal' gardens, though some dried cabbage was also sold. But most villagers with access to gardens garden for their own consumption. Marketing vegetables in the more remote villages is a particular problem. The sale of hand (or rarely machine)

sown pillow cases, crocheted table-clothes or knitted scarves and the like is restricted by the shortage of the capital necessary to purchase materials and by the lack of market.

Another means by which a household might supplement its income is by working on Food Aid projects. Work for Food Aid is not rewarded by payment in cash but in United States food imports. Over forty per cent. of households said they had participated in Food Aid projects at least once over the last eight years, and eighteen per cent. contained a member who participated "frequently" or "whenever work was available". Food Aid work is not a lucrative form of employment and it attracts only the poorest householders, and those with little other source of income. Participation on Food-for-work projects is also often restricted to supporters of the ruling Basotho National Party. This is discussed further in Chapter 5.

Other informal economic activities are less widespread. Prostitution was limited in the case-study villages, but prevalent in the District Capital itself where migrants collected on their return.

What is striking about all these activities is how profitless they all are. Few of these activities on their own generate sufficient income to satisfy a household's needs.

(v) The Relative Importance of Different Sources of Income

Conventional wisdom in Lesotho assumes that households may be categorized according to their source of income. It is assumed, for example, that there is a class of households dependent

upon migrant labour, another on agriculture, another on brewing and so on. But analysis of village data demonstrates that such categories are rarely appropriate. For example, in correlating brewing as an income source, it was found that all households, no matter what other sources of income were available, were equally likely to brew for cash. Similarly, in 1976, migrant labour was so widely distributed that only households without potential migrants or the very few with members with well paid jobs in Lesotho, were not dependent upon migrant remittances. Until more recently⁴⁰ most able bodied Basotho men had relatively easy access to migratory wage labour. Access to land too, though in small quantities has been relatively widespread though indications are that the proportion of landless is increasing.

The most important reason that households with similar sources of income are not socially distinct is because migrant labour is the primary and only sufficient source of rural income, 'Informal' sector activity and agriculture itself is centrally reliant on migrant labourers income. Brewing beer is not an independent source of income but a mechanism for redistributing migrants' earnings. In the same way, farm income is not opposed, or supplementary to migrant labour remittances: viable farm incomes depend on migrant earnings.

Moreover, the categorization of households by their source of income at one time does not take into account changing strategies for a households' survival through its developmental cycle. A previous section has illustrated how, for example, households only acquire land at a relatively late stage of develop-

ment, and prior to that are directly and often completely dependent upon migrant remittances.

(vi) Poverty and Social Differentiation

Another tenet of conventional wisdom among development planners in Lesotho is the somewhat complacent belief in rural equality.⁴¹ As a result the extent of absolute poverty is underestimated. Recently the works of Van der Wiel, Spiegel and Murray have done much to dispel this complacency.⁴² The results of investigations into the extent of village poverty and social differentiation are presented below.

Firstly, Table 2.11 shows that successful farming activities, both crop production and stock ownership, are highly concentrated. Households wealthier in livestock also produced more grain and vice versa. There is some evidence that the concentration of farm wealth is a relatively new phenomenon. A comparison with Ashton's survey of fifty three Mokhotlong households in 1939 suggests that the average stockholding has fallen in the last forty years, while the holdings of the best endowed ten per cent. of households have not decreased.⁴³

Table 2.12 correlates the mean distribution of wealth by size of household and shows that smaller households are considerably poorer whether wealth is measured by stock units, numbers in paid employment, numbers of fields, or bags of grains, though in some of these categories the apparent poverty would be offset by more meagre consumption.

Table 2.11

A: Mean household stockholdings by grain production

	Bags of Grain								Total
	0	1	2-5	6-10	11-20	21-50	51+	not known	
Mean stock holding in stock units	18	10	35	67	194	800	800	50	70
Number of households	20	13	28	22	11	1	2	23	125

B: Mean grain production by household stockholding

	Stock Units							Total
	0	1-10	11-25	26-50	51-100	101-500	500+	
Mean grain production in bags	8.8	5.0	4.0	3.8	5.1	21.7	29.1	4.4
Number of households	47	13	17	13	18	11	6	125
%	38	10	14	10	14	9	5	100

But the most critical indicator of wealth is the presence or absence of household heads, since this roughly correlates to the presence or absence of migrant labourers. Table 2.13 compares the means stockholdings of households with present and absent household heads in various age groups. It shows, strikingly, how all households with absent household heads except for the

Table 2.12

Mean Distribution of Wealth by Size of Household

	Size of Household					Mean
	1	2	3-5	6-10	11+	
Mean stock units	21	26	28	72	507	68
Mean paid employment*	0.40	0.29	0.36	0.36	3.14	0.78
Mean fields held	0.40	1.14	1.29	1.70	2.86	1.47
Mean bags of grain	0	1.6	2.7	5.9	18.0	4.4
Mean brewing rate	10.6	4.4	21.2	17.9	14.4	17.3
% of households	4%	11%	44%	35%	6%	

Note

* Includes all paid employees, migrants and local salaried employees.

Table 2.13

Mean stock holdings of absentee and present heads of households

	Age of Household Head						Mean
	20s	30s	40s	50s	60s	70+	
Mean stock units; absent household heads	19	11	19	19	192	-	21
Mean stock units; present household heads	14	90	57	136	93	80	87
% household heads absent	56	41	22	8	7	0	26
Total No. of Households	16	32	32	25	15	5	

youngest and an exceptional few in their sixties, are likely to be poorer than those who can afford to remain at home. This finding gives the lie to the common assumption that the Basotho migrate by choice. Clearly, hard necessity is what drives the men to live apart from their families for most of their working lives.

In conclusion, a rough model of differentiation between households can be formulated. In the migrant labour economy the major constraint on income is male labour. The very poorest households are small, without land and are all-female: wageless and without a direct farm income these householders barely scratch a living together by share cropping (seahlolo) and by entering into a variety of other arrangements which allow households to reap a small share of agricultural produce from those with land. They are dependent to a very great extent on brewing and other 'informal' activities. A second category, often just as poor as the first, contain large, landholding, wageless households. These will often be headed by elderly women who have been deserted by or lost their husbands and sons. They are beset by all the problems of agriculture in Lesotho and they too may depend on inter household support.

The remaining categories of households have a wage-earner and this does give them the possibility of an income higher than the previous categories, though the unreliability of remittances and effects of loss of manpower mentioned above limit financial management. One category here contains newly established households without land solely dependent upon migrant earnings; another grouping contains households with land and migrant remittances;

and a final category consists of households with a member in local employment (or established as a trader).

4. CONCLUSION

Despite Mokhotlong's long involvement in the regional Southern African economy the district certainly does not appear to be one in which one would expect imminent "take-off". To a very considerable degree social and economic life in Mokhotlong have been moulded by involvement in the economy of the sub-continent. Oscillating migration has been a fundamental cause of the under-development of the region and its effects are evident in the nature of 'informal' economic activity, the decline of agriculture, the national pattern of diseases, conjugal instability, the skewed household developmental cycle, the short life-spans of Basotho men, and the anxieties to which their dependents are subjected.

By contrast other writers on agriculture and development in Lesotho have suggested other factors as causes of "non-development" in Lesotho. Williams cites "socio-cultural congruity" as a factor which "impinges upon rational decision making at the farm level";⁴⁴ Leistner argues that the lack of "socio-cultural orientation indispensable for the functioning of a modern economy"⁴⁵ helps account for the country's poverty; and Wallman, in a more sophisticated manner, argues that the failure of so many rural development projects can be attributed to a "complex of poverty, migration and ideology"⁴⁶ but her eclectic approach does not make the connection between ideology and migration binding, and

she ends up treating ideology apart from the context of under-development, and assuming that there are purely subjective factors which account for Lesotho's 'non-development'. There are many historical precedents illustrating an enthusiastic response when economic opportunities present themselves: take, for example, Lesotho's quick response to the incentives of the grain market in the 1870s. If alternative opportunities for economic development existed, it is likely that they would be taken up.

This is the background against which the design of development strategies should be seen. Ideally development planners would take careful cognisance of the state of the villages before formulating an appropriate development strategy. The suitability of the self-help approach adopted in the village water supply programme is discussed in Chapter 6, after the evaluation of the effects of the village water supply programme presented in the following chapters.

Reference Notes to Chapter 2

1. Especially Murray, C. Keeping House in Lesotho, 1976a;
Gay, J. Senqu River Agricultural Extension Project: Rural
Sociology Technical Report, 1977; Ashton, E.H. The Basuto:
A Social Study of Traditional and Modern Lesotho, 1967;
Sheddick, V. Land Tenure in Basutoland, 1954; Wallman, S.
Take Out Hunger: Two Case Studies of Rural Development in
Basutoland, 1969; and Turner, S. Sesotho Farming: The Conditions
and Prospects of Agriculture in the Lowlands and Foothills
of Lesotho, 1978.
2. Keable, R., Recompense, 1924.
3. Smit, P., Lesotho: A geographical Study, 1967, p. 8.
4. ibid., p. 5
5. Monyake, L.P. "Lesotho: Land, Population and Food" Report
on the National Population Symposium, 1974, p. 41.
6. Chidambaram, S. "Economic Development in Mokhotlong", 1974,
p. 1.
7. Lesotho Bureau of Statistics, Annual Statistical Bulletin
1976, Table 9.
8. Rosenthal, E., African Switzerland, Basutoland of Today,
1948, p. 13.
9. Herd, N. The Bent Pine: The Trial of Chief Langalibalele,
1976, Chapters 1 to 3.
10. Murray, op. cit. 1976a, pp. 15-16.
11. Ashton, op. cit. p. 4.

12. Sheddick, op. cit., p. 15.
13. The definition of the de jure population is necessarily arbitrary (see Murray op. cit. 1976a, p. 56). The figures presented in Tables 2.1 and 2.2 were obtained from surveys of case-study villages in which each household was asked to mention all members of the household whether present or absent. De jure population is defined as that population which is perceived by present villagers to include themselves and those 'temporarily' away.
14. Macdowell, M. "Basotho Labour in South African Mines - an Empirical Study", 1974, p. 7.
15. Van der Wiel, A.C.A., Migratory Wage Labour: Its Role in the Economy of Lesotho, 1977, p. 49.
16. Murray, op. cit., 1976a, p. 59.
17. ibid., p. 62.
18. Murray, ibid., p. 54, and Wallman, op. cit., p. 42.
19. Van der Wiel, op. cit., p. 52.
20. Murray, op. cit., 1976a, p. 54.
21. Sheddick, op. cit., pp. 16-23.
22. Murray, op. cit., 1976a, Chapter 4, gives a far more detailed and elegant analysis of the household development cycle. See also Spiegel, A.D. Migrant Labour Remittances the Developmental Cycle and Rural Differentiation in a Lesotho Community, 1979.
23. Van der Wiel, op. cit., p. 32.
24. Murray, op. cit., 1976a, pp. 155-156.
25. ibid., pp. 33-39.

27. Murray, op. cit., 1976a, p. 131.
28. Germond, R.C. (trans.) Chronicles of Basutoland, 1967, p. 459, quoted in Spray, P. "A Tentative Economic History of Lesotho from 1800", 1975, p. 3.
29. The decline has been documented by Spray op. cit., and Murray, op. cit., 1976a, pp. 14-26. Bundy, C. "The Emergence and Decline of a South African Peasantry" African Affairs, 71 (285), 1972 places the decline into the political economy of Southern Africa as a whole.
30. Gay, op. cit., p. 18.
31. The size of fields varies but it is generally accepted that the number of fields is a rough index of relative land holdings. See ibid., and Murray, op. cit., 1976a, p. 107.
32. Gay, op. cit., pp. 12-18, and Murray, op. cit., 1976a, Chapter 3.
33. ibid., p. 130.
34. Gay, op. cit., p. 16.
35. Turner, op. cit. Chapter 3 contains a useful discussion on the social significance of cattle in Lesotho.
36. Gay, op. cit., p. 23.
37. The equivalence of stock units defined in Table 2.9 is the rough exchange rate used in Lesotho for calculating bride wealth. The distribution of other livestock is not presented here.
38. ibid., p. 19.

39. For a more detailed definition see Hart, K. "Informal Income Opportunities and Urban Employment in Ghana" Journal of Modern African Studies, 11, 1973, p. 69.
40. The proportion of Migrants from Lesotho has declined since 1978 following the 'internalization' of the migrant labour force. See Gray, J., Roberston, N. and Walton, M., op. cit., and Murray, C. "'Stabilization' and Structural Unemployment" South African Labour Bulletin, 6(4), 1980.
41. World Bank, Lesotho: A Development Challenge, 1975, p. 21.
42. Van der Wiel, op. cit.; Spiegal, op. cit.; Murray, C. "Migration, Differentiation and the Development Cycle in Lesotho" African Perspectives, 1, 1978.
43. Ashton, op. cit., p. 152.
44. Williams, J.C. Problems and Prospects of the Economic Development of Agriculture in Lesotho, 1970, quoted in Murray, op. cit., 1976a, p. 11.
45. Leistner, G.M.E. Lesotho: Economic Structure and Growth, 1966, p. 35.
46. Wallman, S. "Conditions of Non-Development: The Case of Lesotho" Journal of Development Studies 8(2), 1972, p. 260.

CHAPTER 3

WATER IN THE MOUNTAINS

1. Introduction

Sansom has argued that many of the characteristics of South-Western Bantu (Sotho-Tswana) as opposed to South-Eastern Bantu (Nguni) society have resulted from adaption to differing ecologies.¹ A central feature of the ecology of the central and western plains of Southern Africa, particularly the highveld, Western Transvaal and Botswana, the areas inhabited by Sotho-Tswana peoples, is lack of water. The large concentrated settlements which characterise Sotho-Tswana peoples are partly explained by the infrequency of water sources. It is not surprising, then, given these harsh physical and climatic conditions, that Sotho-Tswana peoples display a substantial concern for water. Even in the mountains of Lesotho where water is not as scarce as in other areas of Sotho-Tswana settlement water has retained a special cultural importance.

This chapter discusses the availability of water in Lesotho and its importance to villagers. Here the focus is on traditional or unimproved sources of water whereas the following chapters deal with the introduction of piped water supplies. Patterns of water use from traditional sources are described in order to be able to assess the impact of piped water on water use. Basotho perceptions of water and the importance of water in Basotho belief systems and customary law are discussed by way

of ethnographic background and also to examine whether beliefs about water could significantly effect the course of the rural water supply improvement programme.

2. Availability of Water

There are two sources of water: rain and ground water.

(a) Rainwater

Unreliable and infrequent rain is characteristic of the interior plateau of Southern Africa inhabited by Sotho-Tswana peoples. This is most extremely illustrated by the case of Botswana where Schapera has, for example, described how "The scarcity of perennial water supplies was one of the greatest economic handicaps with which the Kgatla had to contend."² Among the Kgatla, particularly before the installation of pumped water supplies and concrete reservoirs, surface water was also in short supply, with the result that the villagers' whole livelihood depended upon the coming of the rain. Schapera argues that the Kgatla's dependence on the rain is illustrated, amongst other things, by the importance accorded to the word pula (rain), which is often used to infer prosperity or rightness.³ A recent illustration that the importance of rain has not altered since the time of Schapera's fieldwork is the choice of the term pula to denote the standard currency in Botswana.

The annual average rainfall in Lesotho is about thirty inches, whereas Schapera recorded approximately twenty inches

in Mochudi, Botswana. Yet although Lesotho's annual rainfall is higher than in Botswana, rain in Lesotho is capricious and inimical to agriculture. It is characterised by an unreliability which causes severe droughts from time to time, by hail and violent summer thunderstorms which may damage crops, by snow in the mountains in winter, and by a considerable contrast in the amounts of rain in summer and winter which means that correct timing of the summer rains is crucial to the success of the crops.⁴ In general the amount of rain decreases from East to West. The unsuitability of the rain for agriculture was evident in Mokhotlong in the summer of 1975/6 when, following a long dry spell, exceptionally heavy rains destroyed the crops washing away the loamy soils along with many of the seeds and young plants, and turning the clayey soils into heavy bogs preventing harvesting.

So, despite the fact that Lesotho enjoys a rainfall higher than other areas of the Southern African interior, the variability of the rainfall makes it an unstable source for agriculture. Rainwater is only used as a source for domestic water use in the drier lowlands where small dams may be built to collect summer rain.

(b) Ground Water

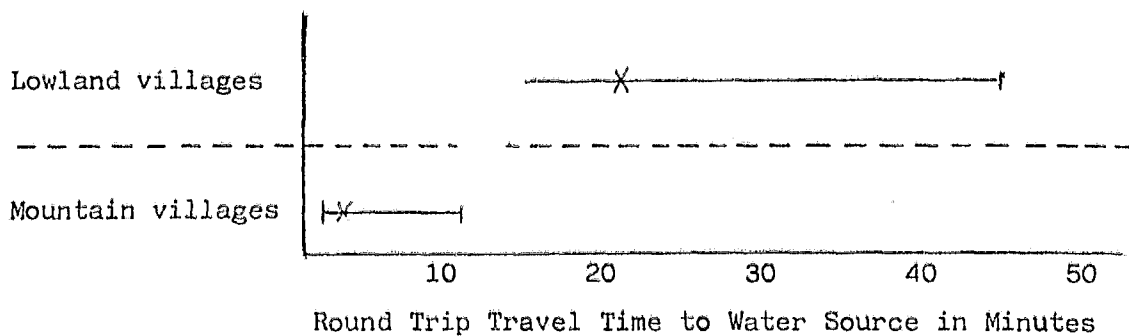
Ground water is obtainable from two sources: streams and springs. Spring water is the preferred domestic source in Lesotho, and stream water rarely is used in the home. Lesotho is distinctive in Southern Africa and extremely fortunate that

it not only has a great deal of ground water but that the water is reasonably accessible. Especially in the mountains any number of fresh water springs are to be found on the sides of most valleys. The lowland areas are less fortunate and their distribution of ground water sources more closely approximates that of the arid Orange Free State.

The abundance of potable springs in the mountains is illustrated in Figure 3.1 which compares the difference in round trip water collection travel times to unimproved sources in lowland and mountain villages. Figure 3.1 shows that whereas the mean travel time in the lowlands is about twenty minutes, in the mountains it is five minutes. The mountains' exceptional ground water supply is partly as a result of the higher rainfall and partly as a result of the volcanic mountain rocks' comparative permeability in comparison with the sandstone of the lowlands.⁵

Figure 3.1⁶

Round Trip Travel Times to Unimproved Sources



Notes

- | |— The range of village mean times
- X— The mean of village means

Yet Bonney estimates that even in the lowlands there are two perennial springs per square kilometer.⁷ This would suggest that the average village would be within a kilometre of a suitable spring. In practice, lowland villages tend to lie either on the many sandstone mesas in the country or, more commonly, on the colluvial slopes below. This settlement pattern avoids building on the scarce arable land, and has the additional benefit of placing villages close to the major spring lines, so that most villages have one or more perennial sources of spring water within a few hundred yards. Ground water sources also fluctuate with the rainfall and in the wetter months a great many seasonal springs often start up and may provide an even closer temporary water source. In one mountain village there were five springs in use during the summer and only one the following winter.

3. Water Quality

The quality of ground water varies according to the season, the strength and situation of the source, the nature of the terrain and the effectiveness of the source's protection. It is impossible to estimate precisely how the quality of unimproved sources in Lesotho compares with that in similar countries since water quality is dependent upon so many factors. But certainly nearly all Lesotho's domestic water supplies would be condemned if World Health Organisation standards were applied. Nevertheless, it is generally true that water quality

from unimproved sources in Lesotho is better than in other similar countries.

The reason for this is that mountain springs are remarkably clean and are considerably cleaner than lowland springs. This is because of the high rates of flow in mountain springs, because of the greater choice of springs in the mountains and because of the lower mountain population densities. Moreover, villagers have themselves protected many of the sources from pollution by digging away the earth surrounding a spring and placing stones around it or by diverting polluted surface water.

The chief sources of water pollution are animal and human faecal material. Large numbers of animals populate villages and the areas adjacent to villages in which village water sources are usually found. Despite attempts to control animals from contaminating water supplies water quality tests indicate that faecal pollution originates primarily from animals.⁸ Nevertheless, the lack of cover in Lesotho means that dongas (erosion gullies) which often develop near water sources, are favourite human defecation sites and as a result human faecal pollution may also occur. In the mountains it may be that the lower population density and the jagged terrain affords more numerous defecation sites and is a further factor accounting for the lower pollution figures for mountain springs.

In summary, the mountainous East of Lesotho is exceptionally fortunate in comparison with other regions of the country and similar countries in that both ground and rain water are in good supply, and although the rainfall is not well-suited to

agriculture, domestic water sources are remarkably frequent and contain water of a reasonable quality.

4. Water Sources in Customary Law

In comparison with the literature on customary law in Botswana where water rights are an important issue,⁹ there is little mention of the place of water in customary law in Lesotho despite a substantial literature on the social anthropology of Basotho law.¹⁰ This reflects the fact that the relative availability of water in Lesotho has meant that water rights and water generally are of much less importance than they are in other Sotho-Tswana societies and elsewhere in Africa.

The control of water sources is mentioned briefly in a late amendment of the Laws of Lerotholi¹¹ which states that it is the duty of the principal chief to issue orders.... "preventing the pollution of the water in any stream, watercourse, or waterhole, and preventing the obstruction of any stream or watercourse."¹²

The control of natural water sources, as with land, resides in the chieftainship. Local chiefs and headmen are responsible for ensuring that cattle are kept away from traditional water sources and that new settlements are not established in a position which might pollute a village's water supply. In rare cases the chief may of his own accord appoint an individual to be responsible for protecting traditional supplies.¹³ The

chieftainship is also seen to be responsible for the control of rain. If a chief is not himself skilled in the art of rain-making then he is responsible for hiring a rainmaker to "churn for rain" on behalf of his people. The incidence of rain can become a gauge for assessing a chief's power (see below).

As regards water rights, water is a "free commodity"¹⁴ which may generally be used without restriction. Water rights are a right of citizenship,¹⁵ although they are only freely available to residents of a particular chieftaincy. Restrictions on the use of water from traditional sources for domestic use are only enforced in times of drought. Animal watering rights are no more exclusive in customary law, but Jingoos recounts how in his boyhood (in the lowlands) as a herdboys he was often involved in disputes over access to the best watering places.¹⁶ Springs situated amongst the fields which could be used for irrigation have of necessity more exclusive rights. Sheddick notes that springs in fields are used by those who have the use of the fields immediately below the spring, though even here land division would be such that more than one household would benefit from the spring.¹⁷

5. The Importance of Water.

It is convenient to discuss the importance of water for Mokhotlong villagers in two ways: at the level of Basotho cosmology, and in terms of the practical significance of attitudes towards water. The reason for this is that although 'significant' attitudes may obviously be made more explicable by an understanding

of their position in an entire belief system, in this case and for the purpose of the main concern of this study no significant relationship was found to exist between the place of water in Basotho cosmology and water use. However, some development anthropologists would argue that it may be conceivable, for example, that in certain societies taboos on water may exist which could affect the pattern of water use, and consequently the success of a development programme attempting to improve village water supplies. In consequence, an account of the importance and significance of water in Basotho cosmology is given here, despite its lack of relevance to the central arguments of the dissertation, precisely to illustrate what little relevance the 'cultural barrier' argument has, in accounting for the failure of development programmes in Lesotho.

(a) Water in Basotho Cosmology.

In this chapter, two apparently contradictory findings as to the availability of water have emerged. On the one hand rainfall is variable, unreliable and often unsuitable for agriculture, and on the other, surface water is relatively accessible, especially in the Eastern areas. It seems that only the first of these facts, the scarcity of water is reflected in the symbolism of water in Basotho cosmology. The most significant factor explaining this apparent contradiction is that much of the Eastern mountain areas, where water is so much more plentiful, have only been inhabited in the last century (see Chapter 2). Many of the similarities in social structure

Page 112 omitted from pagination

and beliefs that the inhabitants of Lesotho share with other Sotho-Tswana peoples may well reflect a common past rather than adaption to their present physical environment. Specifically it seems that the symbolic importance of water as reflected in ritual and myth has its origins in an earlier period and cannot be said to be strictly related to present environmental conditions. Alternatively, the fact that rainwater, which has remained a relatively unchanged water source, is used primarily for agriculture whereas surface water now in more abundant supply is used for domestic purposes, may be significant in explaining the importance attached to water in Basotho cosmology. Successful crops are certainly rated of greater importance than reduced housework.

How then is water represented in Basotho cosmology? How do Basotho attempt to control this aspect of their environment?

Reference to water appears frequently in Basotho myth and ritual. There are also a number of taboos associated with water. It is 'dangerous' for example, to 'splash the water' when carrying water. Similarly, bringing water into a hut at night is also 'dangerous'; a thokolosi (a familiar) might enter the home hidden in the pail. If water has to be brought in, it is said that the familiar can be prevented by dropping some hot ash into the water.

In ritual and mythical contexts the different qualities of water, its coolness, wetness, transparency and life-giving properties become associated with environmental and structural issues. These are discussed below. The idea underlying this

interpretation is that for the Basotho the natural order and the social order are interdependent and that the natural order can be affected by the moral achievements of society. This area of interdependence is most vividly apparent in myth and ritual, for these contexts represent a means by which society can attempt to regulate the forces outside its control. Taboos or customs, for example, which Basotho explain in terms of their place in the agricultural cycle typify the link Basotho perceive between the natural and real world.¹⁸

Firstly, water represents a cool element in the hot-cold continuum found in Sotho-Tswana cosmology. Associated with coolness is the power of cleansing. While water is obviously used in washing, water may also cleanse spiritually. Water is an important component of the plaster which is used periodically to resurface the inside of huts. When a woman has recently given birth her hut is replastered and, as it were, 'disinfected'. At the end of a burial all those that have attended troop to the deceased's family where water is ritually poured over everyone's hands to mark the ending of the burial ceremony and by way of preventing anything from adversely affecting the future. Casalis notes that after battle warriors plunged themselves into the nearest stream to purify themselves to prevent the shades of their victims from pursuing them.¹⁹ Cleansing with water often marks the transition in phases of the life-cycle: a new-born baby is thoroughly washed, a final phase in initiation ceremonies is a washing in water and dung,²⁰ a corpse is ritually washed and 'sprinkled' with medicines.

In other contexts water seems to represent a medium through which both good and evil forces can work. Most ritual medicines contain some water. The water, however, is not the active agent but represents a medium through which the medicinal powers work. The taboo against bringing water into a house at night (see above) illustrates water's intermediary role. The familiar enters a home by means of the water. Again, in the taboo that Ashton mentions prohibiting pregnant women from crossing rivers,²¹ the river itself is not seen as the contaminating agent, but rather it provides a medium through which such an agent could work.

But water does take on a more positive meaning in a further set of contexts, and seems to be associated with ideas of plenty, prosperity and fertility. The most immediate association here is the very real connection between rainwater and fertility of the crops. Thus Ashton, quoting Segoete, interprets rain as the "life-giver".²² The association between rain and abundance is exemplified by Lesotho's national crest Khotso! Pula! Nala! (Peace! Rain! Plenty!).²³ The crest links rainfall with good government and the strength of the nation. The chieftainship, the seat of worldly power, is also responsible for the control of the elements. The chief's role is "essentially that of an intermediary seeking rain from God on half of the tribe."²⁴ Droughts are customarily thought to indicate the displeasure of God (Molimo) and the ancestral shades (Balimo), and are sent by way of retribution for irresponsible government. In this vein, Murray cites an informant who interprets a comment

that the rain had declined in recent years to be a reflection on the state of national politics.²⁵

Two communal rituals which are believed to bring rain might be mentioned here. The first, in which only the men participated, was molutsoane (a communal hunt).²⁶ A chief would summon all the men of his village together to hunt. All the animals killed would be taken back to the chief who would accompany them to a river where the animals would be skinned and the intestines cast into the water. Before they reached home, bearing the animal carcasses, it said that all would be drenched by rain. One version of a molutsoane given to Murray suggested that a portion of an ox would be given to a "large black serpent" in the water and while the serpent was devouring the offering, a ngaka (traditional healer) would gather slime from the serpent's scales to enrich his rainmaking potion.²⁷

Two points to note from this sketch of a molutsoane are, firstly that rain is again associated with plenty (of meat). Furthermore, Jingoos follows tales of molutsoane with reminiscences about a lost and more plentiful past, in comparison with the scarcity and national disorder of the present. The second point to note is the association between the serpent in the river and the rainfall. The "implication....that it was the snake which governed the rain"²⁸ will be returned to below.

A second communal ritual, this time organised by the women, which was certain to bring the rain involved the stealing of a lesokoana (a porridge stirring-stick) from a neighbouring

chieftainness.²⁹ If the women of one village managed to wrest away the lesokoana from their neighbouring village, it was said that the rain would fall before they returned home triumphant. Jingoos vividly describes a dramatic fight for a lesokoana he observed in his boyhood. He notes that once the lesokoana had been captured, the women would go down to the river to chant rain-prayers and smear themselves with clay before returning home.³⁰ Points which this ritual illustrate are the association between the pride and strength of the village with rainfall and the consequent abundance of crops.

Yet a further, possibly more fundamental meaning of fertility which is represented by water is illustrated in both ritual and myth. This is the fertility of women³¹ and the consequent stability of alliances between families.

In Basotho ethnography the association between women and water is well known. Ashton, for example, interprets the custom in which a father is showered with water on the announcement that his wife has born a daughter as a first stage in the socialisation of women to their domestic role. He suggests that "womanhood is represented by water"³². A similar interpretation could be given the various other occasions in which women are associated with water. On the onset of menarche, for example, a young girl is sent to the spring to draw water by way of "public acknowledgement that the girl is entering maidenhood."³³ Again, when a prospective bridegroom's family approach the prospective bride's family to arrange a marriage, the son's parents are said to 'beg' for a sekhametsi (a drawer

chieftainess.²⁹ If the women of one village managed to wrest away the lesokoana from their neighbouring village, it was said that the rain would fall before they returned home triumphant. Jingoos vividly describes a dramatic fight for a lesokoana he observed in his boyhood. He notes that once the lesokoana had been captured, the women would go down to the river to chant rain-prayers and smear themselves with clay before returning home.³⁰ Points which this ritual illustrate are the association between the pride and strength of the village with rainfall and the consequent abundance of crops.

Yet a further, possibly more fundamental meaning of fertility which is represented by water is illustrated in both ritual and myth. This is the fertility of women³¹ and the consequent stability of alliances between families.

In Basotho ethnography the association between women and water is well known. Ashton, for example, interprets the custom in which a father is showered with water on the announcement that his wife has born a daughter as a first stage in the socialisation of women to their domestic role. He suggests that "womanhood is represented by water"³². A similar interpretation could be given the various other occasions in which women are associated with water. On the onset of menarche, for example, a young girl is sent to the spring to draw water by way of "public acknowledgement that the girl is entering maidenhood."³³ Again, when a prospective bridegroom's family approach the prospective bride's family to arrange a marriage, the son's parents are said to 'beg' for a sekhametsi (a drawer

of water).³⁴ Water is an appropriate symbol of domesticity, but as Murray has shown, its significance can be taken still further. A third element must be considered in the association between water and women: the snake.

Large snakes are a common feature of Bantu mythology and their association with "deep pools", or "rivers" has often been recorded. In Sotho-Tswana cosmology Schapera has recorded Kgatla opinions and tales of a large snake named kgwanyape who lived on top of Modipe hill.³⁵ Schapera notes how the "fat" of kgwanyape was a crucial ingredient in rain-making medicine, and he also gives a number of accounts by Kgatla informants which suggest that the snake itself caused rain. Kgwanyape is depicted as "drawing water from the clouds and thus causing rain",³⁶ and another informant recounts how on the creature's departure after being sighted, it left in its wake "a heavy downpour of rain".³⁷ Schapera's chief informant gives greater detail as to how she obtained "mucus" from kgwanyape for rain medicines. She climbed the hill where kgwanyape lived, undressed at an appointed spot and, smeared with rain medicine, approached the pool near kgwanyape's cave. The snake licked the woman ("it also put its tongue in my ear and licked me there") and then fell asleep at her feet. She then took the snake's "mucus" and "eggs", dressed and descended, and by the time she arrived home rain had drenched her.³⁸

The Basotho equivalent of kgwanyape, khanyapa,³⁹ who is often called Monyohé is a common character in folk-tales. The following summary of a folk-tale collected by Postma reiterates

many of the themes in Schapera's informant's tales:

"A chief is married to a barren woman. By mystical intervention a son is born to them in the form of a snake, Monyohe. Monyohe grows up in seclusion and wishes to choose a girl for his wife. He goes off to a river pool to watch the maidens of another clan as they come to bathe, and chooses Senkepeng, the daughter of the other chief. He approaches her, and offers water in place of cattle as bohali (bridewealth) but she ridicules the idea of being married to a snake. In anger Monyohe withholds the water and savage drought ensues: the cattle die, the crops wither, the people starve. Eventually Masilo (a common hero in Sesotho folk tales) the brother of Senkepeng, is sent by his father to search for water. The search leads him to Monyohe's pool where the big snake in return for "loosening the waters" to relieve the drought, extracts a promise from Masilo of his sister's hand in marriage. Prosperity returns to the land, but in due course Monyohe comes to claim his bride. Senkepeng, terrified, flees over the mountains. There is an agreement that if Monyohe can catch her she will go with him, for "she knows now that water is greater wealth than cattle" Monyohe pursues Senkepeng but, as a result of a ruse to delay the snake - knives planted in the ground with their blades uppermost - his skin is split open from nose to tail and there emerges a handsome young man. Senkepeng immediately falls in love with this young man - Monyohe transformed - and they return together amid general rejoicing to the village of her father, the chief."⁴⁰

What is interesting in this tale is the interchange between cattle and wealth. Murray comments on this:

"The transfer of bohali cattle is the jural mechanism which activates a woman's fertility. In an analogous manner, perhaps water is..... the source of female procreative power."⁴¹

Murray's analysis, associating water and women's fertility, sheds light on the use of water in other ritual contexts.

It is significant that two important phases on the human productive life-cycle, the onset of menstruation and the initial request for a bride, are both marked by reference to women

many of the themes in Schapera's informant's tales:

"A chief is married to a barren woman. By mystical intervention a son is born to them in the form of a snake, Monyohe. Monyohe grows up in seclusion and wishes to choose a girl for his wife. He goes off to a river pool to watch the maidens of another clan as they come to bathe, and chooses Senkepeng, the daughter of the other chief. He approaches her, and offers water in place of cattle as bohali (bridewealth) but she ridicules the idea of being married to a snake. In anger Monyohe withholds the water and savage drought ensues: the cattle die, the crops wither, the people starve. Eventually Masilo (a common hero in Sesotho folk tales) the brother of Senkepeng, is sent by his father to search for water. The search leads him to Monyohe's pool where the big snake in return for "loosening the waters" to relieve the drought, extracts a promise from Masilo of his sister's hand in marriage. Prosperity returns to the land, but in due course Monyohe comes to claim his bride. Senkepeng, terrified, flees over the mountains. There is an agreement that if Monyohe can catch her she will go with him, for "she knows now that water is greater wealth than cattle" Monyohe pursues Senkepeng but, as a result of a ruse to delay the snake - knives planted in the ground with their blades uppermost - his skin is split open from nose to tail and there emerges a handsome young man. Senkepeng immediately falls in love with this young man - Monyohe transformed - and they return together amid general rejoicing to the village of her father, the chief."⁴⁰

What is interesting in this tale is the interchange between cattle and wealth. Murray comments on this:

"The transfer of bohali cattle is the jural mechanism which activates a woman's fertility. In an analogous manner, perhaps water is..... the source of female procreative power."⁴¹

Murray's analysis, associating water and women's fertility, sheds light on the use of water in other ritual contexts.

It is significant that two important phases on the human productive life-cycle, the onset of menstruation and the initial request for a bride, are both marked by reference to women

drawing water. The association between water and women's fertility similarly illuminate the commonly reiterated Basotho explanation as to where mankind originates: "the river" or "lake" at Ntsuanatsatsi.⁴² The water associated with this explanation suggests that it may be interpreted as a metaphor for sexual union. In myth sufficient rain is dependent upon women's correct relationship with the snake, the phallic antithesis of man, and especially upon his 'slime' or 'mucus', representing man's sperm for their making medicine. That abundant rainfall is associated with sexual experience is further illustrated by Schapera's informant's description of the snake licking her and entering her ear. Yet as Murray's interpretation of the folk-tale above suggests, water is not simply a symbol of sexuality and fertility, but in its antithesis to cattle comes to represent the strength of the family. This is illustrated in further contexts documented by Ashton. Ashton notes that the dissolution of or dissatisfaction in marriage may be signified by a woman smashing her water pot at the spring.⁴³ This action represents an unstable marriage, and may possibly also imply sexual dissatisfaction. The association between water and marriage is positively affirmed in Ashton's description of the kenela custom by which a widow is "married" to, or consorts with, one of her husband's kinsmen.⁴⁴ Among the Phuthi this new "marriage" is symbolised by a ritual during which the widow fetches water with which she and her consort wash.

In this section the importance of water in Basotho cosmology has been analysed, and water has been demonstrated to be rich

in symbolic inference. It is necessary now to change perspective from one of anthropological elaboration on Basotho beliefs, to one which examines the practical significance of Basotho perceptions of water, and their choice of water sources.

(b) Basotho perceptions of Water and Water Sources

The symbolic inferences and ritual uses of water discussed above have little significant effect on villagers' perception of water, and certainly no effects which would in themselves disadvantage a development scheme designed to improve traditional water supplies. Ideally water should be clean, cool and freshly drawn, and water sources close-by and containing fast flowing water. Piped water supplies supply water of a quality closer to the ideal than traditional sources and there is consequently no 'cultural obstacle' in the use of a piped water supply. Indeed, the quality of water they supply enhance their desirability.

The subject of water quality was not one of the greatest interest or concern in the village.⁴⁵ Detailed questions on water quality produced little elaboration as to what qualities indicated good water other than coolness, cleanness and a general freedom from particles. No households went to the trouble of boiling water before use.

Dirty water is generally disliked, 'dirt' being defined as visible pollution. Villagers allow that dirty water may cause disease, but the 'seeds of disease' (lipeo tsa mafu), or the 'little monsters' (likokonyana) which cause the discomfort,

are conceived of as visible creatures and not as invisible agents of infection. The majority of villagers recognised that defecation near water sources might pollute the water. In the village of Thabang where a subvillage was situated higher up the mountainside above the main village, a number of women explained that the reason water for domestic use was not drawn from the nearby stream was that the villagers from the sub-village defecated in the higher reaches of the stream. This, however, did not mean that the same informants did not themselves use the donga (erosion gully) in which the stream flowed as a defecation site.

Another water preference expressed by some informants was that domestic water should be freshly drawn. Stored water may become 'polluted' physically or spiritually, and as a result no mountain household had any water storage facilities.

6. Water Collection and Use from Traditional Sources.

This section contains a summarised description of collection and water use from traditional sources. It is presented in order to measure the effect of improved supplies in the following chapter. In the field, intensive studies of the patterns of water collection and use were made to facilitate the design of water supply systems which would more exactly meet local requirements. A fuller description of these patterns and the consequences for water supply design are presented elsewhere.⁴⁶ The material is presented first in the form of a case study, and then as a summary of statistical data.

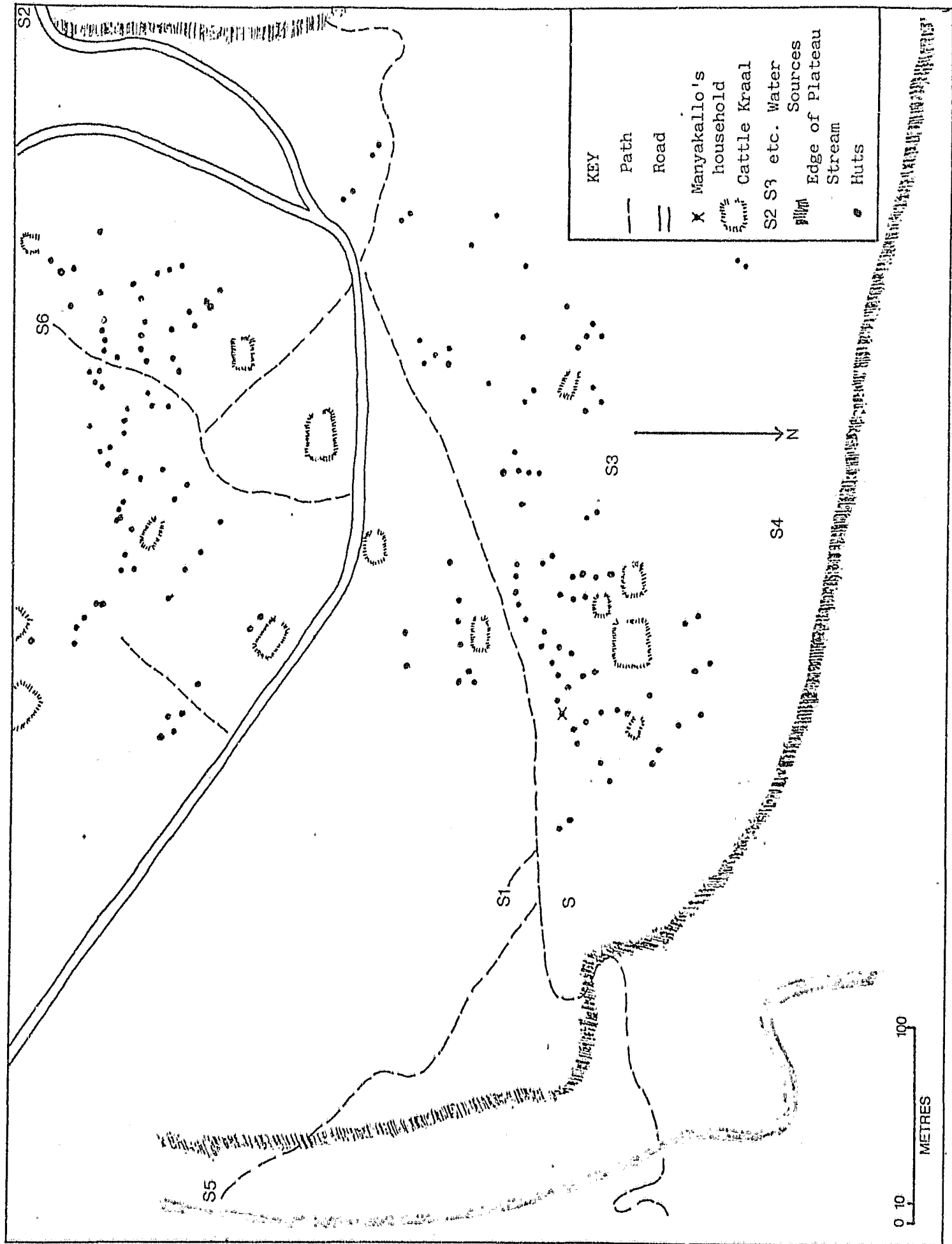
(a) A Case Study of Water Collection and Use

Manyakallo is a mother of three children who lives in the village of Thabang (see Figure 3.2). Her husband Tseliso spends most of the year away on the mines, and she and her children live in a single hut on a small plateau perched on the steep slopes of the Senqu (Orange) river valley. Before the arrival of a piped water supply for the most part of the year Manyakallo drew water from a spring protected by a few stones some fifty metres down a well-worn path to the East of the village (S1 on Figure 3.2). Often in the winter that spring would dry up or freeze and she would have to walk to a further spring (S2) some 450 metres away from her home. During particularly long dry winters this second spring has also been known to stop flowing and in these periods she would be forced to walk a further 100 metres West of the village for clean water.

Her daily routine as regards water collection and use was as follows. When she awoke in the morning at first light, one of her first morning chores was to put the remaining water in the house in a pot on a dung fire and walk down to the spring to refill her bucket. At the spring she might have to queue along with the other village women and might pass the time of day while awaiting her turn. She would return with a fourteen litre pail on her head and the scoop floating on the surface to prevent the water from splashing. This water would generally be used to wash the dishes, her children and herself. If she cooked lesheleshele (a watery porridge) she might send her

Figure 3.2

Unimproved Water Sources in Thabang



daughter to fetch another load. Manyakallo does not store water for any length of time and in general prefers to draw and use the water within a few hours.

If during the day, she had decided not to work in the fields she might have done any number of chores for which more water was needed. The re-plastering of the inside walls of her hut required a basin of water, though in the rainy season she might have used the rainwater that collects in a nearby hollow in the ground, or water that she had drawn from one of the polluted, unprotected seasonal springs that start up in the summer (S3, S4 and S6). Tseliso used water from these unprotected sources when he built their new hut. Manyakallo would also have to water the vegetable patch at the back of her hut in the spring and summer. This might require another load, or she often simply used dirty household water. A major water-using activity which Manyakallo took on every week or so when there was not a great deal to be done in the fields was to brew beer. This required three to four large buckets of water, which Manyakallo would have to collect from the protected spring. She spoke derisively of the owners of a shebeen situated on the bridle path who collected their water from the nearby stream.

Once every week or so Manyakallo would have to go down to the river and wash her clothes. She generally went to a fork in the stream some 500 yards away where a large flat stone jutting into the stream provided a convenient washing spot (S5). As often as not this was a Saturday, in preparation

for Sunday morning church, and in the summer she would take the opportunity to bathe in the stream. If she decided to wash at home this would entail a further one or two trips to the spring and back.

Before evening she would certainly have had to make at least one further trip to the spring. Water would be needed for the evening meal, for drinking and possibly for washing. Manyakallo also prefers to keep half a pail or so of water in the house overnight for drinking and to put it on the fire in the early morning. The last draws would be made in the late evening before it was completely dark.

Tseliso's daily routine when he is home for his annual holiday from the mines is hardly concerned with water at all. This is firstly because on his visits home he regards that he is 'on leave' and rarely does much work at home apart from the ploughing, if he can get away from the mines in the spring. Secondly, the strict division of labour between house-work which is 'woman's work', and tending to the animals which is 'men's work' means that Tseliso does not have to handle water at all. The herdboys ensure that the animals are watered at streams during the day, and there are no water troughs in the village.

(b) The Overall Picture.

The following summary of survey data gives a broader understanding of the pattern of water collection and use in villages before the arrival of piped water supplies.⁴⁷

Before the arrival of piped water supplies the range of water sources used included unprotected springs, waterholes, streams, small dams, unprotected rainwater pools and crudely protected springs. The distribution of sources alters by region: waterholes, for example, occur only in the lowlands, and in addition the scarcity of water and the sandy lowland terrain facilitate the construction of small dams in the lowlands where none exist in the mountains. Despite these differences practically every villager has a range of different sources from which water may be drawn.

The plurality of village water sources makes it difficult to assess accurately the amount of water villagers use. In the course of the surveys on water collection and water use, it was only possible to observe water collections from a single source (usually the closest cleanest spring). Consequently the results did not take into account water use from other sources. A further problem was that even where an attempt was made to record total water use it was found to be very difficult to assess water use not drawn in bucketfuls. How, for example, does one assess water use when washing clothes at a stream? When water for washing clothes was occasionally drawn and carried home this might account for up to seventy seven per cent. of daily use. In consequence, the recorded range of daily water use in villages with improved supplies changes from under five litres to over forty litres per capita per day. The reason for this great variation is that while a household's typical domestic use, i.e. cooking, drinking

and washing at home, is approximately six and a half litres per capita per day, every other day this will be supplemented by much larger water uses, i.e. washing clothes, brewing, and watering the garden. A crude per capita figure of eighteen litres per day is obtained if the total water used is divided by the total number of users.

The main categories of water use are food washing, cooking, drinking, clothes washing, personal washing and utensil washing. In the Mokhotlong sample these categories accounted for eighty-eight percent of carried water used from the main village spring. Other uses include brewing, plastering, animal watering and garden watering, and, as indicated above, the amounts of water used in these activities may be substantial but they do not always occur regularly. The choice as to which water source should be used for a particular task depends on the available choice of sources in the area at a particular time of year, on the distance and perceived difficulty of the journey to the source, on the source's water quality, and on the quality of water required. In general, springs will be used for all tasks where water quality is regarded to be of importance. Fast-flowing springs are perceived to be the cleanest sources and where possible are used for water intended for cooking, drinking or food washing. At the other end of the scale, river or stream water is rarely carried home for domestic purposes. Its use is normally reserved for animal watering and clothes washing. Water for watering gardens, plastering and occasionally brewing is drawn from the nearest available source without

too much regard for quality. Table 3.1 illustrates the range of traditional sources available, their perceived quality and their typical uses.

The seasonal change in the pattern of water use is not very great. While the survey did not illustrate any significant seasonal changes in the amount of water drawn from springs, it is likely that more water is used from a wider variety of sources in the summer than in the winter. In the Mokhotlong case-study villages the number of springs used in the summer in each village doubled. Water use is greater in the summer than winter because mountain streams are often frozen over and icy cold in the winter with the result that less washing and no stream bathing takes place over the winter months.

The extent to which water is used at the source rather than carried home depends on the condition of the source and its proximity. Water use at the source occurs far less often in the lowlands than the mountains not only because water sources are less conveniently placed for casual use at the source, but also because lowland streams and springs tend to be surrounded by mud. In both areas the water use most regularly carried out at the source is clothes washing. Summer personal washing and washing vegetables and other food is commonly carried out at the source in the mountains. The majority of water carried home is used domestically.

Most water collections are made between 5.00 and 9.00 a.m. and 4.00 and 7.00 p.m., though in the mountain villages collections start a little later and finish a little earlier

Table 3.1

Typical Water Quality Perceptions and Uses from Traditional
Sources

Source	Perceived quality	Uses		
		Often	Sometimes	Never
Unprotected spring	variable	all uses		
Waterhole**	variable	all uses		
Unprotected rainwater catchments	poor quality	animals plastering gardens	utensils	cooking drinking clothes personal brewing
Small dam**	poor quality	animals plastering gardens	clothes utensils	cooking drinking brewing
Stream or river	good quality	clothes animals	bathing brewing	cooking
Protected spring		all human uses		animals

Notes

* This data is drawn from both lowland and mountain villages.

** These sources occur only in lowland villages.

than in the lowlands. The mountain variation is probably explained by the intense cold of mountain nights. Just over ninety-six per cent. of collections are made by women, and eighty nine per cent. of these collections are made with containers which can carry over ten litres of water. The range of the amount of water carried per load varies between five and twenty five litres with fifteen litres being a typical load. Most households make between two and six collections per day. Mountain households have substantially shorter water collection journeys in comparison with lowland households (See Figure 3.1) despite the fact that the steeper mountain slopes make water collection in mountainous regions more arduous. The mean time spent in lowland villages on water collection to an unimproved spring is twenty two minutes, whereas the mean is only eleven minutes for mountain villages. This means that the time per household per day spent on water collection is ninety nine minutes for a typical lowland household and fifty minutes for a typical mountain household.

7. Conclusion

This chapter has discussed the availability and importance of water in Lesotho and described water collection and use in remote mountain villages. The main purpose of this discussion has been to present 'base-line' data against which to assess the material impact of improved water supplies.

Reference to water occurs frequently in Sotho-Tswana cosmology suggesting scarcity. Yet both rain and ground water

are to be found in relative abundance, especially in the eastern areas. The lack of reference to the regulation of water in Lesotho's customary law is indicative of the relative unimportance of water to village life. While this is only a relative assessment, for water remains a perennial household chore and the rainfall remains unreliable, it does raise the question as to why improving village water supplies has become such a high priority in rural development.

In this chapter patterns of water collection from traditional sources have been described and the complexity of water use has been illustrated. It is against this background that the material impact of a rural development programme intent on improving village water supplies can be measured.

Reference Notes to Chapter 3

1. Sansom, B. "Traditional Economic Systems" in Hammond-Tooke W.D. (ed.) The Bantu-Speaking Peoples of Southern Africa, 1974.
2. Schapera, I., Rainmaking Rites of Tswana Tribes, 1971, p. 10.
3. ibid., p. 15
4. For analyses of the climate in Lesotho see, Sheddick, op. cit., pp. 45-47, and Smit, op. cit.
5. Ashton, op. cit., p. 121.
6. This figure was drawn up in the course of the evaluation and has been constructed from the mean household to water source distance walked by villagers from five Mokhotlong villages and ten Mafeteng villages (twenty households per village). While slope has been taken into account in these travel times, the walking pace has been kept constant and no allowance has been made for delays en route to and from the water source with the result that the times slightly underestimate the actual times taken on water journeys to traditional water sources.
7. Bonney, G., Groundwater Exploration and Borehole Siting, 1975.
8. The human or non-human origin of pollution can be calculated from the die-off rate of faecal coli and faecal streptococci Feachem, et al., op. cit., 1978, Chapter 8.

9. See for example, Schaper, I., A Handbook of Tswana Law and Custom, 1938, pp. 207-211 and Schapera, I., Native Land Tenure in the Bechuanaland Protectorate, 1943, pp. 44-45.
10. The major publications on the anthropology of Law in Lesotho are Ashton, op. cit., Chapter 5; Sheddick, op. cit.; Duncan, P., Sotho Laws and Customs, 1960; Palmer, V. and Poulter, S., The Legal System of Lesotho, 1972; Hamnett, I., Chieftainship and Legitimacy, 1975; and Poulter, S., Family Law and Litigation in Basotho Society, 1976.
11. The Laws of Lerotholi refer to the customary laws which were first set down in 1903 and which have become the working guide for village courts.
12. "Laws of Lerotholi" Proclamation No. 61 of 1938, item 8(1), para (e), quoted in Sheddick, op. cit., p. 30.
13. ibid., p. 115.
14. ibid., p. 114.
15. ibid., p. 32.
16. Jingoos, S.J. A Chief is a Chief by the People, 1975, p. 45.
17. Sheddick, op. cit., p. 115.
18. Ashton, for example, mentions a number of such taboos, e.g. the taboo prohibiting a deceased's personal belongings from being distributed during the growing season "for fear of provoking frosts, hailstorms or damage to crops", Ashton, op. cit., p. 110. Also see comments in ibid., p. 31, and Murray, C. "Water, worms and women", 1976b, p. 5.

19. Casalis, E., The Basutos: or, Twenty-Three Years in South Africa, 1861, p. 258.
20. Ashton, op. cit., p. 54.
21. ibid., p. 27.
22. ibid., p. 31.
23. Murray, op. cit., 1976b, p. 2.
24. Schapera, op. cit., 1971, p. 17.
25. Murray, ibid.
26. No informants in Mokhotlong had actually participated in a molutsokane. Written accounts of molutsokane are contained in Ashton, op. cit., p. 32; Jingoos, op. cit., p. 24; Murray, op. cit., 1976b, p. 5; and Sheddick, V., The Southern Sotho, 1953, p. 70.
27. Murray, ibid.
28. ibid.
29. For accounts of lesokoana chases, see Jingoos, op. cit., pp. 35-38; Ashton, op. cit., p. 132; Murray, op. cit., 1976b, p. 4, and Sheddick, op. cit., 1953, p. 20.
30. Jingoos, ibid., p. 36.
31. This section relies heavily on ideas contained in Colin Murray's draft paper, op. cit., 1976b, in which he explores the structural contexts of water and women in greater detail than is presented here.
32. Ashton, op. cit., p. 29.
33. Murray, op. cit., p. 8.
34. This Sotho marriage custom told to me in Mokhotlong compares closely with an example from Sekese quoted in Murray, ibid.,

p. 10, in which the bride is requested metaphorically as a "calabash of water".

35. Schapera, *op. cit.*, 1971, pp. 35-42.
36. *ibid.*, p. 36.
37. *ibid.*, p. 37.
38. *ibid.*, p. 40-41.
39. It is interesting to note in view of this argument that khanyapa is defined as both "fabulous serpent" and "rain" in Mabilile, A. and Dieterlen, H. Southern Sotho-English Dictionary, 1950.
40. The summary of Postma's folk-tale is taken from Murray, *op. cit.*, pp. 6-7.
41. *ibid.*, p. 7.
42. See, for example, Ashton, *op. cit.*, p. 10.
43. *ibid.*, p. 76.
44. *ibid.*, p. 83.
45. Ashton's comment that "people pay little attention to the purity of their water supply", *ibid.*, p. 162, is true in that water quality is not a subject of great discussion in villages, but is misleading in so far as it suggests that villages are quite content with dirty water.
46. Feachem *et al.*, *op. cit.*, 1978, Chapter 7.
47. The data has been gathered from studies in fifty-eight villages throughout the country. A total of 1334 household days' water collection and use were recorded in these villages. Villages were selected to ensure a range of sources, and a sample of households in each village were selected for

study, though in the smaller mountain villages this often meant the whole village. Data were collected firstly by observing the preferred source from 4.00 a.m. until 9.00 p.m. of each day of study, and secondly by interviewing all households studied every morning and evening.

CHAPTER 4

IMPROVED WATER SUPPLIES: The Material Impact

1. Introduction

Chapter 1 has outlined the scope and history of the village water supply programme in Lesotho. This chapter discusses the implementation and material impact of that programme in one district of the country, Mokhotlong. Firstly, the growth of the whole programme in Mokhotlong is outlined, and this is then illustrated by a case history of improved water supplies in one village. Secondly, an assessment is made of the material impact of the programme. Evidence for this assessment is drawn from both countrywide studies and statistics, and from Mokhotlong case-study villages.

This chapter's emphasis on the 'material impact' distinguishes it from the following chapter's concern with more ephemeral issues, and specifically from discussion of the social effects of the village water supply programme. The phrase 'the material impact' refers to concrete, direct benefits or costs, such as changes in water use patterns, or the prevention of water-related disease, which villagers have experienced as a result of the development programme.

2. Piped Water Supplies in Mokhotlong.

(a) A note on methodology

The data on the growth of the village water supply programme in Mokhotlong presented in this subsection is derived from three sources: Department of Community and Rural Development (Comrudev) central office files, Comrudev district office files, and from information supplied by villagers. Comrudev central office records of village-level developments are hopelessly inadequate. What records there are invariably only record the funding aspects of projects and contain little or no data as to what the project achieved. A great many files simply bear the name of a village project and contain no other information whatsoever.

Comrudev district office records are marginally better, but a rapid turn-over of staff in Comrudev's early years has meant that there is little continuous documentation in any of the district offices. In Mokhotlong the rapid change-over of staff has been particularly acute. Isolation, an inhospitable climate, the lack of facilities and the demoralisation of under-development makes Mokhotlong the least pleasant district in Lesotho in which to be posted, and Government staff commonly press for transfers out of the district after short periods of service. As a result there are no records in the Mokhotlong district office prior to 1973.¹

A further difficulty that has had to be overcome in piecing together an account of a district's village water supply programme is that a number of organisations have constructed village water

supplies. Besides Comrade's efforts, at different times the Ministries of Health, Works, Agriculture and Interior, and numerous aid organisations such as the Catholic Relief Services and the Peace Corps have built supplies.

It has been no less difficult to gather material on the history of water supply schemes from villagers themselves. Not only are details easily forgotten as to when, by whom, and how a supply was implemented, but, more importantly, the general distrust of Government and aid agencies promoting development projects in the villages has been compounded by the highly political nature of the whole water supply programme.

Villagers would rarely openly discuss details of the water supply programme or anything to do with the village management of development programmes for fear of political reprisal. As a result of these methodological problems the statistical and historical material presented below must only be taken as approximating a description of the growth of the district programme.

(b) The growth of the Mokhotlong programme.

The 1976 census gives the population of Mokhotlong district as 71764. Assuming that the 'urban' population is eight per cent. of the district (probably an over estimate), the rural population in Mokhotlong in 1976 was about 66000. The 1966 census gives the figure of 622 villages in the district. By January 1976 twenty eight villages had been supplied by a total of thirty five piped water supplies.² The mean population supplied per supply is estimated to be 277.³ This means that a total of

approximately 9700 people, or under fifteen per cent. of the rural population have been supplied by piped water in the district. Table 4.1 presents these figures and compares them with figures from other districts and with the national figures.

In addition to the thirty five water supplies that had been completed by January 1976, by the same date materials were on site for six further supplies. This makes a total of forty one supplies for which materials had been supplied in a total of thirty two villages.⁴ Even without these as yet uncompleted supplies Table 4.1 illustrates that a comparatively high percentage of Mokhotlong district's rural population has been supplied by piped water relative to other districts and national averages. The remainder of this subsection discusses the growth of this not insubstantial programme.

Prior to the early 1960s there were no attempts to improve the domestic water sources of villages in the rural areas of Mokhotlong. Three traders had built their own supplies as had the St James' Roman Catholic Mission, but these were primarily for private use. A few small dams had been constructed in the rural areas under the auspices of the Colonial Government's Ministry of Works in the 1950s for animal watering, but the majority silted up fairly soon after construction.

From the early 1960s up to the present day there have been two programmes to improve domestic village water supplies. This is apparent from Figure 4.1 which records the application dates for improved village water supplies in Mokhotlong.

Table 4.1

Lesotho Population Supplied with Piped Water by District

DISTRICT	A Estimated rural population	B No. of supplies	C Mean population per supply	D Rural population supplied	E % of rural population supplied
Butha-Buthe	71608	3	429	1287	1.8
Leribe	190629	18	603	10854	5.7
Berea	132182	44	442	19448	14.7
Maseru	243828	40	413	16520	6.8
Mafeteng	137066	37	490	18130	13.2
Mohales Hoek	124098	17	244	4148	3.3
Quthing	81950	26	315	8190	10.0
Qachas Nek	69397	1	408	408	0.6
Mokhotlong	66023	35	277	9695	14.7
Lesotho	1116781	221	401	88680	7.9

Notes:

- A. Rural populations are derived from the 1976 De Jure census by assuming that 8% of the population lives in towns. (An overestimate in the case of Mokhotlong).
- B. National records are very disorganised. The district and hence national figures have been estimated from a wide variety of sources. When in doubt more rather than less supplies have been assumed. The figures only refer to villages in which the implementation of piped supplies has been completed.
- C. These figures are also estimates. it is likely that they overestimate the population supplied for several reasons: (i) some villages have had more than one supply serving the same population; (ii) de jure population estimates are used when for the majority of the time de facto residents use the supplies; (iii) all residents in a supplied village may not necessarily use the piped supply (see below).
- D. B multiplied by C.
- E. D as a percentage of A.

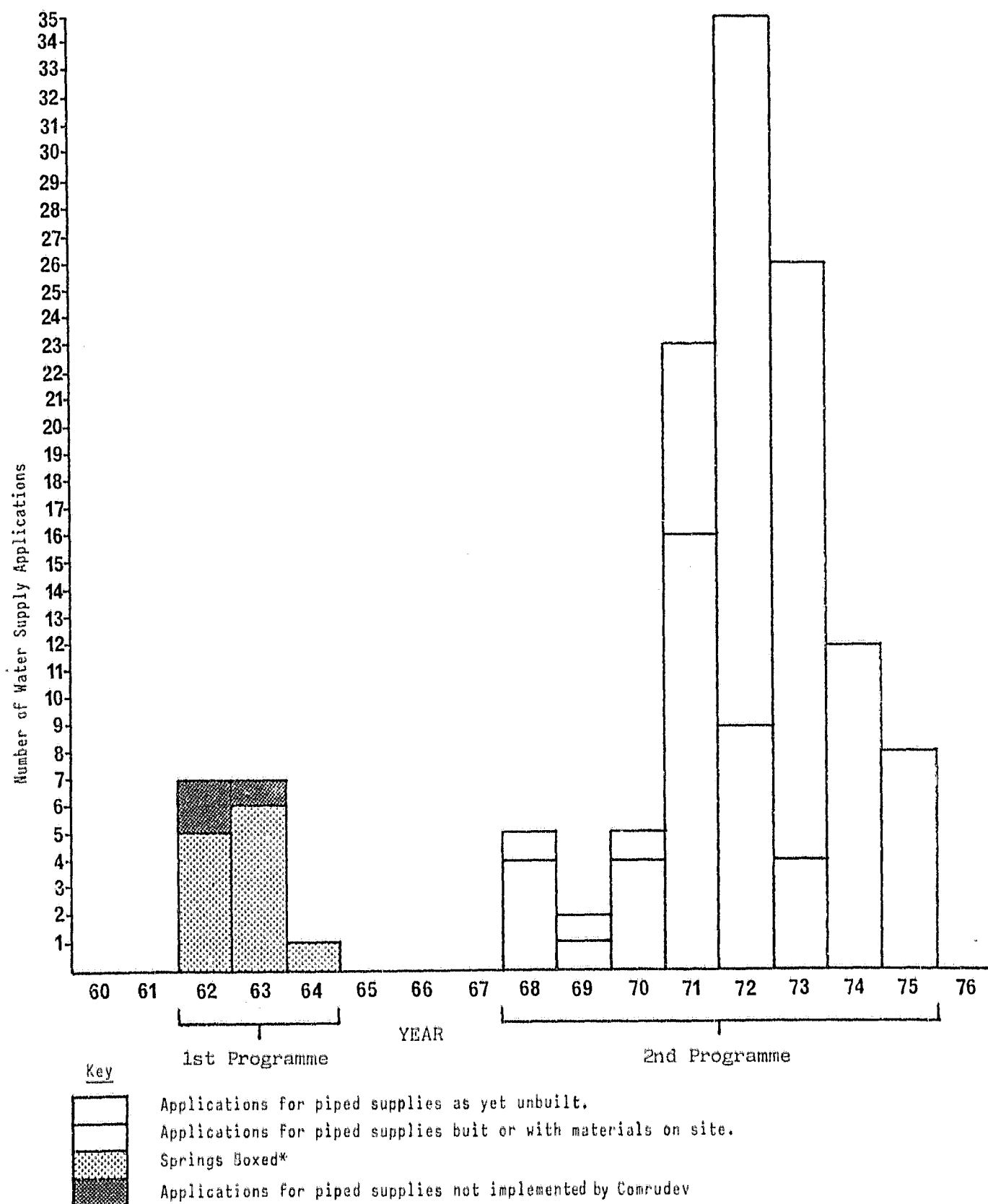
In the first programme the water mechanic responsible for the town supply constructed simple spring 'boxes'⁵ in approximately twelve villages,⁶ and small gravity fed supplies⁷ in three villages. These supplies were all constructed between 1962 and 1964. It seems that only a very few of the supplies built during this period were applied for by villagers themselves, as were many of the later supplies. Rather, they were constructed either where the Ministry of Works felt them to be appropriate, or where they served important individuals in villages. The supplies built during this period did not formally utilise self-help labour.

Figure 4.2 illustrates the distribution of the water supplies constructed in the first phase of water supply improvement in Mokhotlong. Of the ten supplies constructed before 1966 supplies a, k, h, e and g (see Figure 4.2) served the villages of local dignitaries, important chiefs and traders. Supplies a, k, c, d, b, h, f and e all lie within eight miles of the district capital, and all the supplies with the exception of i and g were constructed in villages on or overlooking district roads. Of the three gravity fed supplies, k, c and d, two supplied on village very close to Mokhotlong Camp itself which has since become part of the Camp in all but name, and the third supply lead to a standpipe outside the District Chief's residence.

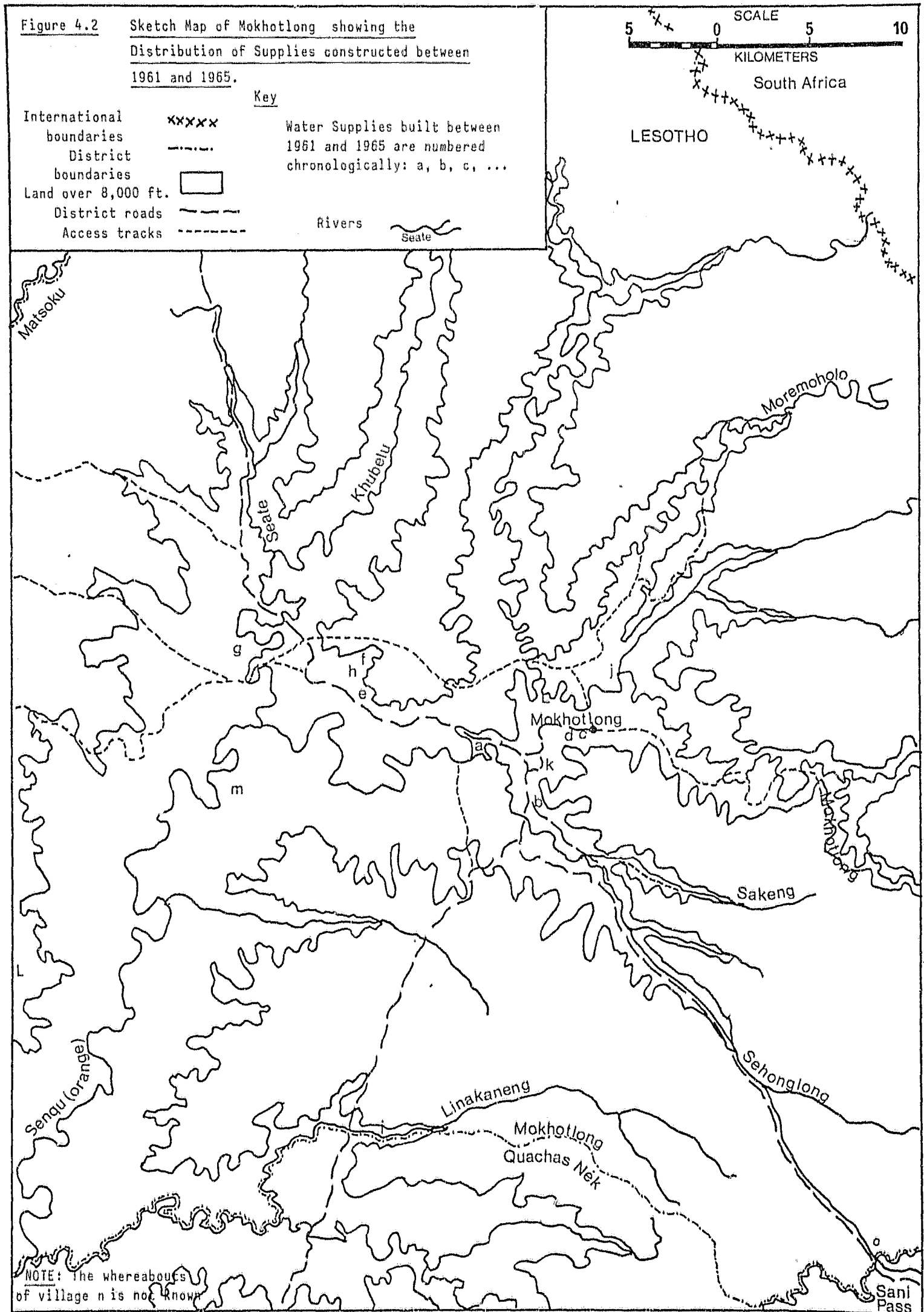
Construction and maintenance of the boxed springs were of a poor standard,⁸ with the result that the District Community Development Officer (DCDO) commented in a report in 1968 that

Figure 4.1

Histogram of Village Water Supply Application dates in Mokhotlong



Note * Boxed springs rarely had formal applications and are entered by year of installation.

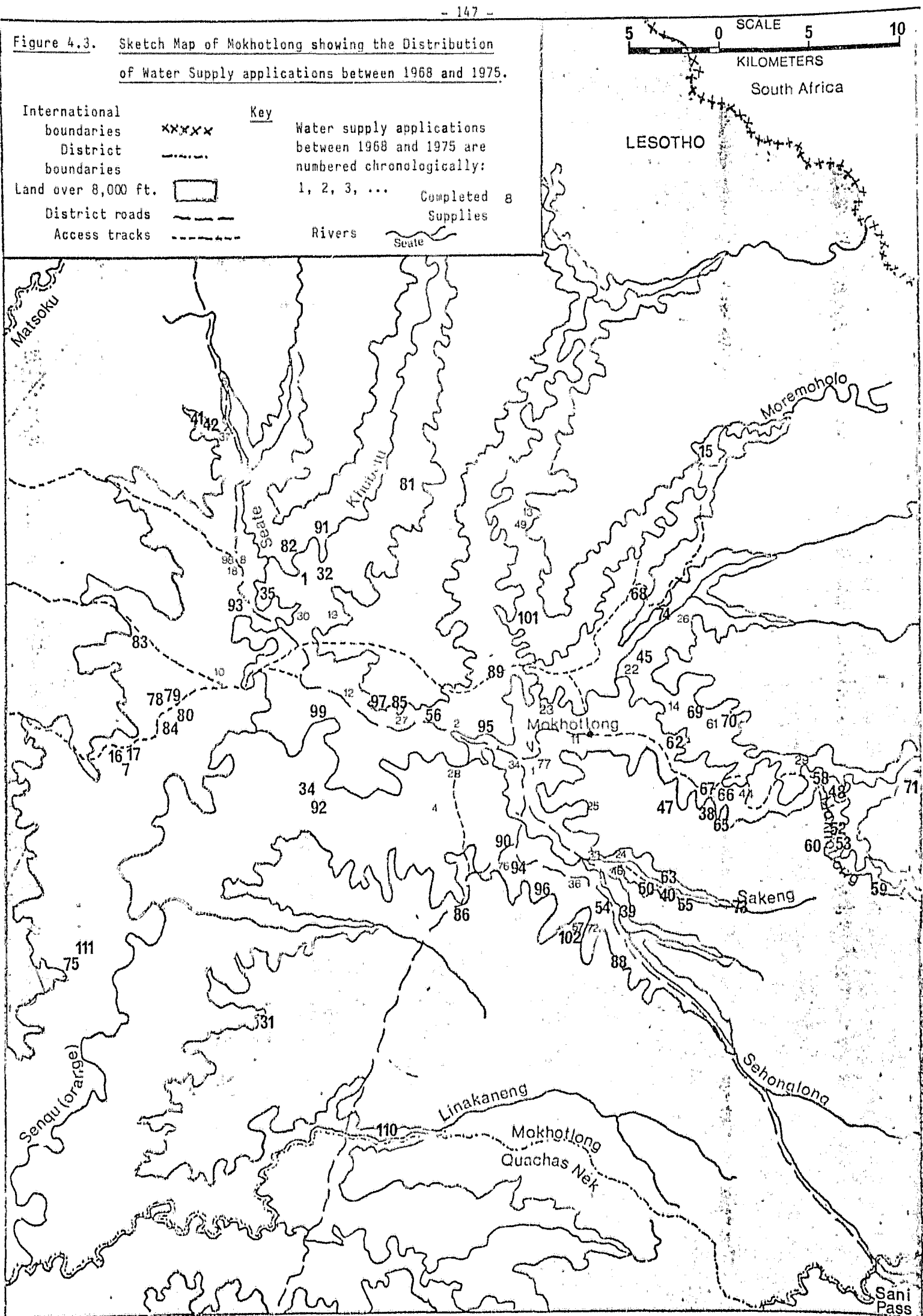


"most of these (referring to a list of boxed springs in villages) have apparently dried up."⁹ By 1976 none of the six boxed springs inspected worked adequately.

In theory, up until 1966 the District Councils were responsible for establishing and organising all village projects, though in practice few were established. From 1966 this became the responsibility of the Department of Community and Rural Development (Comrudev), who have been responsible for the second wave of village water supply construction. The lull between the two periods of activity illustrated in Figure 4.2 is probably explained not only by the administration's growing preoccupation with the coming of Lesotho's independence but also by the spirit with which the first supplies were implemented. The early supplies were not conceived of as a programme but rather as a series of ad hoc projects supplying either 'urban' people in the villages, or nearly 'urban' environments. On the other hand, the Comrudev village water supply programme was established to deal specifically with the problems of rural development in the new state and to tackle this task in the long term.

Figure 4.3 indicates the spacial and temporal distribution of village water supply projects applied for or constructed by the Comrudev in Mokhotlong from 1968 until January 1976. The Mokhotlong Comrudev office was established in 1966 and the first water supplies were constructed in 1968 (see Figure 4.1). Despite the fact that office reports for the period 1966 to 1970 mention that the DCDO attended a number of pitsos (village meetings) at which he promoted community development by means

Figure 4.3. Sketch Map of Mokhotlong showing the Distribution of Water Supply applications between 1968 and 1975.



of projects such as village water supplies, from the numbers of applications for water supplies received in this period it would appear he had little impact. In 1968 six applications for village water supplies were presented to the District Development Committee for approval. Of these six, one (6)¹⁰ was to supply a clinic and had been initiated by the Ministry of Health, and one (5) had been initiated and implemented by Catholic Relief Service. There also seems to have been little popular initiative in the remaining four villages (1, 2, 3, 4), as all of them seem to have been initiated by a Peace Corps volunteer english teacher who was based in the district during 1968 and who prompted all four village applications and later surveyed the supplies. The lack of popular concern with these earlier Comrudev applications for supplies is all the more apparent when one considers that two of the six supplies applied for in 1968 (2 and 3) primarily supplied schools in villages and that the application that came from the district chief's village (1) was initiated by the district chief himself.

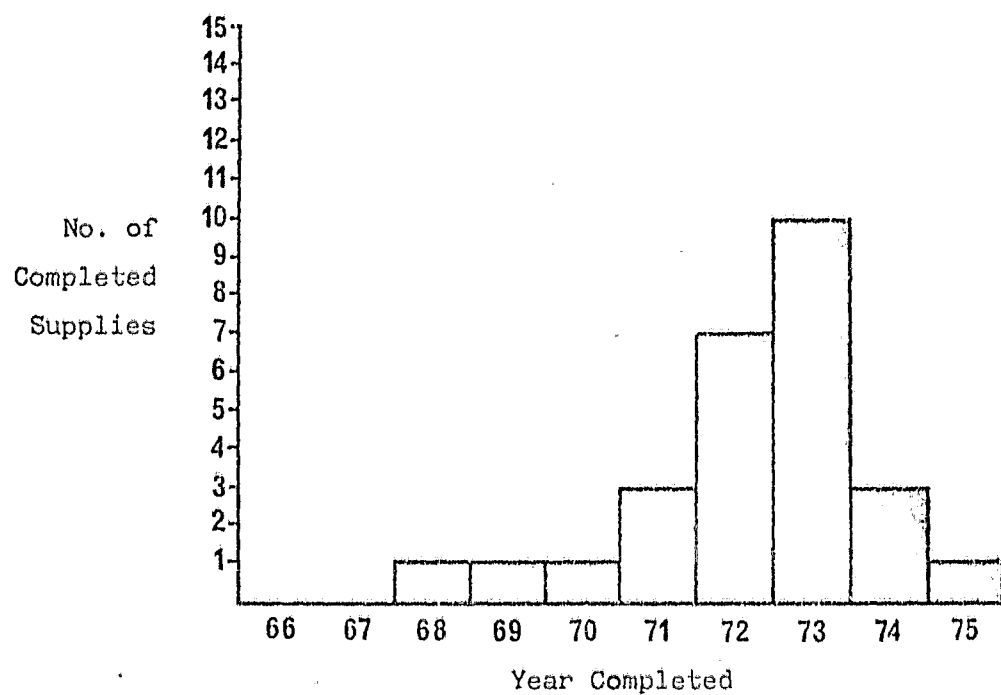
In 1969 and 1970 little more progress was made. Of the seven supplies whose initial application was presented in this period, one (8) was constructed and used by a police station, one (13) was organised by Catholic Relief Services, and another (11) was requested by the village closest to the district capital in response to a reprimand from the DCDO for using the town supply.¹¹ Only four applications for supplies in this period appear to have resulted from village requests stimulated by Comrudev, and again in all of these cases it appears that the presence of an

important chief, trader or school in the village leads one to suspect that they rather than the village as a whole initiated the project.

The stagnancy of the programme up to 1940 is further illustrated by the fact that by the end of 1970 only three supplies had been installed by Comrudev in the whole district. Figure 4.4 presents a histogram of the dates of supplies completed by Comrudev illustrating the low productivity until 1971. 1971 was a watershed year in water supply activity in the district. In the last six months of the year twenty two villages applied for water supplies. Figure 4.1 illustrates that the upsurge in the number of applications reached a peak of thirty-five

Figure 4.4

Histogram of Village Water Supply Completion Dates



Note: By 1976 a further six villages had materials on site.

applications in 1972, whereafter the number of applications dropped again in 1975. While no precise figure is available for the whole of 1976, it is probably considerably lower than that for 1975.

The reason for the increased interest in water supplies from 1971 is a result of a more forceful attempt on the part of Comrudev to establish the programme. From 1971 the DCDO and his assistant began to tour the district promoting community development and spreading the word that the Government gave substantial assistance to villages which had organised the appropriate village development committees. The renewed enthusiasm in the programme stemmed from a change of policy in the purpose and manner of implementing community development projects and will be discussed in Chapter 5.

The distinctiveness of the second water supply programme was that it was prompted solely by Comrudev, and moreover that applications came from village committees who supposedly represented local communities, and water supplies were not only provided to the villages of district dignitaries. The great majority of applications received post-1970 ostensibly came directly from and were to the direct benefit of the rural populace.

Figure 4.3 shows the distribution of applications in Mokhotlong after 1968 and indicates that, as in the earlier supplies, by far the greatest number of applications came from villages within eight miles of the district capital. The distribution of applications has been influenced by accessibility and the topography. The majority of the supplies in Figure 4.3 are situated

reasonably close to the district's roads and main access tracks and their temporal and geographical distribution follows the direction of the major river valleys. So, for example, water supply applications in the Mokhotlong river valley cluster geographically and temporally. Of the nineteen applications for supplies in the valley, seventeen occurred in 1972, and fifteen in the last six months of that year. Figure 4.3 also illustrates that those applications nearer Mokhotlong camp tend to have been registered earlier than applications from villages further up in the Mokhotlong river valley. In order of distance from the main road and from Mokhotlong camp the applications from this river valley read as follows: 33, 24, 46, 50, 63, 40, 55, 73. The numbering of these supplies according to their dates of applications indicates that, in general, more accessible villages submitted applications before remote villages.

The explanation for the clustering of supplies is, firstly, that communication between villages is best between neighbouring villages. Villages in the district tend to be situated on slopes or plateaux on the sides of the river valleys, and communication links are better established up and down river valleys rather than across the high mountain ranges and fast flowing rivers. Secondly, the DCDO often gave a series of pitsos in a single area which probably helps account for the temporal clustering of applications. See, for example, the cluster of applications 78, 79, 80, 83 and 84, all of which were received between April and June 1973 as a result of a series of government pitsos held in the area early that year. And thirdly, the department loosely

adhered to a 'growth-centre' rural development strategy and this may have influenced the placing of supplies in a few instances.¹²

(c) Two primary problems.

The speedy growth of the water supply programme in Mokhotlong and elsewhere in the country brought with it a number of problems. The most immediately identifiable of these were the creation of a backlog of applications for supplies and a large number of breakdowns.

(i) The backlog.

The supply of village water supplies has been unable to keep up with the dramatic leap in demand. Figure 4.1 illustrates that while most of those villages which applied for water supplies in 1971 have had their supplies installed, a much smaller proportion of 1972, 1973 and 1974 applications have received supplies. The diminishing rate of construction is apparent in Figure 4.4. The low rate of construction means that there is often an enormous delay between the dates of application and completion of a supply. The mean time between application and completion of the thirty five completed supplies in the district is just under seventeen months. In mid 1976 there were eighty five outstanding applications very few of them as yet surveyed. This number even included a few applications which had been forwarded as early as 1968 and 1969 (see Figure 4.1).

The growing backlog of applications was the cause of tremendous frustration in villages awaiting supplies. In order to apply

for a supply a village committee would have to arouse the interest of villagers and collect a cash contribution towards the cost of the water supply materials which would be deposited with Government.¹³ When nothing seemed to come from their application villagers often became distressed at the loss of their cash contributions, and village committees suffered a loss of stature. By 1976 resentment, disillusionment and a feeling that they had been deceived by Government were commonplace among villagers awaiting supplies.

In national terms the problem of the backlog reached critical proportions, and by mid 1976 at least 727 villages or 183,000 people (sixteen per cent. of the population) had lodged applications and were awaiting supplies. Moreover, these figures almost certainly underestimate the numbers of villagers affected by the programme, since there were other villages which had collected money but, because they had not fully understood the system of lodging contributions, their application had not been recorded. It is estimated that the average time villages had been waiting by mid 1976 was thirty-nine months. At the average rate of village water supply construction (twenty-nine supplies per year) the 727 waiting villages represent twenty five years' work; at the 1975 rate (sixteen supplies per year) they represent forty five years' work, and at the rate stipulated in the Second Five Year Development Plan¹⁴ (forty supplies per year), they would represent eighteen years' work. The problem of the backlog was made all the more intractable by the fact that the Government's system of accounting for the village contributions makes it almost impossible to refund

village contributions or even establish what those contributions were. In a test case in which a disillusioned village committee asked for their contribution to be returned Government had to try to placate the villagers by other means.

The most immediate cause of the backlog is the low rate of construction as a result of Comrudev's poor technical capacity in both their central and district offices.¹⁵ The Mokhotlong district office was without a district-based trained water technician for the entire period of fieldwork as the previous Field Technical Assistant had been dismissed in early 1975.

But communication difficulties, inadequate staffing and poor management of the technical unit were only part of a more general malaise. The underlying explanation for the backlog lies in the logic, assumptions and administrative imperatives of a self-help community development strategy. These are discussed in the following chapter.

(ii) Breakdowns

The second immediately identifiable problem facing the programme is the poor standard of maintenance and repair of installed supplies. Table 4.2 presents the results of a technical survey of nineteen gravity fed water supplies in Mokhotlong in 1976 and shows that just under half of all the installed supplies are judged to be working inadequately. The rate of breakdown is extremely high, particularly when it is taken into account that most of the supplies have been installed relatively recently, and that the technologies are judged to be remarkably appropriate

Table 4.2

The Breakdown of Village Water Supplies in Mokhotlong
and Lesotho

	Mokhotlong	Lesotho*
Number of supplies insepcted	19	49
Number working adequately	10	32
Per cent. working adequately	53	65

Note: * Includes 19 Mokhotlong supplies and 30 lowland supplies.

to the resources and conditions in Lesotho. Gravity fed supplies require relatively little maintenance for a reticulated supply and have been judged to be the optimum, low-cost, intermediate-technology water supply for the mountain areas.¹⁶

The high breakdown rate is a result of an inadequate standard of construction, a lack of technical capability in the Department, the absence of a clear maintenance policy and the poor functioning of self-help maintenance. The critical reasons for the lack of maintenance derive from self-help strategy. These are discussed in the following chapter which considers village self-help functions.

The high breakdown rate means that the material impact of the programme is inevitably less than could otherwise be hoped

for. Before presenting the results of surveys which measured the material impact of the water programme a case-study is presented to illustrate the statistical sketch of the growth of the programme.

3. A Case-History of Water Supply Implementation

Thabang is a fair-sized, prestigious mountain village containing four sub-villages: Moreneng, the home of the District Chief, with seventy-one households; Terata, nineteen households; Sekhutlong, twenty households; and Lihloehloeng, eight households.

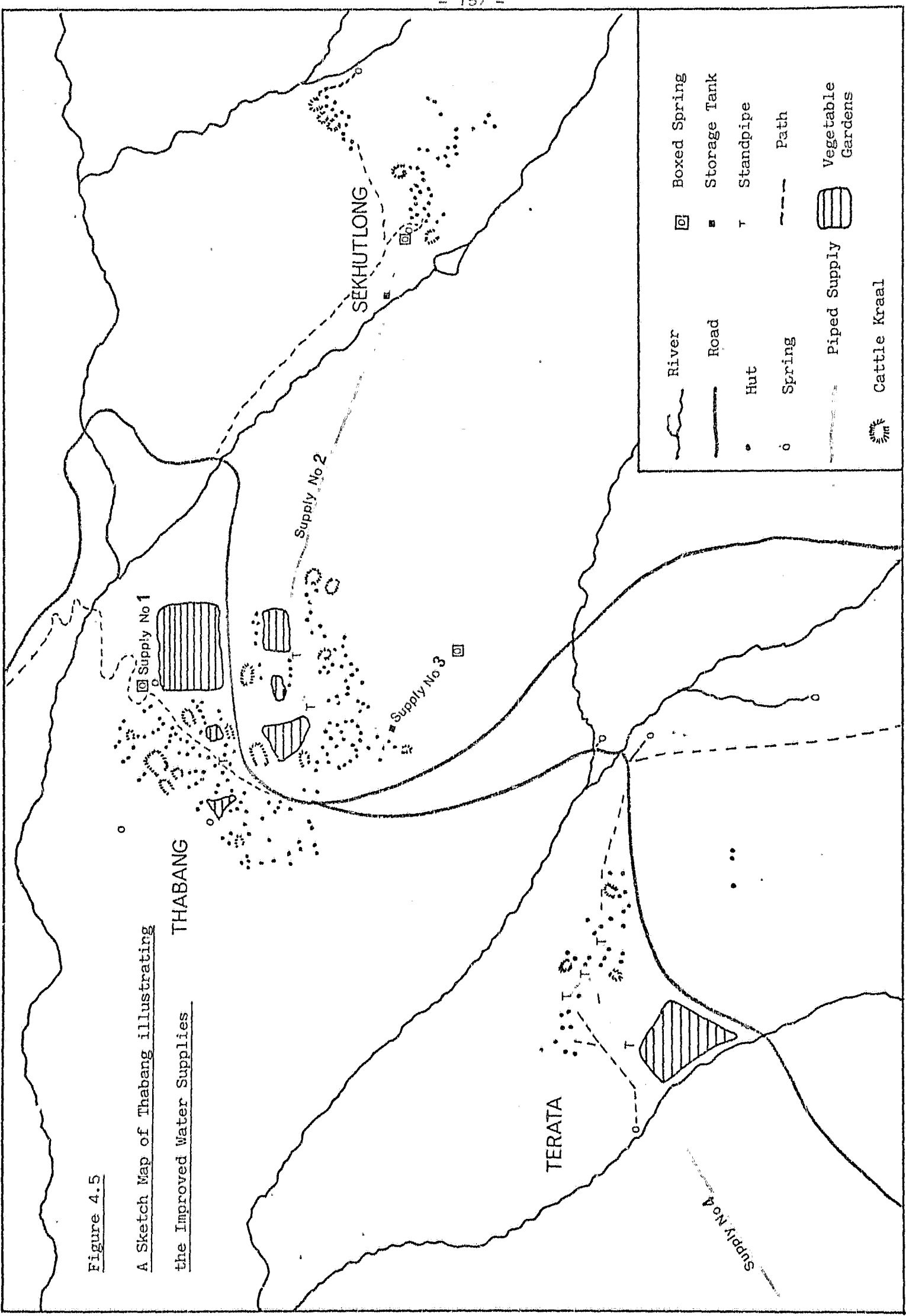
Water availability and use in Thabang prior to the implementation of a piped water supply were described in Chapter 3. Figure 4.5 illustrates the distribution and positioning of piped water supplies in Thabang.

(a) Supply Number One

The first mention of the possibility of a piped water supply in Thabang occurs in correspondence in an early Ministry of Works file.¹⁷ An entry dated 8/6/1955 proposes to "start work on the Thabang water supply". Mention is also made of visits "to inspect the Thabang water supply" in Ministry of Works reports in 1957 and 1958, though it is still not clear whether an improved supply had yet been implemented. It is probable that the supply, which consisted simply of a boxed spring in Moreneng was only completed in 1963 by the Mokhotlong town water mechanic. It was, however, poorly constructed and within six months the spring had moved rendering the box and the spring useless.

Figure 4.5

A Sketch Map of Thabang illustrating
the Improved Water Supplies



(b) Supply Number 2

Next, the District Chief requested that a gravity fed supply be installed. The Ministry of Works agreed to this request, but, in accordance with the colonial government's policy to restrict capital grants to development projects to a minimum and in line with the then emergent policy of self-help, the Ministry insisted that the village contribute towards the cost of the materials and participate in the construction.

In practice the village contribution was little more than a token effort. The sum of money collected was very small, no sanctions being applied against non-contributors, and although the District Chief ordered a letsema (a communal working party) to dig the trenches, the turnout was poor. The District Commissioner obligingly arranged for a team of local prisoners to finish the job and the supply was completed late in 1973.

When complete the supply consisted of a boxed spring, a storage tank situated immediately below the sub-village of Sekhutlong, and several hundred yards of piping which fed a solitary stand-pipe directly outside the District Chief's residence. The villagers of Sekhutlong resented the fact that they had helped contribute towards a supply which did not benefit them in the least, and when the initial box to this supply failed it was rumoured that it was the result of the jealousy of the Sekhutlong villagers. The supply was eventually fixed by the town water mechanic at the District Chief's request and it once more supplied the south-eastern portion of Moreneng to the exclusion of all other villagers in Thabang.

(c) Supply Number Three

In 1968 repeated requests from villagers in the unsupplied portion of the Moreneng lead to an extension of the supply.

A village water committee was elected at a pitso and a second cash collection at fifty cents per household was initiated.

The committee, whose status was in some doubt, made little progress with the cash collection and the chief's secretary eventually took charge warning non-contributors that they would be excluded from using the supply. Finally when some R40 had been collected a Peace Corps volunteer, who happened to be in the district teaching english at a local school, supervised the installation. Villagers dug the relatively short length of trench required and this labour was costed in Maseru in such a way that it appeared as if the village contribution matched that of the aid donor.¹⁸

This second gravity fed supply which supplements the Chief's standpipe only provides water to two further standpipes both in the main village. Although they are communal taps (sanctions against non-contributors did not last more than a few months) their positioning most favours the two wealthiest households in the village. A convenient permanent leak at the base of one of the taps has been diverted to a mud dam which provides the wives of the largest cattle owner in the village with a permanent water source from which they irrigate an elaborate private garden. The second tap is situated below the road just off the site of the wealthiest man in the village, the trader.

Until 1968 repair work was carried out either by the District

Chief's secretary with occasional assistance from the town water mechanic, or, alternatively, by a man in the village who "had worked with pipes on the mines" and was paid fifty cents a day by the Chief to undertake repairs. From 1968 the responsibility for organising maintenance was in theory transferred to the newly elected water committee. Later it was shifted to a politically motivated Village Development Committee which formed in 1971.¹⁹ But in practice neither committee had in themselves any capability for repairs and they did not organise any preventive maintenance.

During the ten months of fieldwork in Thabang Moreneng a water supply breakdown of one sort or another occurred on average every two months, and villagers confirmed that this has been the pattern since the installation of the first supply. The delay between breakdown and repair was also quite substantial, especially if the repair involved organising a labour force greater than the two government employees, or the purchase of some new part.

Committee members hardly participated in repair work at all, and few villagers felt that it was the particular responsibility of committee members to organise or undertake repair work. When villagers were asked who had the responsibility for fixing the supply, the majority replied that it was the chief's or the Government's responsibility. This was borne out when in early 1976 a grader repairing the road ripped up the pipe leading to the lower standpipe. Nothing was done for two months while nearly all the villagers looked to an outside agency for help with what was a relatively simple repair. It was particularly noticeable

that the trader who was also the biggest user of the standpipe and the only source of tools in the village, did nothing to repair the broken pipe.

The supply was eventually repaired when two recently returned migrant labourers from that side of the village supported by the chief's secretary gathered most of the available men in the village together and completed the job in under two hours.

This example brings to notice the infrequency with which returned migrant labourers participate in village development projects. It was interesting to note on this occasion the almost nostalgic, holiday mood that characterised the work. The work party provided a rare opportunity for men who grew up together in the same village once again to work together. Discussion during the work centred on a comparison of working experiences at the mines, where some of the men had previously had cause to repair pipes. Rather than being a work party committed towards the upliftment of the village, the repair of the broken water supply was not regarded as a serious work project and it was apparent that a work party had and would only very rarely come together to work on a village project. The incongruity of the work party was further illustrated when, after the supply had been fixed, the men descended upon the headman and half-heartedly demanded payment in food and beer, as if a letsema (communal work party) had been called, for their assistance on the 'self-help' water supply.²⁰

(d) Supply Number Four

The fourth water supply to be built in Thabang was a gravity fed supply in the small sub-village of Terata, approximately half a kilometer to the west of Moreneng. In early 1972 the local Catholic Missionary informed a group of women from the sub-village who formed part of his congregation that if they were prepared to organise village contributions the Catholic church would be able to assist the villagers to purchase a piped water supply. The missionary stipulated that funds would only be forthcoming if a communal garden was initiated at the same time. A collection of R1 per household was started. Later in the same year the DCDO held a pitso in the sub-village and encouraged the villagers to form a committee to organise the management of the water supply. Villagers started to dig the trenches for the pipes in late 1972.

The first plan for the supply was to lead the water from a strong spring just beyond a crest of a nearby hill back over the hill down to the village. The villagers had dug half a kilometer or so of the trench before it was discovered that the crest of the hill was too high for the spring water to flow over it by gravity.

Nothing further occurred until the arrival in early 1973 of a more vociferous DCDO who decided to obtain further funding so that well over a kilometer of galvanised piping could be purchased to take the water on a steady downhill slope around the hill rather than over it. Accordingly, in early 1973, with the help of eight additional households from the sub-village of Lihloehloeng

who benefitted from the change of plan, the pipe was laid under the direction of the Comrudev Field Technical Assistant. Comrudev files record a sum of R80 being paid by villagers for the supply. R50 of this, however, was in fact paid by Moreneng villagers when a plan for an extension of the Terata supply was being considered, so the real cash contribution from Terata was only R30.

Three events marred the implementation. Firstly, the tank outlet was not properly flanged. Secondly, the ground was so rocky around the hill that well over a quarter of the total length of the pipe remained exposed after the first rains had washed the loose soil away. And thirdly, a fact which added to the difficulties of village organisation, the technician who was supervising the installation of the supply had an illicit affair in the village from which an illegitimate child was born.

Despite these problems the supply started working in time for a scheduled visit by the Prime Minister to the area in early 1973. The supply worked for just over two years during which time only minor problems were encountered, some of which were attended to by the committee. No major breakdowns occurred and no maintenance was carried out.

By June 1975 these minor problems had built up until the supply stopped working completely: several taps were missing or broken; great lengths of piping were exposed and many were cracked; the exposed piping had also been damaged by animals and herd boys; the unflanged tank outlet had broken; and the eye of the spring had begun to move below the box. By July 1976

no further repairs had been attempted and water was again drawn from traditional sources.

The reason for the lack of care of the supply was not immediately apparent. The villagers clearly wanted the supply and the majority understood that the responsibility for maintaining it was theirs. Furthermore, unlike many other committees to be described in the following chapter the committee which was responsible for the supply had been freely elected.

Finally, it appeared that there were a number of reasons for the poor management. A low standard of installation accounted for the early breakdown; the district Comrudev office did not have the technical capability to repair the tank and could only suggest that the village hire a private welder; the small population and high incidence of migrant labour in the sub-village made it all the more dependent on outside help.

Moreover, factionalism weakened the committee's ability to elicit the village's support. A rift had developed between the all-female committee and a group of the resident men. The cause of the rift was obscure but the line of the division became evident when the women argued that the men were primarily responsible for repairs and the men responded by saying that since drawing water was the work of women maintenance of the supply was their responsibility. In addition, political feelings ran high in the village following the shooting of one of the prominent family's eldest son by the Lesotho police in an incident at the diamond mines, and the complicity between one of the women on the committee and the district technician, a vociferous BNP supporter, which

resulted in the illegitimate child, further weakened the standing of the committee in the eyes of many of the men.

(e) Supply Number Five

An application for a fifth water supply for Thabang was submitted to Comrudev in mid-1973. Following the installation of the Terata supply the District Chief hoped that an extension could be lead from that exceptionally strong supply to supplement the three standpipes in Moreneng. The chief was especially keen to supplement Moreneng's supply, both because the three existing standpipes were too few for the seventy households in the main village, and secondly, because he was sceptical of the quality of the water from the oldest gravity fed supply, as the spring from which the water was drawn was situated very close to a Sekhutlong burial site.

However, the plan for the extension had eventually to be dropped as Terata's Village Development Committee fiercely opposed extending their supply on the grounds that the extension would weaken the supply of water to Terata. In addition, it introduced the further problem as to who would be responsible for the supply when it broke down. While there is much coming and going between the two villages and many families have relations in either village, Terata's geographic and social identity are clearly defined. Village rivalry is further exacerbated by political differences, many of the Terata inhabitants see themselves as an opposition enclave within a larger BNP village.

(f) Supply Number Six

In 1975 yet another plan was mooted by the District Chief. He suggested that a very strong spring some distance away above Sekhutlong be used to supply that sub-village as well as to supplement the Moreneng supplies.

By July 1976 this plan was still far from being implemented. The Sekhutlong villagers were suspicious that they would once again be supporting Moreneng's village water supply and were sceptical as to whether their contribution would be sufficient to purchase a supply. As a result they were very slow to form a management committee and collect cash contributions. In any event there were no technical staff in the district who could construct the supply. A further problem was that some materials which had been bought by Comrudev's office in Maseru for the initial extension plan (supply Number Five) and which were awaiting transportation up to Mokhotlong from the foot of Sani Pass were stolen from a storage garage.

(g) Conclusion

The lasting impression from the village case-history is the complex and piecemeal fashion in which water supply improvements have come about. Actual processes in villages are immensely more complicated than most development planners would seem to believe and the actual method of implementation and management of these development projects has been very different from the picture presented by both international aid donors and the Lesotho Government.

Over the past twenty years there have been six attempts to supply Thabang villagers with an improved water supply. By July 1976 of the 117 households in the whole Thabang complex, twenty households (Sekhutlong) had never had any access to an improved source, twenty seven households (Terata and Lihloehloeng) had had no access to piped water for the past year, and the remaining seventy one households (Moreneng) had only had intermittent access to piped water. The fact that two of these supplies are still working is an achievement in itself. But the case-history throws the ineffectiveness of the water supply programme into even sharper relief; Thabang is a prestigious central village and it is likely that more cash, effort and expertise has gone into its water supplies than any other village in the district.

How then has this concentration of energies materially affected the typical Thabang villager's lifestyle? How had it affected Manyakallo's lifestyle?²¹

By whatever criteria are used the effect has been negligible. While Manyakallo says that she is glad to have piped water, the material impact upon her lifestyle has been minimal. Her journey to collect water from the village standpipe when the supply is working is now fifty metres shorter and she may save up to half an hour a day which she would have otherwise spent collecting water. But the complex pattern of her water use has not changed and she only regularly uses piped water (when the supply is in operation) for cooking and drinking. When washing clothes, washing herself, watering the garden and using water for occasional tasks such as plastering and even brewing she often uses traditional sources.

In order to substantiate the conclusion that improved water supplies have had little impact upon villagers' lives the following subsection summarises the results of studies that were undertaken to measure the material impact of the programme.

4. The Material Impact of the Programme.²²

The material benefits which proponents of village water supplies expect will follow from the introduction of improved supplies can be roughly divided into two categories. Firstly, it is hoped that changed patterns of water use will result from more accessible and better quality supplies, and that these will lead to a reduction in the incidence of water-related disease. Secondly, a more convenient supply may be expected to stimulate the village economy by facilitating the creation of water-related production, and by reducing the time and effort expended upon water collection consequently creating a potential for increased productivity. A reduction in the incidence of water-related disease too can be viewed as an economic benefit.

The results of studies determining the extent to which these hopes and expectations have been realised are presented below following a summary of the changes which have occurred in the supply of water and the pattern of domestic water use in villages with piped water supplies.

(a) The availability and quality of piped water.

Comparisons of the proximity of improved and unimproved water sources to villages concluded that improved sources were generally closer than unimproved sources. Whereas lowland villagers walked a mean distance of 580 metres to their preferred unimproved source, the mean distance to an improved source was 290 metres. In the mountains the distance gained was slightly less: the mean distance to unimproved sources was 145 metres, and to improved sources 90 metres.

It was more difficult to compare the relative reliability of improved and unimproved sources with any accuracy as both sources are undependable. The fact that at any one time roughly a third of all improved supplies are out of order is a high rate of breakdown. Traditional sources also fluctuate greatly with the season. A rough estimate from the Mokhotlong case study villages puts the number of unimproved sources in the winter months at about half the number used in the summer. While this is a lower reliability rate than that for improved supplies, strong unimproved springs, of course, remain constant sources whereas very few piped supplies had no history of breakdowns.

Water quality tests showed that improved sources did provide less polluted water than unimproved sources. This was especially true in lowland supplies where the quality of water from traditional sources was particularly poor.²³ The high breakdown rate does, however, detract from the improved water quality. In some supplies cracks or breakages in the supply meant that the piped supply became as polluted as unimproved supplies. This was especially

true of mountain supplies where pipes frequently crack in the winter months.

How have the changed availability and quality of water supplied by piped supplies affected water use patterns?

(b) Water use patterns from improved supplies.

Comparative studies of water use from improved and unimproved sources concluded that there was no significant increase in the volume of water used, despite the fact that improved supplies were on the whole closer to households. The only exception to this general conclusion concerns households with over a kilometre's round trip journey. These households did use less water than households with a round trip journey distance of less than a kilometre. These conclusions confirm those reached by White et al. in their study of water use in East Africa in which the authors conclude that the volume of household water use decreased when the source was over a mile away, but that there was otherwise little decrease in the volume of water used with marginal changes in the distance of the source.²⁴ It was only when supplies were extended into private households that the volume of water used rose significantly. No household connections were available in rural Lesotho.

One result of Comrade's policy of installing communal standpipes, as opposed to household connections, has been that, in general, the benefit of proximity to a piped water source has been reasonably evenly distributed and standpipes are often scattered throughout villages. Yet having said this it is also true that standpipes

are invariably placed closer to the village elite. This is illustrated in the case of Thabang where the three standpipes are situated to the best advantage of the District Chief and the two wealthiest households in the village. Inequality of access meant that the privileged households used substantially more water. The trader, for example, who runs a large shebeen, often attached a hose to the supply and could use nearly as much water as all the other villagers in the northern section of the village put together. On one occasion, for example, of the 2791 litres drawn by the forty two households who used that particular standpipe, 1025 litres were used by the trader, over 500 litres of which to wash his three four-wheel-drive vehicles.

When water use from improved and unimproved sources are compared, not only does the total volume of water used hardly change at all, but there are also very few changes in villagers' patterns of water use as a whole. Negligible changes were found to have occurred in the times of collection, the sex and age of water collectors, in the number of trips made per day per household and in the amount of water used in the various categories of water use. The only significant change in this last aspect of water use concerned clothes washing. In Thabang Moreneng, for example, of the seventy households, twenty eight had their own metal bath used for washing clothes at the village standpipe and approximately half the households preferred to wash their clothes at the standpipe rather than at the river. It is unclear whether this change in the pattern of water use made the job any less arduous: despite the longer walk, washing clothes in

a river is usually a much quicker and more efficient method of washing than is washing in a tin bath without flowing water.

The provision of piped water normally replaced the cleanest perceived traditional source and did not radically alter the complexity of water use from different sources described in Chapter 3. Even in villages with access to piped water, villagers continue to use traditional sources for many uses. Piped water is normally used for cooking, drinking, home personal washing, food washing and possibly brewing. It would only replace other water sources where the standpipe was very conveniently situated, e.g. closer to a vegetable garden than other possible sources from which water may be drawn for watering.

(c) The health impact

Studies of the impact the rural water supply programme has had on the health of Basotho villagers conclude that the health benefit derived from improved supplies is negligible. This conclusion was reached following lengthy argument and detailed analysis of patterns of water use, hygienic practices, hospital records, and following studies of the incidence of water-related diseases in villages with and without improved water supplies. The major points in the argument illustrating the surprising lack of health benefits are as follows:

(i) Lesotho's national pattern of disease is in many respects remarkably unlike other developing countries in Africa. Notably absent are schistosomiasis, malaria, cholera and sleeping sickness,

all of which are water-related diseases with a high prevalence elsewhere in Africa. The most reliable figure that could be obtained for the incidence of water-related disease in Lesotho is eleven per cent. of all reportings in hospitals, though among the under five age group water-related diseases account for nineteen per cent. of all reportings. The incidence of water-related diseases in Lesotho is noticeably less than that of respiratory diseases which constitute the largest group of hospital reportings. A decrease, then, in the incidence of water-related diseases in the country will only affect a comparatively small category of the national ill health.

(ii) Piped village water supplies may improve the supply of water in two basic respects: supply more water reliably and allow easier access to water, i.e. create conditions whereby a greater quantity of water is used, or, alternatively improve the quality of water. A disease classification has been developed in the work of Bradley and Feachem which attempts to classify water-related diseases into those whose aetiology is affected by water quality and those affected by water quantity.²⁵ In Lesotho it was found that there was no significant change in the quantity of water used from improved supplies and that the only effect had been to make an improvement in water quality. The impact of the programme then can only be expected to have an impact upon water-related diseases whose aetiology is affected by water quality.

(iii) Further, it appears that Lesotho has a very low incidence of diseases whose aetiology is thought to be affected by water quality. Typhoid and diarrhoeas are the only prominent diseases of this category to be found in Lesotho. Studies of the incidence of diarrhoeas and typhoid, however, conclude that there is no significant difference in their distribution between villages with and without piped water supplies. One of the avenues of thought that this suggests, is that the initial understanding of the aetiology of these particular water-related diseases was inadequate and that these diseases are not primarily water-born, but are rather, water-washed (i.e. only water-related in that improved hygiene may break a disease transmission route which is not primarily water-born).²⁶ It is interesting to note here that while the figures comparing the total incidence of water-related disease in supplied and unsupplied villages showed no significant differences, in the small sample of Mokhotlong villages studied, it was found that more diarrhoeas were reported from villages with improved supplies than those villages that had no access to improved supplies. To the extent that these are water-born diseases this paradoxical conclusion would seem to be explained by both the high quality of the unprotected spring water in the district, and the fact that poor maintenance and the high breakdown rate of mountain supplies leads to greater pollution of the supplies.

(iv) To the extent that some diseases are water-born, the impact of better quality water may be nullified by the fact that

even in villages with improved supplies water may be drawn from a number of sources, and by the fact that water quality may deteriorate markedly between collection and use.

(d) Water-related production.

Another possible benefit of village water supplies mentioned by donors and promoters of village water supplies is that they will stimulate water-related production in the village. The provision of water, the argument runs, will enable other economic activities to be started. In Lesotho several possible economic benefits resulting from the improvement of village water supplies were examined. In general it was found that the impact village water supplies had on the village economy was negligible.

(i) Livestock. In Lesotho livestock are not watered from domestic sources even where they are available and so do not benefit from the provision of piped supplies.

(ii) Brewing. The sale of home-brewed beer, joala, is a major water using activity using between nine and thirty six per cent. of domestic water use. The importance of home brewing has been mentioned in Chapter 2. It provides one of the few means by which village women can gain something of an independent income, and is one of the important mechanisms which redistribute migrant labour earnings.

With this in mind a study of brewing in villages with improved and unimproved village water supplies was carried out. The results

of this comparative study showed no difference in the amounts brewed, in the profit accrued or in the frequency of brewing from either water source. The amount a household brews is rather determined by factors such as proximity to a market, a household's need for cash, access to the necessary investment needed for materials, the availability of sorghum, and possibly the amount of time a brewer has available. Where piped water is available it will normally be the preferred source for brewing, especially for home consumption, but two instances were recorded where shebeens preferred to draw water from nearby unprotected sources rather than from piped sources marginally further away.

(iii) Irrigation. In Lesotho no cases were found where domestic piped water supplies supplied by Comrudev were used as sources of field irrigation. The village water supply programme did not attempt to have and cannot be said to have had any impact upon agriculture proper.

In the summer, however, water from domestic supplies is extensively used for watering vegetable gardens. Promoters of the village water supply programme hoped that the provision of piped water would encourage the establishment of communal vegetable gardens.

A communal garden in Lesotho consists of an area of land, roughly 100 metres square allocated by a chief to a management committee, and divided into a number of small plots. Both the Ministry of Agriculture and Comrudev today play a part in establishing a communal garden. Agricultural extension agents are expected

to give horticultural advice and help site communal gardens. One of the criteria considered in siting communal gardens is that they be within one hundred metres or so of a water source, though in the mountains access to a stream or spring does not present a major problem. Comrudev is responsible for the establishment of village management and for supplying fencing materials where a village contributes cash and labour in accordance with the Comrudev's self-help strategy.

In most cases there is little 'communality' in the organisation of the gardens. Plots are allocated to individuals who plant, water and reap the benefits of their production individually. The only activities which are sometimes carried out communally are the buying of seed, the application and installation of a fence, and occasionally, application to Comrudev for an extension from an existing water supply to supply the garden. In only a handful of cases have attempts been made to farm an area of the garden communally and use the money gained from the sale of those vegetables on some communal project.

Promoters of village supplies envisaged that communal gardens would benefit from the water supply programme in two ways: firstly, by providing more convenient access to water which was presumed to be a major obstacle to the creation of communal gardens, and secondly, in that it was hoped that once a village water supply project had been successfully completed by means of self-help organisation, the village would then, in the same spirit, be better able to establish a self-help communal garden. The second part of this hypothesis, the 'catalyst thesis', will be discussed

in Chapter 6. In order to test the first part of the hypothesis a study was undertaken of the relationship between the provision of piped water and the establishment and effect on communal gardens.

The first finding of the study was that the majority of communal gardens were established well before the village water supply programme got under way. Communal gardens have been established since 1950 and the majority built between 1960 and 1970. The programme was at its most vigorous under the colonial administration. The current Ministry of Agriculture estimates that since its inception over 1,400 communal gardens have been established. In Mokhotlong the Ministry of Agriculture files record that by 1974 approximately seventy two communal gardens had been established. The communal garden programme then, has been run quite separately from the village water supply programme. Whether or not a communal garden project is established is not only dependent on spontaneous village processes and access to resources, but it is also dependent upon the efficiency of the organisers of the separate programmes and villagers' perceptions and participation in the programmes.

The inadequacy of aid donors' development hypotheses are illustrated by a second finding of the study. This is that the national failure rate of communal garden projects stands at ninety three per cent. Of the 1,400 established, not more than one hundred in the country are still in use. There is no simple explanation for this high failure rate, but rather than a technical explanation such as lack of fencing, lack of water or poor drainage it would seem that problems of village organisation are the

Author Cross E P W

Name of thesis Self-help and village development: Rural domestic water supplies in Lesotho 1980

PUBLISHER:

University of the Witwatersrand, Johannesburg

©2013

LEGAL NOTICES:

Copyright Notice: All materials on the University of the Witwatersrand, Johannesburg Library website are protected by South African copyright law and may not be distributed, transmitted, displayed, or otherwise published in any format, without the prior written permission of the copyright owner.

Disclaimer and Terms of Use: Provided that you maintain all copyright and other notices contained therein, you may download material (one machine readable copy and one print copy per page) for your personal and/or educational non-commercial use only.

The University of the Witwatersrand, Johannesburg, is not responsible for any errors or omissions and excludes any and all liability for any errors in or omissions from the information on the Library website.