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RESEARCH REPORT NO. 11

RURAL CONDITIONS IN MASERU DISTRICT

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DECEMBER 1985



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District Level Planning and Rural Development Project

Institute of Southern African Studies

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December, 1965.

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All errors in this report remain the sole responsibility of the authors.

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ABBREVIATIONS

AESP	Applied Environmental Sciences Programme
DLPRD	District Level Planning and Rural Development Project
GOLCC	Government of Lesotho Computer Centre
ISAS	Institute of Southern African Studies
LHWP	Lesotho Highlands Water Project
NUL	National University of Lesotho
SPSS	Statistical Package for the Social Sciences
URPP	Urban and Regional Planning Programme

SUMMARY

Part I of the paper reports on a baseline household survey carried out by the DLPRD project in five village areas in the Rapoleboea region of the Maseru district mountain zone in winter, 1984. The survey was carried out in order to complement similar surveys carried out in the lowlands and foothills of Maseru district in 1982 and 1983 respectively. Part II of the report presents a comparative analysis of rural conditions in the three zones of the district, with particular reference to the identification of poverty.

The mean size of the 284 households enumerated in Rapoleboea is 5.2 [4.9% for the 679 lowland, foothill and mountain survey households combined]; 72.9% of the households are male headed [73.9% for the district as a whole], and migrant labour to South Africa was stated as the principal source of subsistence of 30.3% [29.6%] of the household heads. 43.7% of the Rapoleboea households surveyed [41.4% for the Maseru district survey population] were classified into categories dependent to a significant degree on migrant labour to South Africa, with another 3.6% [10.2%] similarly dependent on wage earning in Lesotho. 11.3% [15.2%] of the Rapoleboea households have no access to arable land; hardly any of those households which planted crops in 1983/4 expected their harvest to fulfil the year's requirements of the crop in question. Only 37.0% [36.7%] own one or more major agricultural tools, and 71.2% [75.7%] of the households do not own adequate draft power (four animals or more). 24.9% [43.2%] of Rapoleboea households manage no livestock at all, and 62.6% [73.9% for the Maseru district survey population] manage six livestock units or less (one livestock unit is the equivalent of one cow). A few flocks of several hundred small stock were encountered.

In Rapoleboea, as in the district survey population as a whole, a predictable cycle of household growth and dissolution was observed in both demographic and economic terms. The most prosperous households are the minority of the senior ones which have built up agricultural resources and production but also have children remitting cash from migrant labour in South Africa. Female headed, small households tend to be the poorest. Those households which must depend upon farming only or upon farming and the unremunerative local non farm sector tend to be especially poorly equipped for agriculture in terms of implements and draft, and it is in these categories that the poorest households are likely to be found. Farming alone as the principal mode of household subsistence is in any event likely to mean only poverty. Rural Lesotho's long established dependence on cash income grows more marked as agriculture fails to develop and landlessness increases. Cash from family members working in South Africa continues to make a major contribution to the rural economy, but stagnation or (possibly rapid) decline is all that can be expected from this sector. Urban and peri urban Lesotho offer new opportunities, but are unlikely to compensate in full for a shrinking South African migrant labour market. In these

circumstances, the generation of extra income through whatever small scale local off farm employment can be created takes on extra policy importance.

Analysis in the last part of the report divides the Maseru district population into relatively poorer and relatively richer groups according to various criteria, and it is concluded that the presence or absence of a wage employed worker is the best single factor in determining to which of the two groups a household belongs. But it is noted that the family cycle through which households pass is at least as important in explaining the poverty status of a household, and that while macro level analysis of the type attempted here is useful for policy purposes, the community's identification of poverty and the poorest groups is bound to be more effective if relief to a specific village is being considered.

1. INTRODUCTION

1.1. Urban and Regional Planning Project research, Maseru district lowlands, 1982

The Urban and Regional Planning Programme (URPP) of the National University of Lesotho (NUL) Department of Geography has been undertaking research on rural and urban conditions relevant to town and regional planning since 1978. In 1982 URPP merged its research activities with those of the Department of Geography's Applied Environmental Sciences Programme (AESP). The general objective, was to make an inventory and analysis of physical and human resources, production activities and services with a view to the identification of development constraints in a selected district in Lesotho. Maseru district was chosen for research attention, largely because of logistical convenience. For the 1982 research exercise, undertaken with students from both programmes in collaboration with the Land Use Planning Unit of the Ministry of Agriculture and Marketing, representative areas within Bawden and Carroll's Lowlands Zone 1 were selected (1). In Bawden and Carroll's reconnaissance study of agricultural potential, this zone is viewed as having potential for semi-intensive cultivation. The two areas chosen were Liolong and Ha Mafa, which were differentiated in terms of the former having been in the Thaba Bosiu Rural Development Project's Area I, whereas the latter had received no such special attention. It was therefore hoped that the impact of government policy on land use could be assessed, although in fact very little difference could be identified. The joint URPP/AESP research in the lowlands of Maseru district in 1982 concentrated on the pattern of land use, the changes in this pattern over time and the factors responsible for these changes (2). In addition a useful general data base was built up on household characteristics in the lowland communities studied: students interviewed every household in Ha Mafa and a 50% sample in Liolong. In 1984 the District Level Planning and Rural Development (DLPRD) project coded and captured this data base in such a way that it was directly comparable with data collected by DLPRD during 1983 and 1984 in the other agro-ecological zones of Maseru district (3).

1.2. The District Level Planning and Rural Development Project

The three year DLPRD project of the NUL Institute of Southern African Studies (ISAS) began in May, 1983. The project is jointly implemented by the Free University, Amsterdam and NUL, with funding from the governments of the Netherlands and Lesotho. It has three main aims: to provide, through research and collation of existing information, a data base for district level rural development planning in Lesotho; to strengthen the research and teaching capacities of NUL staff and students by involving them in the first task; and to develop the role of NUL as an applied research resource that can assist the government of Lesotho in achieving its rural development targets.

It was intended that part of the DLPRD project's terms of reference should be the piloting of data collection and collation methods appropriate for district level planning, in such a way that a future decentralized development planning system in Lesotho would be able efficiently to marshal the required information about a district through the use of such methods. It was further intended that in carrying out this work, DLPRD should build upon the existing research programmes and findings of the URPP and AESP programmes.

Progress with the development of data systems to support district level planning has been slow because the process of district level planning has itself not yet been clearly defined. It became possible to attempt more in this field when the third core member of the DLPRD team, a planning expert, took up his post in the Ministry of Cooperatives and Rural Development in October, 1984. Meanwhile, the DLPRD project has built upon the data foundations laid by URPP and has maintained the initial research focus on Maseru district. Rural conditions in the foothill zone of the district were investigated in 1983 (4) and in the mountain zone in 1984. A pilot district planning survey was undertaken in Thaba-Tseka district in winter 1985.

The core staff of DLPRD is limited to a manager and counterpart project manager, together with the planning expert just mentioned. A major feature of the project is intended to be that staff and students from teaching departments should also be involved in aspects of DLPRD research. This has been achieved in the 1983, 1984 and 1985 field exercises and in the preparation of this report, as with the fieldwork and analysis for the project's study of rural non farm employment (6).

1.3. DLPRD research, Maseru district foothills, 1983

Shortly after its inception, the DLPRD project began to build upon the research foundations laid by URPP in the lowlands of Maseru district. In collaboration with staff and students from four NUL departments, baseline household data were collected in two parts of the foothill zone of the district, Ha Ramotsokane and Ha Raboshabane. Fieldwork took place during the NUL long (winter) vacation. Although the survey instrument was expanded and refined in various ways, an effort was made to ensure that the data collected in the foothills would be comparable with those collected in the lowlands the year before. Foothill conditions were analysed in an earlier report (7), but will be summarized again here (Part II below) for comparative purposes.

1.4. DLPRD research, Maseru district mountains, 1984

A similar exercise, described in more detail in section 2 below, was undertaken by DLPRD and the four collaborating departments in the winter of 1984. To complete the pilot investigation of Maseru district, the Rapoleboea area in the mountain zone of the

district was selected for study. The survey instrument used in 1983 was again refined, but with the same concern for comparability with data collected earlier. The data collected are presented in part I of the present report.

1.5. Analysis of the existing data base

Although the data collected and presented here by DLPRD can reasonably be claimed to be representative of rural conditions in the three agro-ecological zones of Maseru district, the analysis can be considerably enriched by comparative reference to data collected by some of the many earlier surveys of rural Lesotho conditions. Such comparative reference to the existing data base is an important part of the DLPRD project's terms of reference and has been attempted on several occasions since the analysis of the first project data from the Maseru foothills in 1983 (8).

A large body of data on rural Lesotho exists on computer file in Maseru. These data derive from surveys undertaken by a number of rural development projects and other government agencies since the early 1970s. They refer mainly to the lowlands and foothills: the data collected by DLPRD in the mountains in 1984 are an important addition in this respect. Coming as they do from a wide range of sources spanning some 15 years, the data are variable in quality and definitional problems often arise before information from one survey can directly be compared with that from another. Cautious interpretation is called for, and the temptation endlessly to juggle the variables and values must be avoided. But it should be a principle in social science research in developing countries which in many cases are starting to suffer from the over-research of their rural populations that each investigation link its analysis with what has already been done, thereby avoiding superfluous field expense and the aggravation of villagers who may have been interviewed many times already. The scope and depth of the analysis can also be enhanced by reference to a larger body of data, perhaps stretching back over a considerable period. Much of the argument in DLPRD's earlier analysis of rural poverty (9) derives from this reference to the existing data base and as such will be applied to the district wide analysis attempted in the second part of this report.

1.6. Structure and purpose of the report

The report which follows falls into two parts. In the first, the data collected in Rapoleboea on rural conditions in the mountain zone of Maseru district are summarized. We have tried to structure the presentation in the same way as that of the foothill data in an earlier report (10). In the second part, we attempt an interzonal, comparative analysis of subsistence and poverty in Maseru district. This begins with a discussion of the zones themselves as units of analysis in the study of rural Lesotho, and goes on to offer a comparative summary of household

and income generation characteristics in these zones. The report ends with some suggestions on further work which could usefully be done to support the district level planning process and the promotion of rural employment.

It is hoped that the analysis presented here goes some way towards the pilot investigation of conditions in one district required in the DLPRD project's terms of reference. It is also hoped that this study of Maseru district will have wider relevance, in two ways. First, although huge amounts of data on the rural areas of Lesotho have been collected (and a proportion analysed), interzonal comparisons within one district are rare (11). Secondly, we hope that the analysis of rural conditions begun in an earlier DLPRD report and continued in this one will permit the design of an abbreviated survey instrument which asks the key questions these reports show to be relevant and which can be used in future field checks for district level planning purposes elsewhere in the country. These are our practical reasons for adding to the already substantial academic literature on subsistence and socio-economic organisation in Lesotho (12). It can also be hoped that this contribution of data on Maseru district can be used for further refinement of theory and analysis of national conditions. Three district surveys will soon be available for comparison: that by URPP on Mafeteng (13) and those by DLPRD on Maseru (below) and Thaba-Tseka (forthcoming).

PART I

DLPRD WINTER 1984 HOUSEHOLD SURVEY, MASERU DISTRICT MOUNTAINS

2. RESEARCH AREA AND METHODS

2.1. The area studied

The area generally known as Rapoleboea was selected for study in the DLPRD winter 1984 household survey, as representative of conditions in the mountain zone of Maseru district. For the purposes of DLPRD and collaborating social science departments, any reasonably accessible and apparently representative group of communities of appropriate size in the zone would have been acceptable for study. The Rapoleboea area was chosen because it met these criteria and also contained a small mountain catchment suitable for study by the AESP students and staff who worked with us.

The road from Maseru to Semonkong runs through the Rapoleboea area (see Map 1), but in fact only one of the villages studied is accessible by vehicle. Others are up to one hour's walk from the road. While the physical geographers concentrated on the catchment in which the village of Ha Mabernice is situated, DLPRD research was undertaken in a total of five village areas: Ha Chadwick, Ha Mabernice, Ha Fuchane, Ha Sekantsi and Ha Setenane. Students lived in rented accommodation in the first four of these villages. Ha Mabernice, Ha Fuchane and Ha Sekantsi in fact comprise numbers of small villages, all of which were surveyed: students visited them on foot from their places of residence.

A full census of all households was attempted in the village areas just named, producing the data presented in this part of the report. Five households were identified but could not be interviewed because of the absence of senior members. The Rapoleboea area is typical of the mountain zone in that village size is substantially smaller than in the lowland and foothill zones. This increases survey costs when an attempt is made to secure representative data. A total of 284 households were enumerated in the area, divided between the villages as follows. The populations of the various sub villages are not shown.

MASERU DISTRICT

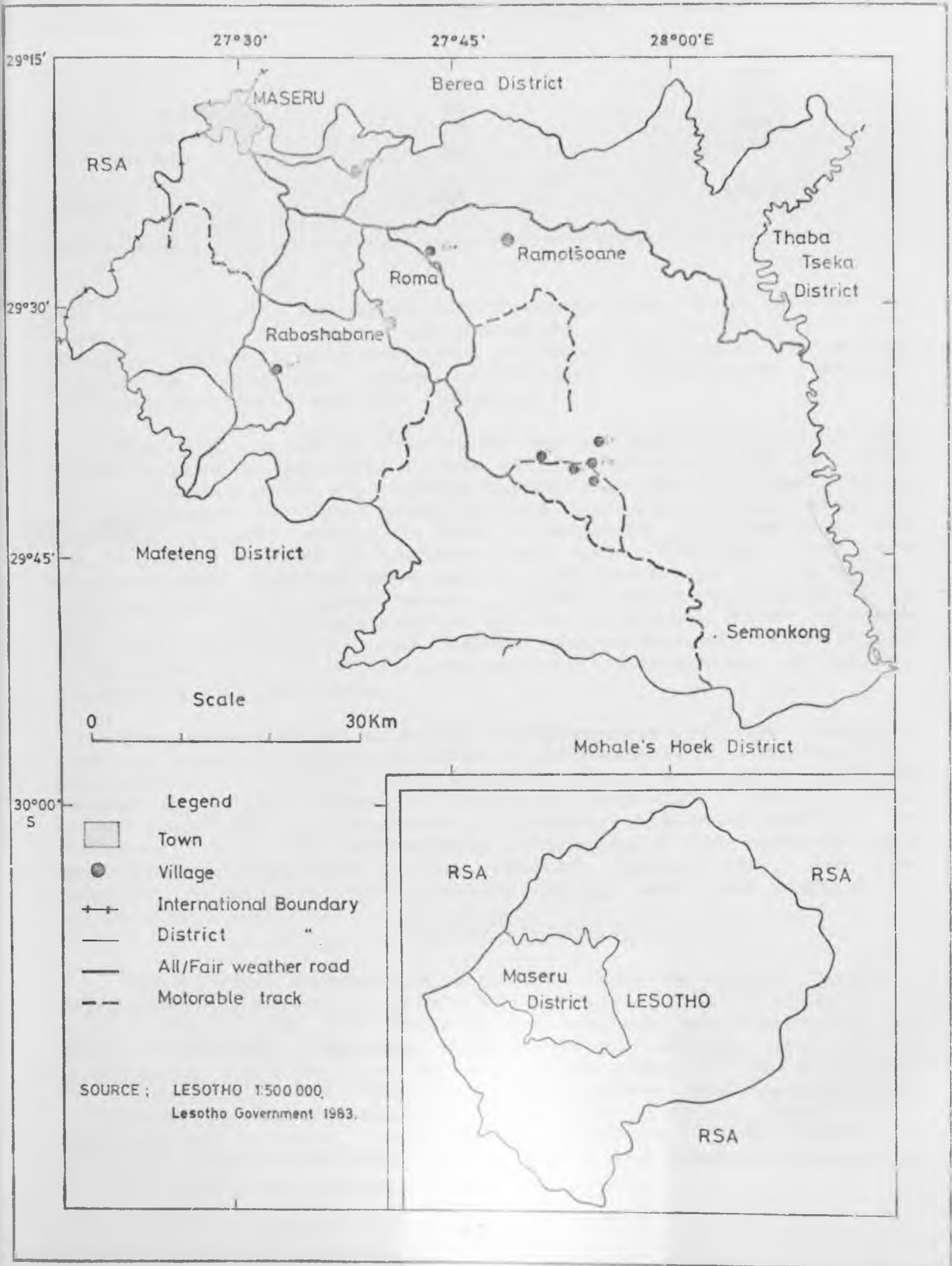


Table 2.1. Village areas surveyed

	Number of households	De jure population
Ha Chadwick	37	166
Ha Fuchane	47	275
Ha Mabernice	93	502
Ha Sekantsi	75	393
Ha Setenane	32	186
Total	284	1522

Few statistically significant differences were found between the five villages in terms of household characteristics. The analysis below treats the total of 284 households as a single population, although where significant differences between villages do occur these are indicated.

One way in which Rapoleboea may be less typical of the mountain zone is that each of the village areas studied is ruled by a separate chief who reports directly to the principal chief in Matsieng. No one chief in this relatively small area is superior to any other. This arrangement may reflect the fairly recent origins of the area as a summer cattlepost for the Matsieng ward, as such governed directly by the principal chief. When permanent settlement began - probably not more than 60 or 70 years ago - the direct control of the principal chief through what were effectively local headmen was maintained, without the development of any of the intermediate hierarchies of chiefs commonly found in Lesotho.

The area studied is fairly representative of the mountain zone of Maseru district in terms of accessibility. Commercial, educational, religious and administrative facilities can be reached in an hour or two on foot or on horseback. As elsewhere in the mountains, a phenomenon of internal migration can now be observed, with new settlements developing at the roadside and depopulation occurring in the remoter communities. The new roadside households are commonly young and lack access to agricultural land.

While such modernizing processes can be seen, however, Rapoleboea continues to give a subjective impression of being a more 'rural' area than those in the lowlands and foothills of Maseru district. Although dependence on outside sources of subsistence will be shown below to be as great in the mountains as elsewhere, the significance of crops and particularly livestock to some households remains considerable. Many other features of a more 'traditional' lifestyle - from modes of building construction to the practice of old Sesotho customs and

beliefs - can still be discerned. The more material differences and similarities between the zones will be described in Part II below.

2.2. The questionnaire survey

The survey instrument used in Rapoleboea is reproduced in Appendix A. It constitutes a further slight refinement of the questionnaire used in the Maseru district foothills in 1983, which was itself developed from that used in the lowlands by URPP in 1982. Care was taken in modifying the questionnaire for use in Rapoleboea to ensure that variables directly comparable with those from the lowlands and foothills could be generated from the mountain data. For the same reason, definitions of household membership remained the same (14): those who shared cooking arrangements and had visited the household in the last two years. Migrants named as household members by the respondent but who had not actually been home for more than two years were thus not included as members by the survey.

Households were again classified in three ways, into subsistence, agricultural networks and membership categories (15). In an additional coding exercise, the lowland households surveyed in 1982 were also classified into subsistence and agricultural networks categories for the first time; the data did not permit classification into membership categories. In order to permit the creation of one computer file for the combined Maseru district data - containing a sub file for each of the three zones - an identical coding format was used for the Rapoleboea data, with new variables not used in earlier surveys coded at the end of the string of values for each case. One complication caused by this was that the variables for numbers of sheep and goats were defined in the earlier surveys as two digits. In other words, the maximum was not expected to exceed 99. This maximum was exceeded several times with the mountain data, which meant that the true numbers would not be accepted by the coding format and processing of these variables had to be done manually.

Creation of a combined, standardized computer file of Maseru district data permitted the comparative analysis of the three district zones presented in Part II below. The analysis of the mountain zone data collected in 1984 in Rapoleboea (presented in Part I) simply involved the selection of the relevant subfile. The subfile structure of the Maseru district file and the codes used for all variables are presented for reference purposes in Appendix B. Lists of the three types of category into which all households were classified are reproduced in Appendix C. Notes on the definitions used in the survey and coding are presented in Appendix D.

2.3. Student projects

As in the foothill zone survey undertaken in 1983, DLPRD research in Rapoleboea in 1984 was undertaken in collaboration with students and their supervisors from the NUL departments of African Development, Economics, Geography and Political and Administrative Studies. All these departments require their students to submit research reports in their final year. The ten students involved worked together on the baseline survey described in this report, and then spent the second half of their seven week field period researching their own individual topics. Their combined generation of a body of baseline data on the area they were all studying provided them with more background material than any could have obtained individually, and various computer runs have been done for students requiring additional analysis of survey variables. Individual research topics included poverty and the characteristics of the poorest groups; rural non farm employment; agricultural networks (sharecropping and mafisa); local institutions in development; and the role of women in agriculture and local development activities. A list of the ten student research reports resulting from the Rapoleboea field exercise is presented in Appendix E.

3. HOUSEHOLD CHARACTERISTICS

This chapter discusses some characteristics of the households resident in the five village areas studied in the mountain zone of Maseru district. Demographic aspects of household composition are presented first, followed by a discussion of general sources of household subsistence. Details of some of these subsistence sources are then outlined: migrant labour, rural non farm employment and agriculture. Attention is then given to the level of subsistence these economic activities make possible for the villagers, in terms of food security and the acquisition of 'modern' household items. The final section discusses participation in local administrative and development activities and the extent to which the communities studied are being reached by various government services.

The indicators presented were mainly generated by a first processing of the data, in which variables refer to the household as the unit of analysis. Data on individuals in the households is represented only in the form of summary household variables, such as the number of dependants or the number deriving their subsistence mainly from agriculture. More information is provided on household heads: for example, age, sex and migration history. Similarly, data on households' fields, gardens and crop production is only available in summary form in the 'household' file to which the analysis here largely refers. Other data like size of fields and levels of production by crop were stored in a separate file. As the unit of analysis in that file is not the

household (but the field or garden), data cannot easily be referred back to household characteristics. For example, a crosstabulation of household members active in agriculture by total field size has not been made at the present level of analysis. Hand coding has occasionally been used to supplement the information coded on the 'household' file.

3.1. Demographic indicators

The working definition of the household used in this survey was noted in section 2.2 above and is outlined more fully in Appendix D. As in the earlier analysis of foothill zone data (16), the household's own definition of its head was normally adopted: this is normally the husband if alive and - at least in day to day managerial terms, if not in official customary law - the wife if the husband dies or deserts her. Occasionally household respondents would refer to the man as the household head even when he had been continuously absent for more than two years. In these cases, again following our earlier working definition, the wife was taken as head for purposes of analysis.

A major feature of the household interviews (see Appendix A) and of the analysis here is the definition by the respondent (household head or other senior member) of the principal source of subsistence of each person aged ten or over in the household. People did not generally find it difficult to identify such a principal source of subsistence, and further questioning usually succeeded in eliciting information on at least some of the individual's subsidiary sources of subsistence. While this important subsistence variable is thus based on a subjective judgement, this is at least the judgement of the a well informed household member rather than an outsider. A definition introduced by the analysis is that of 'dependants'. These were all household members whose principal source of subsistence was shown on the questionnaire to derive from the work or income of another member (see Appendix D). All children aged under ten, for whom principal sources of subsistence were not recorded, were automatically classed as dependants. Table 3.1 below refers among other things to the principal source of subsistence of the household head, but coding design failed to allow for the rare cases where the household head was recorded as him/herself dependent on the work or income of another person. In these cases it was decided to show the household head's principal source of subsistence as that of the member on whom he/she was in fact dependent.

Household size ranged from one to 16 members, with a median size of five. The median number of dependants was three, ranging from zero to 13. Male headed households formed about 73% of the total, although as indicated above this is a formal definition rather than a reference to de facto management of the household. Had the latter been the criterion, many more households would have appeared as female managed than the 27.1% which are

Table 3.1. Household composition and characteristics of the household head

N = 284

Household size	1	2	3	4	5	6	7	8	9	>9
% of households	6.0	9.9	10.6	15.5	17.3	10.9	10.9	6.0	5.6	7.4
	median = 5						mean = 5.2			
No. of dependants	0	1 - 2	3 - 4	5 - 6	7 - 8	>8				
% of households	12.0	28.5	31.7	19.7	6.0	2.1				
	median = 3									
Sex of household head					Male					Female
% of households					72.9					27.1
Marital status of household head	Single		Married		Widowed		Divorced			
% of households	1.1		65.8		28.5		4.6			
Age of household head	15-20	21-30	31-40	41-50	51-60	61-70	>70	Un-known		
% of households	0.4	6.0	15.5	18.7	18.7	16.5	11.3	13.0		
Head's principal source of subsistence	Agri-culture	Migrant labour RSA		Local informal sector		Wages Lesotho		Other/unknown		
% of households	58.8	30.3		6.0		2.8		2.4		

officially female headed. It can be inferred from the adopted definition that most widowed and divorced heads are women, although a few are men. A rather large proportion (13%) of household heads' ages were unknown; among the other household heads, the joint commonest age groups were 41-50 and 51-60.

3.2. General sources of subsistence

Agriculture has often been described as the mainstay of the Lesotho economy, and it is commonly believed to be the foundation of rural subsistence. This may not be an entirely apt description, since other sources of income - notably migrant labour - may make a greater contribution, and the proportion of rural households unable to gain access to arable land at all is growing. On the other hand, there is no doubt either to the outside observer or to the rural household that fields offer a form of subsistence security unavailable in other sectors, even if it is inadequate for total subsistence. A certain stability of employment and social status accrue from arable land holdings. A first analysis of the sources of household subsistence should therefore refer to access to arable land, and this was done in the 1982 URPP lowland and 1983 DLPRD foothill surveys (17) in the belief that such access would significantly influence both the level and mode of income generation. The accuracy of this hypothesis will be discussed in more detail below, but for purposes of comparison and as an introduction to the subsistence structure in the Rapoleboea survey area, the same division into subsistence categories according to access to land is presented in Table 3.2 below.

A household was defined as having access to land when it had been allocated the use rights of one or more fields. Assignment of a household's overall principal source of subsistence was based on the principal sources of subsistence reported for each of its adult members (see below). Where more than one type of principal subsistence source was mentioned for a household, an assessment was made as to which category best described the household. In these cases greater weight was attached to wage employment - in Lesotho or South Africa - than to agricultural or local non farm employment. For example, a landless household with one member employed in South Africa and another providing agricultural labour would be characterized as depending principally on migrant labour for its subsistence.

An important factor influencing the level and mode of a rural Lesotho household's subsistence is its stage in the family cycle (18). This constitutes a principal point of reference in much of the following analysis of rural conditions in Rapoleboea and Maseru district. For this reason, two subsistence categories were identified in the larger 'access to land' group to differentiate households receiving income from the head's migrant labour to South Africa and those obtaining it from the migrant labour of a child or children. The latter category are typically the most prosperous households: they have built up

some resources at home in agriculture and possibly non farm activities with capital earned in earlier years by the migrant labour of the head, and are now able to add to this local income that remitted by their offspring (prior to these offspring establishing separate households). As Table 3.2. shows, this apical category in the family cycle constitutes just under one in six of all households surveyed. The former category are typically small, nuclear households comprising a young couple and perhaps young children. They may have substantial cash income from the head's migrant labour in South Africa, but are likely to be less well established in the village economy, with fewer fields and less capital for off farm activities other than brewing. Many of the landless households in the other major subsistence category reporting dependence on migrant income from South Africa are also at this young stage in the family cycle.

Table 3.2. Household subsistence categories by access to land

N = 284

No access to land (11.3% of total)			Access to land (88.7% of total)		
Principal household subsistence source	% of total	% of subgroup	Principal household subsistence source	% of total	% of subgroup
Migrant labour to RSA	9.2	81.3	Farming only	44.0	49.6
Local informal sector	1.4	12.5	Farming + wages hh head in RSA	19.0	21.4
Agricultural labour	0.4	3.1	Farming + wages child in RSA	15.5	17.5
Wages in Lesotho	0.4	3.1	Farming + local informal sector	7.0	7.9
			Farming + wages in Lesotho	3.2	3.6

Further aspects of subsistence in the Rapoleboea area are clarified by Table 3.3 and 3.4 below. Table 3.3 shows households' main and subsidiary sources of subsistence in terms of the percentage of households in which one or more members

reported a certain subsistence source as principal or subsidiary. Table 3.4 gives more detail by indicating the percentages of all households with given numbers of members reporting these sources as principal or subsidiary.

Table 3.3. Households' main and subsidiary sources of subsistence

N = 284

Source of subsistence

	Agri- culture	Migrant labour RSA	Local informal sector	Wage employ- ment Lesotho
% of households with one or more members reporting given <u>principal</u> source of subsistence	67.6	44.4	8.8	8.5
% of households with one or more members reporting given <u>subsidiary</u> source of subsistence	47.5	11.6	72.5	7.7
% of households not involved in given activity at all		44.0	18.7	83.8

Table 3.4. Number of household members with given principal and subsidiary sources of subsistence

N = 284

Percentages

Source of subsistence

No. of members in hh	Agriculture		Migrant la- bour RSA		Local infor- mal sector		Wage employ- ment Lesotho	
	prin.	sub.	prin.	sub.	prin.	sub.	prin.	sub.
0	32.4	52.5	55.6	88.4	91.2	27.5	91.5	92.3
1	23.2	29.2	39.1	8.1	7.7	48.2	6.0	6.7
2	29.2	14.1	3.9	3.2	1.1	18.3	2.5	1.1
> 2	15.1	4.2	1.4	0.4		6.0		

One coding decision should be noted with regard to the two tables above. Some respondents gave agriculture as both a principal and a subsidiary source of their households' subsistence. This was coded as such in cases where the household engaged in sharecropping on other households' land as well as farming its own fields. Because of this coding decision an accurate percentage of survey households not involved in agriculture at all cannot be calculated.

The paramount feature of rural Lesotho subsistence today is that a cash income is necessary (19). Pure subsistence in kind from the fruits of the earth is no longer practicable, given the standard of living and material requirements of modern Basotho. More significantly, hardly any households in the country - and probably none in the mountain zone - have the arable land holdings or the crop productivity to obtain their required cash income from the sale of crops. A very small minority of mountain livestock owners are able to obtain adequate cash income from sales of wool, mohair and meat. But almost all households, in the survey area as elsewhere in Lesotho, must obtain a proportion of their subsistence from whatever crops they can grow - if they have land - and the balance in cash from other sources. It is therefore instructive to consider these other sources.

Taking reported principal sources of subsistence, it can be seen from Table 3.3 that 44.4% of households gain a cash income from migrant labour to South Africa. Only 8.5% have one or more members whose principal source of subsistence is wage employment in Lesotho. (It should be noted that such employment almost always constitutes a second form of migration - to the urban areas of the country - which is currently contributing to significant shifts in national population distribution and depopulation of the remoter mountain areas.) Primary dependence on the local non farm 'informal' sector is equally low at 8.8%. This sector embraces more or less every way in which a household can earn some cash locally outside agriculture, formal sector opportunities being almost non-existent in the Rapoleboea area. A total of 61.7% are thus earning a primary cash income from the activities of one or more of their members in these sectors.

Turning to subsidiary sources of subsistence, the types of activity reported as subsidiary dependence on agriculture have already been noted. 11.6% of households state migrant labour in South Africa as a subsidiary source of subsistence, indicating that members consider themselves more fully or significantly dependent on other sources. It should be noted that the migrant remittances of another household member could be reported by a given individual as a subsidiary source of his/her subsistence. Very few household members list wage employment within Lesotho as a subsidiary source of subsistence. In fact, five out of six households have nothing to do with wage employment within the country. But the importance of the local non farm sector as a subsidiary source is much higher: 72.5% of households report one or more members involved in minor ways, with only 18.7% not deriving any subsistence from the sector.

It can be seen from Table 3.2. that 44.0% of the survey households are classified in the 'farming only' subsistence category. As this refers to principal sources of subsistence only, these households are all likely to depend in part upon cash income from various reported or unreported subsidiary sources. Subsidiary sources are hard to record in full, since some may be so minor or sporadic that the respondent does not bother to report them.

While agriculture is often viewed as the mainstay of Lesotho's economy - an interpretation which these tables show to be superficial - the dependence of rural households on migrant labour to South Africa is also often stressed. In fact, about half of these households no longer appear to have either a major or a minor dependence on this subsistence source. For the foothill communities of Maseru district surveyed earlier by DLPRD (20), the exact percentage was 51.8. Dependence on migrant labour to the Republic appears to remain somewhat higher in the mountain area studied, where only 44.0% of households report no involvement in this sector.

An alternative way of examining the sources of households' subsistence is shown in Table 3.5 below. This refers to the location of the principal subsistence source of half or more of those household members who are not dependent, i.e. recorded as undertaking an income generating activity themselves for their principal subsistence rather than obtaining such subsistence from the remittances or other support of other household members.

Table 3.5. Location of principal subsistence source of half or more of household members

N = 284

	% of households
Study area	69.4
Republic of South Africa	27.1
Elsewhere in Lesotho	3.2
Elsewhere	0.4

Although this interpretation underestimates the importance of income from South Africa - since few households have half or more of their income earning members working there, and the income earned in the Republic by just one person often exceeds all other cash income household members are able to secure - the importance of income secured within the local rural area is clear. Given that the contribution of agriculture can only be partial, many households can be seen to be surviving on a combination of this and whatever local off farm strategies they

can devise. On the other hand, it is probably only possible for such numbers of households to survive in this way because of the amount of South African migrant income remitted to and recirculated within rural communities. Returning to the family cycle mentioned above, it can be argued that in recent generations the rural areas, with their limited opportunities for agricultural and other income generation, have acted as partially secure bases from which able bodied men have migrated to supplement their household incomes. They return when they are older to combine their local agricultural and off farm income with the migrant remittances of their children. Ultimately they experience the contraction and impoverishment of their households as their children establish themselves separately and their own ability to farm or earn other income declines. To some extent the rural areas continue to act as a base for the more modern migration to work in the urban areas of Lesotho, from which the migrants in due course return. But there are some important differences. For a growing number the migration is permanent, often because no arable land is available for them in the rural areas. Furthermore, a significant proportion of the temporary and permanent migrants are women. The economic, demographic and spatial structure of subsistence for rural communities - in the mountains as elsewhere - is changing in these various ways, but the continuing significance of rural income generation should not be overlooked because of this. Nor can the urban sector - or even the lowland zone generally - be expected to absorb all of the growing population who need to subsist in the remainder of the country.

Following these general observations on the structure of subsistence in the mountain communities studied, some additional notes on specific income generating activities are now presented.

3.3. Migrant labour

Migration by one or more members to work in South Africa is part of the experience of the great majority of rural households in Lesotho. In the Rapoleboea villages studied, 44% of the households reported in 1984 that they had at least one member for whom such migrant labour was the principal source of subsistence. This does not reflect the full importance of work in South Africa for rural communities. For several generations, but especially since the wage increases of the 1970s, this sector has represented the greatest potential for a rural household to gain access to a relatively large amount of money in a relatively short time. In addition to such 'target' earning for specific purposes like marriage or investments in buildings, cattle or equipment for agricultural and non agricultural income generation at home, migrant labour has often constituted the only way rural households, especially young ones, can attain a tolerable level of subsistence. It typically goes on to provide the strategy whereby a household in the early stages of the cycle establishes the economic foundation at home in the rural area upon which subsistence in later stages of the cycle can be built. Marriage

payments permit the establishment of the household and the production and legitimization of the next generation who will in turn provide labour for the household. Investment in cattle, agricultural equipment and sometimes other productive goods like spinning or weaving machines permits the household to generate essential income at home. Many of the basic comforts in a rural Lesotho home - like beds and other furniture - are purchased during the stage in the cycle when migrant labour to South Africa is generating income. Finally, as was noted in section 3.2 above, the income earned by migrants in South Africa circulates and recirculates in the rural economy - for example through beer sales or the rental of agricultural services - and so supports many more people than the actual migrants and their immediate families.

During the early phases of a household's existence, the migrant to South Africa is thus generally the husband. 27.5% of the household heads in Rapoleboea were reported to have been at the mines for part or all of the six month preceding the survey. Later on, the household's children may become the migrants, although this is normally restricted to men and recent cutbacks in South African mines' recruitment of Basotho novices mean that far fewer young men can now obtain such employment than in previous decades. Nevertheless, 15.5% of the households had children earning wages in South Africa (Table 3.2 above).

The workings of this cycle of household experience and the employment of (male) household members in South Africa can be seen in the fact that 42.6% of the Rapoleboea household heads (of both sexes) have migrated before but are not involved now. In summary, again for both sexes, 28% of household heads are currently migrants, 43% have been migrants before but are not now, and only 29% have never migrated to work in South Africa. Given that 27% of household heads in the villages studied are women and that female labour migration to South Africa is severely restricted, it can be concluded that the vast majority of male heads are or have been migrant labourers in the Republic. In fact, however, of 178 household heads for whom the duration of past or current migration could be established, 11 are female. Eight had migrated for periods up to five years, two between six and ten years and one for even longer. These histories of migration by household heads are summarized in Table 3.6 below. It can be seen that for most, such migration is a protracted experience.

Further aspects of labour migration to South Africa as a component of subsistence in the mountains of Maseru district and in the three zones generally will be discussed in chapters 4 and 7 below.

Table 3.6. Duration of household heads' past or current migration to South Africa

N = 284

No. of years	No. of hh heads	% of all hh heads	% of all hh heads who have migrated & for whom estimate was obtainable
< 5	39	13.7	21.9
6 - 10	40	14.1	22.5
11 - 15	33	11.6	18.5
16 - 20	36	12.7	20.2
> 20	30	10.6	16.9
Never migrated	82	28.9	
No estimate obtainable	24	8.5	

3.4. Local non farm employment

The prevalence of local non farm employment as at least a subsidiary source of subsistence in the Rapoleboea communities studied was indicated in section 3.2 above. This sector was the subject of a separate DLPRD study in the Maseru district lowlands and foothills (21) in which six common types of non farm income generation were identified for convenience of analysis. The same six common categories and their occurrence have been tabulated here. There are of course many more, less common types, and these also will be noted below. Table 3.7 below shows how prevalent these non farm activities are: the majority of Rapoleboea households are involved in at least one.

Table 3.7. The commonest categories of local non farm income generation

N = 284

Activity	No. of households involved	% of households involved	No. of persons involved
Brewing	137	48.2	163
Building, roofing, masonry, quarrying	28	9.9	35
Grass weaving	18	6.3	23
Knitting, sewing	12	4.2	12
Metal, shoe repairs	6	2.1	7
Other	113	39.8	Not calculated
No involvement reported	72	25.4	

Table 3.8. Other types of local non farm income generation

Activity	No. of households involved
'Piece jobs'	15
Participation in stokfels	8
Rope making	6
Cafe	6
Processing mohair	5
Saddle repair, leather work	3
Pottery	3
Sale of fowls, pigs	3
Sale of soft goods	3
Traditional healing	2
Postman	2
Sale of firewood, thatch	1
Licence officer	1
Church minister	1
Unspecified	8

It can be seen that a wide range of economic opportunities, many of them very minor, are being exploited by people in these mountain villages. 'Piece jobs' are a rather vague category of occasional tasks people do for small payments: perhaps helping to dig the foundations of a house, or helping to cook for a feast. One important source of non farm income in Rapoleboea which is not shown in the above tables is employment on food for work projects, where people are taken on for 15 day shifts on labour intensive activities, normally road construction. They may be paid entirely in food or partly in cash and partly in food. Involvement in food for work projects was particularly marked in the village of MaBernice, where 70 households and 99 individuals were reported to have participated. The large majority of labourers on such projects are women, and those earning income from this source typically combine it with other types of local non farm activity. Most commonly it is combined with brewing. Many other non farm activities are practised in combination, which is not surprising since none of them offer full time employment or anything approaching full subsistence (except possibly work in cafes). Income generation from stokfels (cooperative parties held in rotation by groups, each member taking her turn to keep the proceeds) was always reported in combination with another type of non farm employment. Grass weaving is very commonly linked with other activities also.

Two of the students working with DLPRD in Rapoleboea, P. Mapetla and P. Tsoene, applied the questionnaire on rural non farm enterprises earlier used by the project in the lowlands and foothills of Maseru district to a selection of enterprises in the mountain villages under study. Details of their individual reports are given in Appendix E, and those reports present the data they collected in detail. Whereas the earlier lowland and

foothill survey tried to enumerate all non farm income generating enterprises in the four villages studied, Mapetla and Tsoene were not able to do such a census because of shortage of time. They deliberately skewed their sample away from brewing, which is the commonest type of rural non farm employment, and towards other types which occur in smaller numbers. Their findings indicated a similar structure for the sector as a whole and for individual enterprise to those encountered elsewhere in the district. Of the 57 enterprises they studied, 81% employed (normally part time) only one person. 56% were male headed: overall in this sector female enterprise heads are much commoner, but this figure indicates the purposive exclusion of most brewers from the study. 91.9% of the enterprises were headed by people aged over 30, and 69.1% by people more than 40 years old. This is indicative of the way local non farm employment comes into play later in the family cycle as dependence on migrant labour ceases to be possible and reliance upon local income generation has to increase. Again, however, the age distribution would be less skewed if all brewers had been included in the study: some of these entrepreneurs are the young wives of absent migrant labourers. The modest, localized nature of the enterprises was made clear: almost all those involved have picked up their skills locally, with 84.2% of enterprise heads saying they learned by informal observation and 14.0% saying they taught themselves. 80.7% of the enterprises market their produce in the local area. Management of the enterprises is unsophisticated, and their capacity for the generation of capital limited: 73.7% do not keep any form of accounts, and 93.0% of heads (probably a slight exaggeration) said they did not maintain savings accounts. 47.4% said they give credit to their customers, which is commonly a severe burden upon profitability. Even with the reduced number of brewers in the group studied, the frequency with which these enterprises must give credit was marked. Here again we see the small but significant ways in which rural people, in the mountains and elsewhere, must piece together small, part time, dubiously profitable components of subsistence from local non farm sources and the recirculation of whatever money comes into the local economy from outside.

Many households involved in agriculture must engage in this type of additional income generation. Table 3.2 above showed that 44.0% of the 284 households surveyed in Rapoleboea fell into a 'farming only' subsistence category, but it was pointed out that subsistence categories were defined in terms of the reported principal sources of subsistence of household members. Table 3.9 below shows the involvement in local non farm employment of households in three 'agricultural' subsistence categories.

Experience with the earlier DLPRD survey of lowland and foothill rural non farm employment and with DLPRD baseline surveys in the foothills and mountains all suggests that the complex, interlocking network of local non agricultural income generating strategies which households use to help piece together their subsistence is likely to grow in significance the more deeply it is investigated. A superficial survey is unlikely to

Table 3.9 'Agricultural' subsistence categories' involvement in local non farm employment

N = 154

Activity	<u>Subsistence category</u>					
	Farming only		Farming + local off farm employment		Farming + wages Lesotho	
	No of hh	% of category	No of hh	% of category	No of hh	% of category
Brewing	65	52.0	11	55.0	5	55.6
Grass weaving	11	8.8	3	15.0	1	11.1
Knitting, sewing	5	4.0	1	5.0	1	11.1
Building, roofing etc.	15	12.0	6	30.0	2	22.2
Metal, shoe repairs	4	3.2	1	5.0		
Other	59	47.2	16	80.0	4	44.4
No involvement	23	18.4	2	10.0	2	22.2

do more than scratch the surface of these many strategies, partly because respondents often consider them too minor to be worth reporting. The subject has to be pursued in more thorough investigations of a village economy if the true depth and significance of this sector are to be understood. Such investigation is time consuming and detailed, and we believe that DLPRD and other studies have only begun to reveal the elements of the non farm income generation which goes on in any Lesotho village. The more one searches for such activities, the more one finds. This being so, it is safe to conclude that baseline data such as those presented here from the Rapoleboea survey probably underestimate the significance of the local non farm sector.

3.5. Crops, livestock and food security

While it was shown in section 3.2 above that agriculture is not the principal source of subsistence for Lesotho generally or for many of its constituent households, the influence of the sector is profound in that almost all people living in the rural areas are involved in it to some extent. In the five mountain villages surveyed in the Rapoleboea area, only eight households, or 2.8% of the total, had no involvement in agriculture. Other landless families were linked to crop production activities through sharecropping other households' fields or the provision of agricultural labour. It was shown in section 3.2. that over two thirds of the households had at least one member whose main

source of subsistence was agriculture, and 44% of all households had two or more such members. 59% of all household heads stated that they are primarily involved in agriculture, and 93% of all households planted at least one crop during 1983/84.

Yet, notwithstanding this general and active involvement, many households harvested very little in relation to their needs. This is shown by Table 3.10 below.

Table 3.10. Household heads' estimates of how long harvested crops will meet household needs for these crops

	% of all households				% of those households which planted crop and could estimate			
	N = 284				N=227	N=202	N=46	N=23
	Maize	Wheat	Sor-ghum	Beans	Maize	Wheat	Sor-ghum	Beans
Not planted	20.1	28.9	83.8	91.9				
Planted, no. of months								
< 1	17.6	8.8	1.8	3.2	24.0	13.4	13.5	64.3
1 - 3	40.1	32.4	8.8	1.4	54.8	49.5	67.6	28.6
4 - 6	9.5	15.1	2.1	0.4	13.0	23.1	16.2	7.1
7 - 9	1.1	3.2			1.4	4.8		
10 - 12	3.5	4.6	0.4		4.8	7.0	2.7	
> 12	1.4	1.4			1.9	2.2		
No estimate	6.7	5.6	3.2	3.2				

The most common crops are maize and wheat, but only four households reported that they had harvested more maize than would be needed for one year's consumption, and an equally small number had more than enough wheat. Sorghum and beans were planted by far fewer households, but among those who did grow them only one household thought that the harvest would cover more than six months' consumption.

Like 1982/3, the crop year covered by the Rapoleboea survey was one of drought. A limited follow up survey by one of the students participating in the fieldwork indicated that farmers felt they could grow much more than in 1983/4 in a year of good rainfall. The importance of the figures in Table 3.10 is not to indicate the agricultural potential or otherwise of the area, but

to show that almost all households realized only a fraction of their subsistence needs from their own farming in a drought year, despite heavy involvement by many of their members on the land. Many households had to buy their basic food all year round, and within three months after harvest the majority of households were in this position.

The means of agricultural production in the survey villages are unequally distributed. Although landlessness is low in comparison to the estimated national average, few households have the tools and draft power to engage in crop production on their own (see Table 3.11 below). 40% of the households have reached the 'ideal' of having three or more fields, but only 37% own one

Table 3.11. Distribution of fields, major agricultural implements and livestock

N = 284

FIELDS

	0	1	2	3	4	5	6	7	8
% of households	11.3	18.3	30.3	31.7	3.9	2.1	1.8	0.4	0.4
	Mean 2.16								

MAJOR AGRICULTURAL IMPLEMENTS

	0	1	2	3	4	5
% of households	63.0	32.0	2.8	1.4	0.4	0.4
	Mean 0.45					

LIVESTOCK UNITS

	0	1-3	4-6	7-10	>10
% of households	24.9	25.6	12.1	12.8	24.6
	Mean 8.53				

DRAFT ANIMALS

	0	1-3	4-6	7-10	>10
% of households	45.1	26.1	15.1	9.2	4.6

or more major agricultural implements. Almost all of these have only a plough; other implements are rare. Carts are completely absent in these villages, and apart from three households that have a sledge in working order, all local transport must be done with pack animals, the occasional wheelbarrow or by means of headloading.

The figures for draft animals in Table 3.11 above clearly illustrate a dilemma which faces both farmers and policy makers in all zones of Lesotho but which is particularly acute in the mountains where tractors are almost unknown and their use is severely limited by the lack of negotiable tracks and the steep gradients in fields. Overgrazing is commonly believed to be severe, yet the table shows that 45.1% of households have no draft animals. Given that at least four cattle are normally required to pull a plough, the group having between one and three such animals also suffer: the best they can do is to combine their animals with those of neighbours, but this may affect the timeliness of their ploughing - a crucial factor in Lesotho's difficult rainfall conditions, and more important in the mountains where the growing season is shorter. A total of 71.2% of households, despite the overgrazing which surrounds them, thus lack adequate draft. Even if we assume that this group contains all of the 11.3% of the households which hold no land and therefore do not need draft, more than half the land holding households can be seen to have to rely upon sharing or hiring mechanisms which may be unreliable, untimely, or both.

The survey did not have the resources for field measurement. It is known that there is considerable variation in Lesotho field sizes, so that the number of fields held (as shown in Table 3.11 above) is not a reliable guide to the area of land held. Other surveys have suggested that those who hold more fields also tend to have bigger fields. If this is true in Rapoleboea also, land distribution may be more uneven than Table 3.11 suggests.

A considerable proportion of the households surveyed combine field crops with garden production. Two out of three households have a garden near their house, and half had used this garden during the year preceding the survey. Most grew vegetables for home consumption only (32.0% of all households), but 18% produced for consumption and for sale to other households, so that this comparatively small asset made a much needed cash contribution. So did the sale of field crops for a minority of the households (see Table 3.12 below): these sales occurred despite the fact that, in most cases, the household did not really have a surplus to sell. Somewhat larger minorities sold animals and/or wool and mohair; fewer households (13%) sold handicraft products. Unfortunately, information was not collected on amounts sold or the income realized. (Such quantification normally requires more sophisticated data collection than the single visit survey.) Except for wool and mohair, almost all sales were made to other households. The agricultural sector thus made very little contribution to the income earned by the villages from outside.

Where so many households are involved in agriculture and so few have all the necessary means of production, forms of cooperation abound. One of the commonest is sharecropping, which is examined in more detail in one of the student project reports listed in Appendix E (22). More than half the households which hold fields are involved in it, one way or the other, and almost

Table 3.12. Crop, livestock and handicraft sales

N = 284

Percent

Type	Sold none	Sold, to:			
		Other house- holds	Private traders	Cooper- atives	More than one of these
Field crops	82.7	16.9		0.4	
Garden crops	82.0	18.0			
Animals	72.2	26.4	0.7		0.7
Wool/mohair	73.2	0.4	18.7	4.9	2.8
Handicrafts	87.3	10.9	0.4	0.7	0.7

half of the landless households sharecropped the fields of others in the period covered by the survey. The importance of sharecropping is expressed in the 'agricultural networks' categories shown in Table 3.13 below, although it should be noted that households sharecropping their own land (sharecropping 'in') and those sharecropping the land of others (sharecropping 'out') are in fact quite different.

Table 3.13. Households by agricultural network category

N = 284

Category	% of households	
Landless,	11.3	
- sharecropping		4.9
- providing agricultural labour		3.2
- other agricultural involvement		0.4
- not involved in agriculture		2.8
Access to land,	88.7	
- no sharecropping arrangements		40.8
- sharecropping own land		24.6
- sharecropping others' land		21.5
- sharecropping both ways		1.8

Another way of getting the necessary agricultural inputs together - implements, draft power or labour - is to hire them for cash. One in four households in the survey area resorted to hiring inputs, often at least two types together (Table 3.14 below). In addition to these more formal resource sharing mechanisms of sharecropping and hire, there is a wide range of less formal arrangements in which friends and relatives agree to carry out tasks on each other's fields, pooling whatever inputs they are able to contribute. Only formal sharecropping and hire were covered by the survey. These less formal mechanisms can only be delineated after much more intensive survey work, but they are at least as significant in permitting a large majority of rural households to undertake agricultural activities despite their lack of adequate inputs. On the other hand, it is the need to resort to these arrangements which may render farming untimely or otherwise inefficient and thus lower the subsistence contribution this sector is able to make.

Table 3.14. Hire of agricultural inputs in 1983/84

Percent of all households	
N = 284	
Hired no inputs	73.9
Hired one or more inputs	26.1

Percent of hiring households	
N = 74	
Inputs hired	
Implements only	17.6
Draft power only	2.7
Labour only	12.2
Implements and draft	14.9
Implements and labour	6.8
Draft and labour	12.2
All three types of input	33.8

Percent of hiring households	
N = 74	
No. of types of input hired	
One	32.4
Two	33.9
Three	33.8

As in crop production, there are arrangements in the livestock sector whereby households can gain access to animals they do not actually own or leave their livestock in the care of others. These mafisa arrangements are the subject of one of the individual student project reports listed in Appendix E (23). Although an effort was made to cover ownership of livestock and mafisa arrangements during the Rapoleboea survey, a note of caution must be sounded on the livestock data presented here: it is thought that they may be less reliable than the other data collected. Some under enumeration is suspected, but no reasons were found why this should systematically affect the distribution pattern which emerges. The figures given refer to the numbers of animals managed on village land. These comprise animals owned by the residents (excluding those they own but have sent out on mafisa loan to other areas), as well as some that belong to residents of other areas but are managed by local people under mafisa loans. Inspection of the data shows that on balance and for each type of animal, there are rather more animals loaned in on mafisa than loaned out. Both movements are small (135 and 166 livestock units respectively) in relation to the total number of livestock units present (about 2560).

Table 3.15. Livestock managed on village area land

	Mean no. per household	Max. no. per household
Livestock units *	8.5	124
Horses	0.9	7
Donkeys/mules	0.6	7
Goats	5.5	105
Sheep	12.9	420
Pigs	0.1	3
Cattle	3.3	not calculated

* 1 livestock unit = 1 bovine/equine or 5 sheep or goats. Pigs were excluded from the calculation of livestock units.

The smallest village surveyed, Ha Setenane, has the largest mean household herd size (16.8 livestock units), whereas the other villages all have much smaller mean household herds of between 6.2 and 8.3 livestock units. Mean cattle holdings in Ha Setenane are again somewhat larger, but the difference between this and other villages is mainly due to some large flocks of sheep and goats managed by a few households. Few such flocks are present in the other villages.

Further investigations by one of the students working in Rapoleboea showed that stock owners in the area generally considered the quality of local grazing to be good. They saw no reason to reduce the size of their herds and flocks. The only

factor which in these circumstances may be preventing the number of animals managed in the area from rising even higher may be the restrictions on taking animals in on mafisa loans which are enforced in some of the villages.

The discussion of livestock so far has been in terms of mean herd sizes, but it must be pointed out again that livestock distributions are in fact highly skewed. Large proportions of the Rapoleboea communities in fact manage no livestock, and even larger groups have no draft animals, as Table 3.11 indicated. Further details are provided by Tables 3.16 and 3.17 below.

Table 3.16. Distribution of livestock holdings

N = 284

No. of livestock units managed *	% of households
0	24.9
1 - 2	18.9
3 - 5	15.3
6 - 10	16.4
11 - 20	13.2
> 20	11.0
> 100	0.4

Table 3.17. Distribution of cattle holdings

N = 284

No. of cattle managed *	% of households
0	40.1
1 - 2	16.9
3 - 5	21.1
6 - 10	15.1
11 - 20	5.6
> 20	1.1

* Household's own livestock managed in the area + other households' livestock loaned in to the household on mafisa.

Given that 24.9% of households manage no livestock at all and 59.1% manage five livestock units or fewer (the equivalent of one cow), the bulk of the approximately 2560 livestock units present can be assumed to be concentrated into a relatively small number

of household herds. Small stock in particular are concentrated into a small number of large flocks. A few individuals in the Rapoleboea area, as in most mountain communities, are professional small stock managers with flocks of several hundred animals and a substantial cash income from the sale of wool and mohair, although they typically appear to devote all their time and interest to their flocks and not to enjoy a substantially higher personal standard of living than their neighbours. As for cattle, it was indicated in the discussion of draft power above that 45.1% of all households in the study area have no adult animals able to pull a plough. Table 3.17 shows that 40.1% manage no cattle of any sort, and 57.0% manage two or fewer. Given the important contribution livestock ownership can make to cash incomes, to the ability to farm effectively and to social status, these figures suggest that the distribution of livestock is a major influence on social and economic differentiation in Rapoleboea.

3.6. Modern possessions

In the analysis of rural levels of living undertaken in an earlier DLPRD report (24), reference was made to the ownership of certain 'modern possessions' as identified in some other surveys. Although the choice of which possessions to use for such index purposes is bound to be subjective, checking which of a list of such items a household has managed to accumulate is a helpful 'stock' indicator of the level of living that household has been able to attain. As was suggested above in the discussion of family cycles, that level of living may no longer be sustained; but durable items earlier acquired may still assure certain minimal comforts and indicate the more prosperous phases through which the household may have passed.

For purposes of comparability with the useful MAFQAL survey to which reference was made in the earlier study, the same modern possessions checked in that survey were included in the 1984 DLPRD questionnaire for Rapoleboea (Appendix A, question 15): chair, table, bed, radio, cupboard, flat (metal) roof on at least one house, lantern and latrine. The frequency with which these items were found in Rapoleboea households is shown in Table 3.18 below. The most important feature of this table is that over a third of the Rapoleboea households own none of the items about which we enquired. It is also revealing that fewer than half the households in these mountain communities own a bed, but that almost as many own radios as beds, and that radios are in fact commoner than chairs or tables. One simple factor affecting the ownership of modern furniture in such villages is of course the difficulty of transporting it over difficult terrain for long distances from the nearest road. The distribution of modern possessions among different types of household is discussed in section 4.4 below.

Table 3.18. Ownership of 'modern possessions'

N = 284

Item	% of households
Bed	46.5
Radio	41.2
Chair	34.9
Table	30.3
Lantern	21.1
Cupboard	14.8
Flat, roof	7.4
Latrine	0.7
Owns none of these items	37.7

3.7. Local development participation and government contacts

As in the study of the Maseru district foothills in 1983, an effort was made in Rapoleboea to ascertain the extent to which households were involved in local development projects of any type or in village institutions connected in some way with development work. Households were again classified on this basis into 'membership and participation' categories, as shown in Table 3.19 below. The local development projects in which large numbers of households had participated in the 12 months previous to the survey were principally road construction activities supported by food aid. 63.0% of Rapoleboea households can be seen to have been involved in such projects during the period. Credit unions appear to be the strongest organizations in the area, but 47.2% of households reported no membership of any organization.

The level of extension contact with these communities is low. Only 11.7% of the households reported a visit from any type of extension worker in the six months prior to the survey. Village health workers had been seen most frequently - in 8.8% of the households during the period - while agricultural demonstrators had only visited 1.5% of the households, and rural development and nutrition workers had been seen in only one household each.

Public meetings, or pitsos, had been reasonably well attended in the same six month period before the survey (although some over reporting might be suspected from respondents anxious to create the right impression). 82% of household heads were said to have attended a pitso during the previous six months: 57.5% had attended at least one pitso addressed by a government representative. Other pitso, commonly called by the chief for local government announcements and discussions, had been attended

Table 3.19. Membership and participation categories

Category	% of households

Participated in a local development project,	
- no membership of any organization	25.0
- a hh member is chief	0.7
- a hh member is chief's councillor	1.4
- a hh member sits on Village Development Committee	2.8
- a hh member sits on Land Allocation Committee	3.5
- a hh member belongs to credit union	14.8
- a hh member belongs to women's organization	0.4
- a hh member belongs to some other organization	0.7
- hh member(s) belong to more than one organization	13.7
Did not participate in any local development project,	
- no membership of any organization	22.2
- a hh member is chief's councillor	1.8
- a hh member sits on Village Development Committee	1.4
- a hh member sits on Land Allocation Committee	0.7
- a hh member belongs to credit union	5.6
- a hh member belongs to some other organization	2.1
- hh member(s) belong to more than one organization	3.2

at least once by 67.3% of the household heads during this period. While a low level of extension input is not surprising in these mountain villages, it is suggested that pitso attendance is still relatively high in communities which remain tightly knit compared with their larger, more urbanized and more fragmented counterparts in more accessible parts of the country.

Following this outline presentation of the major features of the Rapoleboea communities, the next chapter attempts some elementary analysis of the relationships between these characteristics prior to a broader discussion in the second part of the report of how these features and relationships compare between the three zones of Maseru district.

4. SOME INTERRELATIONS OF HOUSEHOLD CHARACTERISTICS

Some fundamental relationships between Rapoleboea household characteristics are explored in this chapter in an attempt to illustrate the typical modes of subsistence and phases of development through which these households pass. The present disposition of resources, demographic structure and income generation opportunities controls the levels of subsistence we observe in such communities; understanding how these features interact can help us identify those points where development intervention is most likely to achieve improvements in the standard of living and economic opportunities of rural households. The chapter therefore begins with comments on the relationship between the demographic features of the household and its mode of subsistence. More specific relationships between demographic indicators and involvement in agriculture are then explored, after which the relationship between agriculture and other household source of subsistence is discussed. Finally, the links between demographic indicators, subsistence categories and 'modern possessions' as an index of standard of living are assessed.

4.1. Subsistence categories and demographic indicators

Reference was made in section 3.2. to the broad subsistence categories into which the Rapoleboea households were classified for purposes of analysis. Table 4.1 below shows the strong relationship which exists between the size of the households surveyed and the subsistence categories into which they fall.

Table 4.1. Subsistence category by household size for the commoner subsistence categories

N = 275

Subsistence category	% of total	Size of household						Median
		1	2-3	4-5	6-7	8-9	>9	
Landless	11.3		18.7	56.2	15.6	9.4		4
Access to land,								
- farming only	44.0	12.0	27.2	32.8	15.2	10.4	2.4	4
- + head's SA wages	19.0		9.3	44.5	31.5	7.5	7.4	5
- + child's SA wages	15.5	2.3	4.5	15.9	29.5	22.7	25.0	7
- + local off farm	7.0	5.0	45.0	10.0	25.0	10.0	5.0	3

Because the various 'landless' subsistence categories each contain relatively few households, they have been combined into one group for further analysis, except where differentiation within the landless group is of particular interest. The 'access to land plus wages Lesotho' subsistence category is excluded from the table (but not from statistical analysis) because it contains only 3.2% of the households.

Statistical tests indicate that the relationship between household size and subsistence category as shown above is strong. The largest median family size can be seen in the group depending upon agriculture and the South African earnings of a child or children. Such households are understandably large, since they include both the older generation - the father no longer migrates to work in the Republic but now farms and perhaps earns other income from local non agricultural activities - and children who have not yet set up separate households but are of an age to migrate to work and remit some of their earnings home. Single member households are commonest in the farming only group, which is where widows living alone and dependent upon residual field holdings are concentrated; other widows probably make up most of the group of single person households in the farming plus local off farm employment category. Households dependent upon farming plus the head's South African earnings are in the middle size ranges, and most commonly are slightly larger than landless households or those depending upon farming only.

The factors explaining this relationship between household size and subsistence category also influence the relationship between the sex of the household head and subsistence category.

Table 4.2. Subsistence category by sex of household head

N = 284

Subsistence category	Sex of household head	
	Male	Female
	% of category	

Landless,		
- agricultural labour	0.0	100.0
- SA wages	96.2	3.8
- local off farm employment	75.0	25.0
- wages Lesotho	100.0	0.0
Access to land,		
- farming only	66.4	33.6
- farming + head's SA wages	96.3	3.7
- farming + child's SA wages	61.4	38.6
- farming + local off farm employment	45.0	55.0
- farming + wages Lesotho	77.8	22.2
% of all households	72.9	27.1

Again a strongly significant relationship emerges from statistical tests. Not surprisingly, male household heads are overrepresented in the wage earning categories (including the small group earning wages in Lesotho). Female household heads are common in the farming only category - as pointed out earlier, many semi-destitute widows are found in this group - and in the category receiving remittances from children in South Africa - widows fortunate enough to have children supporting them. Most striking is that more than half the households combining agriculture and local off farm income generation are female headed. There is in fact only one household - female headed - in the landless group living from agricultural labour. It can be seen from Table 4.2 that the other landless categories are predominantly male headed, subsisting from the formal and informal sector incomes they are able to earn in South Africa and Lesotho. Many of these landless households are young and have not yet been able to acquire rights to fields. It is in fact interesting also to see how the principal source of subsistence of the household head varies with his or her age. This relationship is shown in Table 4.3 below.

Table 4.3. Principal source of subsistence of household head by age

N = 247

Source	Age							% of total
	<20 %	21-30 %	31-40 %	41-50 %	51-60 %	61-70 %	>70 %	
Agriculture	100.0	5.9	40.9	47.2	84.9	76.6	78.1	61.1
Migrant labour to S.A.		88.2	50.0	41.5	7.5	10.6	9.4	28.7
Wages Lesotho		5.9	4.5	1.9		4.3	3.1	2.8
Local informal sector			4.5	7.5	7.5	8.5	3.1	6.1
Other				1.9			6.2	1.2

37 missing cases (age of head of household unknown)

Again the relationship is statistically significant. A very large proportion of the household heads aged between 21 and 30 are at work in South Africa, and about half of all those aged up to 50 are so employed. After this age the numbers tail off sharply. It should be noted that the compression of the data into this table makes those old household heads dependent upon wage earning in South Africa or Lesotho by children or others

appear to be so employed themselves. The rise in the proportions of the age groups above 60 whose principal source of subsistence is migrant labour or wages in Lesotho thus indicates dependence rather than employment. More significantly, Table 4.3 shows the way in which households' dependence upon agriculture rises as they age. Overall, it can be deduced from the tables above that as households mature through the family cycle, they change from one subsistence category to another, while growing and ultimately shrinking in size. Landlessness, the most common condition when the head is under 30 years old, decreases and disappears. Migrant labour is the predominant source of subsistence for the younger households, but as it phases out the importance of agriculture becomes paramount and the modest contribution of local off farm employment also rises. Overall, agriculture is by far the most commonly reported source of subsistence for Rapoleboea household heads. The proportion of all household heads engaged in migrant labour to South Africa is much smaller, but it must be stressed that in the most able bodied age groups it is very high. It is this phase in the family cycle, it has been suggested above, which makes possible the modest capital accumulation that in turn sustains the household at an endurable standard of living and enables it to engage in agriculture at later stages. All these tendencies are best summarized by a tabulation of the covariation of the age of the household head and the household subsistence category, as shown in Table 4.4 below.

Table 4.4. Age of the household head by subsistence category

N = 247

Subsistence category	Age of household head						
	<20 %	21-30 %	31-40 %	41-50 %	51-60 %	61-70 %	>70 %
Landless		58.8	18.2	11.3			
Access to land,							
- farming only	100.0	5.9	36.4	39.6	58.5	51.1	59.4
- + head's SA wages		35.3	38.6	30.2	11.3	2.1	
- + child's SA wages			4.5	9.4	18.9	27.7	28.1
- + local off farm			2.3	5.7	7.5	14.9	6.2
- + wages Lesotho				3.8	3.8	4.3	6.2

The best single index of the current income of a household is whether it has a member in wage employment in South Africa. It is not surprising that the number of migrant labourers in the household correlates strongly with the sex of the household head or the head's marital status, since most of the migrant workers are married, male household heads and most households have only one such worker. Where there is more than one, in the largest, mature households, the head (who may no longer be migrating himself) also tends to be male. The number of migrant workers thus also correlates strongly with the size of the household. Table 4.4 above shows the relationship between involvement in migrant labour and the age of the household head, and the number of migrant workers again shows a strong relationship with the age of the head.

4.2. Involvement in agriculture and demographic indicators

Section 4.1 above suggested that the contribution of agriculture to subsistence in Rapoleboea increases with the advance of the household through the family cycle. This is a gradual and sometimes erratic process with a number of exceptions to the general rule of increasing dependence on agriculture and greater access to farming resources as the household ages. In this section we try to indicate the way in which this involvement in agriculture develops, taking the age of the household head as a surrogate for the 'age' of the household or its stage in the cycle of family development.

Looking first at household acquisition of fields, a gradual increase in the number held can be seen from Table 4.5 below as the household head ages, although the picture is incomplete because of the 37 household heads whose ages were unknown. It can be seen that a majority of those households whose heads are aged 30 or less have no fields. Acquisition then proceeds as the head gets older, and about a third of the households can be seen to have attained the theoretical ideal of three fields. A widow is allowed to keep some land after her husband's death, but no statistically significant relationship was found between the number of fields held and the sex of the household head. Nor in fact was such a relationship found between the number of fields and the size of the household. Although we would expect them to rise together, the overall relationship is probably blurred by the number of large, young to middle aged households which have not yet acquired three fields. The single household head aged under 20 who appears in Table 4.5 and elsewhere is a very young widow who was left well established on the death of her much older husband.

Table 4.5. Age of household head by number of fields held

N = 247

No. of fields	Age of household head							% of total
	<20 %	21-30 %	31-40 %	41-50 %	51-60 %	61-70 %	>70 %	
0		58.8	18.2	11.3				9.7
1		29.4	36.4	24.5		10.6	6.2	16.6
2		5.9	18.2	35.8	45.3	29.8	40.6	32.0
3		5.9	22.7	22.6	41.5	44.7	43.7	32.4
> 3	100.0		4.6	5.7	13.3	14.9	9.3	9.3

63.0% of the Rapoleboea households have no large agricultural tools. Although a few have up to five such tools, almost all (86%) of those who own any own only one. Tool ownership tends to be commonest in the middle age ranges of the household head, but the relationship is not a strong one. There is a stronger relationship between household size and whether or not the household owns any tools: those that do are significantly larger (a mean size of 6.2 members) than those that do not (mean size 4.6). There is a weak relationship between the sex of the household head and tool ownership: 42.0% of male headed households own at least one, while the figure is 23.4% for female headed households.

Livestock take time to accumulate through the family cycle and are often dispersed again before the last member of the family unit, commonly the widow, dies. Because both ends of the spectrum of household head's age are associated with lower holdings of stock, there is no significant relationship between head's age and either number of draft animals or total number of livestock units held, although the data do show a build up of total livestock holdings towards middle age and a decline thereafter. There are fairly strong relationships between the number of draft animals held and the sex of the household head and the size of the household, and the same two relationships hold for total livestock holdings. The latter is illustrated by Table 4.6 below.

Table 4.6. Livestock holdings by household size

	Household size					
	1-2	3-4	5-6	7-8	9-10	>10
Total livestock units	135	449	538	423	537	314
No. of households	45	74	80	48	23	14
Mean holding	3.0	6.1	6.7	8.8	23.3	22.4

It can be seen from Table 4.6 that mean holdings of livestock increase with household size up to ten members, with a spectacular jump above eight members. Households typically have less than the mean holding of livestock until they have at least seven members. Small households - either young or residual - have much smaller herds.

It is interesting to note that of the 115 households in the Rapoleboea area which have no draft animals and no large agricultural tools, 100 (87%) nevertheless planted at least one crop in the 1983/4 season. Sharecropping is one of the main ways in which such resource poor cultivation can be accomplished, as was indicated in section 3.5 above. The agricultural networks categories introduced in that section reflect both a household's access to land and whether it is sharecropping in, out or both ways (which is rare). Most commonly it is old households whose draft power has been dispersed and/or which lack the labour or other resources to cultivate their remaining fields properly which sharecrop in, together with a smaller group of young households which may have been fortunate enough already to acquire some land rights but which have not yet acquired the other resources to be able to farm independently. The households sharecropping out are typically the large, middle aged families which have the draft, the tools and the labour to farm on the fields of their less well equipped neighbours. This fairly neat household age pattern with regard to agricultural network categories is reflected in a statistically strong relationship.

To summarize, it is possible despite the range of individual household experiences to identify a fairly standard pattern of growing dependence upon and involvement in farming as a household matures. Parallel with this is a growing ability to farm as the factors of production are assembled. Ultimately, as the household dissolves into a residual unit, some of these farming resources may be lost, although dependence upon whatever land is still held remains high. This picture will be filled out in the next section by reference to the relationship between agriculture and other modes of subsistence for residents of the Rapoleboea area.

4.3. Involvement in agriculture and other major sources of subsistence

A clearer understanding of the resource position of the different types of household already outlined can be obtained by considering the relationships between variables describing a household's other subsistence activities and those indicating its level of agricultural activity and access to farming inputs. Reference can be made first to the subsistence categories into which the Rapoleboea households were classified. Table 4.7 below shows the number of fields held by households in these various categories. It can be seen that a majority (about 55%) of the households, deriving their subsistence from farming only or from a combination of farming and local off farm employment must survive with only one or two fields. It can also be seen that younger households where the head is still a migrant labourer in South Africa are behind in field acquisition - 74.1% have only one or two fields - while those more senior households which subsist on farming and the remittances of a child working in South Africa are substantially better off with regard to field holdings: 63.6% have three or more. These patterns constitute a statistically significant relationship.

The resource position of Rapoleboea households in the various subsistence categories is next examined with regard to possession of large agricultural tools and draft animals. Again the marginality of the farming carried out by the households in categories dependent upon farming only or farming and local off farm employment can be seen (Table 4.8 below). Almost two thirds of the 'farming only' households do not own a single major

Table 4.7. Number of fields held by households in subsistence categories having access to land

N = 252

Subsistence category	No. of fields			
	1 % of category	2 % of category	3 % of category	>3 % of category
Farming only	18.4	36.0	40.0	5.6
Farming + head's SA wages	42.6	31.5	25.9	
Farming + child's SA wages	4.5	31.8	38.6	25.0
Farming + local off farm	20.0	35.0	30.0	15.0
Farming + wages Lesotho		33.3	33.3	33.3

Table 4.8. Number of tools and draft animals by subsistence categories

N = 284

% in each category having:

Subsistence category	Tools		Draft animals			
	0	1 or more	0	1-3	4-6	Over 6
Landless	84.4	15.6	68.7	15.6	9.4	6.2
Access to land,						
- farming only	64.8	35.2	48.0	21.6	18.4	12.0
- + head's SA wages	63.0	37.0	37.0	40.7	11.1	11.2
- + child's SA wages	40.9	59.1	27.3	22.7	20.5	29.6
- + local off farm	80.0	20.0	50.0	35.0	5.0	10.0
- + wages Lesotho	33.3	66.7	44.4	33.3	11.1	11.1
All categories	63.0	37.0	45.1	26.1	15.1	13.8

agricultural implement. Although this proportion is similar for households in other subsistence categories, these other households have cash sources of income which - except perhaps in the case of local off farm employment - make a much greater contribution to total subsistence. Four out of five households in the category dependent on farming and local off farm employment in fact do not even own a plough. Again, households in the 'farming only' category are overrepresented in the group holding no draft animals. 69.6% of the former group and 85.0% of the latter have inadequate numbers of draft animals, if four is taken as the minimum necessary. These are two indications of the probability that the poorest households in Rapoleboea, as in other rural Lesotho communities, are found in the subsistence categories dependent either only on farming or upon farming and local off farm employment.

Examining holdings of total livestock units again indicates that the best placed households are those at a mature stage in the family cycle which are able to combine agriculture with the remittances of a child or children working in South Africa - rather than those dependent solely upon agriculture or agriculture and local off farm employment. The variation shown in Table 4.9 below was found to be statistically significant.

The gradual progression from young households with little involvement in agriculture and few farming resources to senior households with much better access to such inputs can be seen from Table 4.10 below, which cross-tabulates the number of fields held by possession of tools and draft animals (the numbers of

Table 4.9. Total livestock holdings by subsistence categories

N = 284

Subsistence category	Mean no. of livestock units
Landless	5.6
Access to land,	
- farming only	9.0
- farming + head's SA wages	5.6
- farming + child's SA wages	14.5
- farming + local off farm employment	2.9
- farming + wages Lesotho	12.9
All categories	8.5

these inputs owned are not considered). Further analysis of the relationship between total livestock holdings and agricultural tool ownership indicates that the more livestock a household has, the more tools it is likely to own.

Table 4.10. Distribution of fields by ownership of draft animals and large agricultural implements

No. of households having:	No. of fields					
	0	1	2	3	>3	
No tools, no draft animals:	115	22	27	31	28	7
Draft animals, no tools:	64	5	16	25	17	1
Tools, no draft animals:	13		1	2	7	3
Tools and draft animals:	92	5	8	28	38	13
Totals:	284	32	52	86	90	24

Finally, the relationship between agricultural involvement and whether the household currently has a migrant labourer can be considered, along with the influence of the previous migrant history of the household head. Several points can be noted here. It has already been noted that households with members currently migrating to work are likely to hold fewer fields - these are typically younger families. There is also a strong relationship between whether the household has a migrant worker and which agricultural networks category it falls into. But this reflects upon a different group of households: those at the poor end of the spectrum which must sharecrop in if they are to raise any crops from their field and which also lack any income from

migrant members. The households which have no draft power and no tools fall into two groups. Some are young and have a migrant member; others are old or residual and are found to have at least one member dependent upon farming as a principal source of subsistence.

Although it is argued that involvement in agriculture builds up during the life of a household and is partly based upon earlier involvement in migrant labour which subsequently fades out, the actual length of time a household head has migrated to date or the length of his period of labour migrancy in the past does not correlate with variables showing the extent of farming involvement or achievement. For instance, the number of fields held shows no statistically significant relationship with the number of years the household head has been or was involved in migrant labour: it correlates more directly with the actual age of the household head. Nor does the length of migrant experience show a statistically significant link with the number of livestock units held by the household. A link would be likely to exist between whether a household member ever migrated and the ownership of agricultural implements or adequate draft power, but this was not tested. One complicating factor with regard to livestock holdings is that some of the largest small stock owners have devoted themselves to this occupation since their youth and have never worked in South Africa: this is a different and restricted type of success on the land which is not linked either to migrant labour or to cropping, draft power or implements.

This section has shown that agriculture plays a major part in the succession of subsistence strategies through which the typical household in Rapoleboea, as elsewhere in rural Lesotho, is likely to pass. The most prosperous and best resourced households are the mature ones which have built up an agricultural base and still have access to the migrant remittances of their second generation. In terms of current level of living, young households with a migrant head and little or no involvement so far in farming may be as well off, but it was shown in section 4.1 that migrant labour as a source of subsistence is only available for roughly the first half of the household's life. On the other hand, it has been shown that farming alone as a mode of subsistence is unlikely to offer anything but poverty, if the agricultural resource position of those households dependent only on this sector is anything to go by. Combining farming with whatever income the household can generate in the local off farm sector is unlikely to be much better. In order to approach anything like a comfortable standard of living for most of its existence, the household in Rapoleboea must combine agriculture with migrant labour to South Africa. The supposed backbone of the rural economy can only offer a fraction of the subsistence needs of the people, and not every household is able successfully to combine its various income generation options through its career. Probably a majority of households must ultimately revert to poverty and a major dependence upon inadequate farming, but many others which fail to gain access to migrant earnings for part or all of their

existence are to be found in the poorer, agricultural subsistence categories. They are, of course, likely to be joined by many more as migrant opportunities in South Africa are cut back and only partly replaced by work in urban Lesotho.

4.4. Demographic indicators, subsistence categories and 'modern possessions'

It was suggested in section 3.6 above that one index of the degree of success a household has had in piecing together the elements of an adequate subsistence strategy is the number of 'modern possessions' it has accumulated. As was pointed out, the identification of a standard list of such items against which to check in respondent households is bound to be at least partly subjective. Moreover, it must be recognized that in the acquisition of such items a variety of choices may be made: the household may prefer to spend its money on livestock, or education, or agricultural implements, rather than the type of items to which we refer here. This may be one reason why, as was pointed out in section 3.6, over a third of the Rapoleboea households do not have any of the items on our list. Other reasons are connected with the poorer accessibility of mountain communities: the perceived need for 'modern possessions' is not yet so pervasive, and the difficulty of transporting some of them home remains considerable.

Since in any case the purchaser of such items has a free choice within the limits of available funds, it might be expected that these possessions would be distributed randomly between households with different demographic and economic characteristics. In fact, our data suggest a number of systematic relationships between having or not having these items (and the number owned) and other demographic and economic indicators.

Considering first the relationship between household size and the number of types of modern possession owned, it can be seen from Table 4.11 below that larger households tend to own more such items. It should be noted again that these items were checked against the list in question 15 of the questionnaire (see Appendix A): chair, table, bed, radio, cupboard, lantern, a flat (metal) roofed house and a latrine. Ownership of any other modern item like a record player or a sewing machine is thus not reflected in the tables presented here.

Analysis reveals a statistically significant relationship between the number of modern possessions and the size of the household, and this is true also for the number of these items and the age of the household head. Following the interpretation earlier in this chapter, we can again see the household acquiring more modern possessions as it matures over the years through the cycle of income generation and demographic development.

Table 4.11. Ownership of modern possessions by household size

N = 284

No. of types of modern possession owned	Household size					
	1	2-3	4-5	6-7	8-9	>9
	% of size groups					
0	76.5	60.3	31.2	29.0	24.2	19.0
1 - 2	17.6	19.0	40.9	29.0	21.2	14.3
3 - 4	5.9	10.3	16.1	21.0	30.3	33.3
5 - 8		10.3	11.8	21.0	24.2	33.3

Table 4.12. Ownership of modern possessions by age of the household head

N = 247

No. of types of modern possession owned	Age of household head						
	<20	21-30	31-40	41-50	51-60	61-70	>70
	% of age group						
0		11.8	22.7	32.1	37.7	53.2	43.7
1 - 2		52.9	36.4	20.8	24.5	23.4	34.4
3 - 4	100.0	11.8	25.0	17.0	24.5	14.9	18.8
5 - 8		23.5	15.9	30.2	13.2	8.5	3.1

The poverty of certain of the subsistence categories to which we referred above in discussing agricultural involvement is revealed again when we compare ownership of modern possessions among the subsistence categories (Table 4.13 below). Over half the households dependent upon farming only, and three quarters of those dependent upon farming and local off farm employment, own none of the modern possessions for which the survey checked. It is the households with a head at work in South Africa, or the older households which now have a child or children working there, which have larger numbers of these items. Again the relationship proves to be highly significant statistically.

Table 4.13. Ownership of modern possessions by subsistence category

N = 284

No. of types of modern possession owned	Subsistence category					
	Landless	Farming only	Farming +		Farm-	
			Head's wages SA	child's wages SA	ing + local farm	Farm ing + wages Lesotho
% of category						
0	15.6	55.2	18.5	6.8	75.0	55.6
1 - 2	53.1	23.2	27.8	36.3	10.0	11.1
3 - 4	15.6	13.6	26.0	34.1	5.0	
5 - 8	15.6	8.0	27.8	22.7	10.0	33.3

Taking these tables together, it can be argued that modern possessions are also 'modern' in the sense that younger households are more likely to have at least one. On the other hand, as has been pointed out, accumulating these belongings takes time, and the group of households where the head is between 41 and 50 years old has the largest proportion owning more than three. Further analysis with reference to the number of years the head of the household was or has been involved in migrant labour illustrates this, in that households with younger heads who have been migrating for six to ten years seem to be accumulating modern possessions more rapidly: this may be related to the mine wage increases of the 1970s and the greater purchasing power migrants have had since then. Again, if we compare the two groups of households with most modern possessions - those with a head or child working in South Africa - the younger households where the head is now a migrant seem to be acquiring such belongings more quickly than the older ones. While migrant opportunities in South Africa last, these young households with their substantial, regular cash incomes, are rapidly becoming an economic elite in rural Lesotho - even in the remoter mountain communities like Rapoleboea. It is these households also which are undertaking much of the internal migration in the mountain zone to more accessible roadside locations. While migrant earnings do recirculate in the village economy, the disparity is growing between those with access to South African (or even urban Lesotho) incomes and those dependent only on farming or farming plus local off farm employment. It remains to be seen whether the new generation of migrant labourers will follow the same sort of cycle of capital accumulation and establishment of family farms as their

predecessors - and indeed how much of this migrant income will continue to flow into Lesotho in future years as South African opportunities are restricted.

In the last two chapters we have outlined some of the basic features of demography and economy in the communities of the Maseru district mountain zone which DLPRD surveyed in 1984. In the second part of this report we put these data in perspective by considering them side by side with information on villages studied in the lowland and foothill zones of the district in 1982 and 1983 and then offering some summary comments on the district as a whole. Basic to this district analysis - and indeed to the design of these three years' survey work - has been the division of the district and the country into agro-ecological zones. This division is so commonly and uncritically applied in Lesotho that we consider it useful to begin the second part of the report with a brief discussion of the origins of this zonation and the criteria upon which it is based.

PART II SUBSISTENCE AND POVERTY IN MASERU DISTRICT

5. AGRO-ECOLOGICAL ZONES AS UNITS OF ANALYSIS

5.1. The agro-ecological zones of Lesotho

Implicit in the study of rural conditions in Maseru district by URPP and DLPRD between 1982 and 1984 and its summary in the second part of this report is the division of the district into agro-ecological zones. URPP worked in the lowland zone in 1982; DLPRD worked in the foothills of the district in 1983, and in the mountain zone in 1984. Here a comparative analysis of conditions in the three zones is attempted. The principal aim of this analysis is a factual presentation of Maseru district conditions, rather than any substantive contribution to theoretical debate about rural subsistence and poverty. Integrated, cross-zonal summaries of conditions in a specific district of Lesotho are not common. Agro-ecological zones are well established in discussion of Lesotho's spatial organization and physical conditions. Reference is regularly made to the lowlands, foothills and mountains of the country, and less frequently to the Senqu (Orange) valley and border lowlands as discrete units. URPP/DLPRD analysis of conditions in Maseru district was naturally structured with reference to the three major zones found there; but before proceeding with interzonal comparisons the definition and relevance of these divisions should be considered.

The general division of Lesotho into mountains, foothills and lowlands is fairly obvious and intuitive. A formal zonal division appears first to have been defined by Douglas and Tennant (25) as follows:

Border Lowland	(BL)
Lowland	(L)
Foothill	(F)
Mountain	(M)
Orange Valley	(O)

"The zones... are so demarcated that they could be used with advantage in almost any type of census and survey, the boundaries being based on (a) geographical, including geological divisions; (b) divisions between types of farming; (c) divisions between population groups: e.g. headmen's areas. That is to say, lines were followed as far as possible which were common to all three divisions. The latter do in fact coincide very closely in most cases... this of course is historically quite understandable." (26)

Any acquaintance with Lesotho topography will make the broad division into mountains, foothills and lowlands clear, but the following further quotations from Douglas and Tennant may be

illuminating. Their criteria for distinguishing the Border Lowland from the Lowland zone were:

- "(a) an apparently lower rainfall,
 - (b) soil apparently more impoverished; serious erosion,
 - (c) larger fields, and larger household holdings,
 - (d) a greater proportion of fields left uncultivated,
 - (e) a greater proportion of land under wheat,
 - (f) lower altitude - in parts below 5000 feet,
 - (g) large, relatively unmixed settlements of the Taung clan or tribe, particularly in the southern part."
- (27)

They defined the eastern boundary of their Lowland zone as follows:

"On the east the natural line is the western edge of the mountain basalt at about 6000 ft. separated from the lowland formation by a clearly visible stratum of cave sandstone which underlies the basalt. This wall of sandstone can be followed almost without break from SW. to NE., and forms the eastern boundary of practically all headmen's areas etc. lying in the lowlands and adjoining this line... This zone is in many ways similar to the Border Lowland zone, but more fertile and less arid." (28)

The Foothill zone

"lies between the cave sandstone stratum... and the main western watershed of the Maluti mountains, which runs from Machachaneng on the Butha-Buthe border to Mokopo in Mohale's Hoek, overlooking the Orange Valley. This ridge, about 150 miles long, is nearly all over 8000 ft. and rises in places to 10000 ft.; it forms a strongly defined political as well as natural dividing line: no headman's area crosses it." (29)

For the Orange Valley zone "no rigid boundary can be identified..." but "The guiding rule was to take as the lateral limits of the O zone the level below which no summer wheat is grown... This dividing line generally follows the 6000 ft. contour..." (30) Finally, it should be noted that "all the zones meet, or are closely adjacent, in the Mohale's Hoek district, where the BL, L and O zones have marked similarities." (31)

These are the zones generally used in discussion and enumeration of spatial variation in Lesotho, although the border lowlands and lowlands are often merged into one (e.g. in the 1970 Agricultural Census). A further refinement was introduced by Binnie and Partners (32), who identified Northern, Central, Border and Southern Lowlands zones in addition to the foothills, mountains and Senqu valley. The criteria for this were not defined; the boundaries were "modified slightly... to give a



Map 2: LESOTHO ZONES (after Binnie & Partners, 1972)

better correlation with the soil and relief patterns" (33). This refined zonation has since been adopted in a number of works (34) and is shown in Map 2.

Reference to Lesotho's zones can be seen as a shorthand for the major topographical variation which influences settlement, communications, agricultural production and potential, traditional and modern government and many other aspects of spatial organization at the national and district levels. For district level development planning, the significant variation in agricultural conditions between each of the zones is important. While all zones are heavily populated, the zonal distinction of paramount importance for planning purposes is probably between the (variously defined) lowlands and foothills on the one hand and the mountains and Senqu valley on the other. In the former region communications are significantly better, and government and other infrastructure much more developed, than in the latter, where isolation from government and commercial services and from economic opportunities within Lesotho is a major problem.

Many Basotho in the mountain/Senqu region no longer seem prepared to tolerate such isolation. As noted earlier with reference to the Rapoleboea area, significant internal migration is now taking place. Not only are people moving to live in the urban areas - commonly an interzonal migration - but many are also making intrazonal moves to roadside locations, establishing new settlements and living largely outside the agricultural sector. The impact of both types of migration is probably strongest in the mountain zone, where the populations of remoter villages are probably aging and shrinking. The proposed 1986 census will provide important data on these phenomena.

As the contribution of agriculture to national subsistence slowly declines, the significance of these agro-ecological zones for development planning could be expected also to dwindle. But it is suggested that the differences in infrastructure and hence in opportunity will continue to make these zonal distinctions important for a long time to come. On the other hand, concern for such distinctions should not be allowed to blur our understanding of the one, crucially important way in which conditions in all Lesotho's zones are more similar than they are different. Throughout the country, the rural economy is largely inadequate for subsistence. Most households must supplement local income generation with migrant labour in urban Lesotho or the Republic of South Africa. This is the paramount structural feature of rural life in all the zones. The details of how the bundles of subsistence strategies and opportunities are assembled vary from zone to zone, and some of this variation is assessed in the following chapters with reference to Maseru district. Zonal variation in this district is first outlined.

5.2. The agro-ecological zones of Maseru district

The Maseru district boundary is superimposed on the national map of agro-ecological zones in Map 2. It can be seen that the three principal zones are all extensively represented. Only a small part of the border lowlands is included in the district, and as the division of the lowlands is of more strictly agricultural importance no further reference is made to it here (35).

It was suggested above that for most purposes the most important zonal distinction is between the mountains (and Senqu valley) and the lowland/foothill zones. While this is true also of Maseru district, the differences between the lowlands and foothills in this district should also be noted. The lowlands constitute the most urbanized 'rural' area in the country. The proportion of the population deriving any part of its subsistence from agriculture is lower than elsewhere in the lowlands, and the previously limited agricultural potential has been further reduced by severe erosion and residential development. This is the most 'suburban' part of rural Lesotho. The foothills of the district are more typical of the national lowland/foothill landscape and are notable for their significantly higher agricultural potential. Communications are almost as good as in the lowlands, and substantial residential relocation is taking place towards roadsides and small commercial centres.

The mountain zone of the district, as represented by the Rapoleboea area, has been discussed in detail in the first part of this report. It represents one of the most accessible parts of the mountains nationally, with a slightly higher level of government and commercial services than is available further south or east, and with a growing rural service centre at Semonkong. Population density is probably slightly higher than for the whole mountain zone, with somewhat less high, purely grazing land. As indicated earlier, the subjective impression is of a rather more robust, self reliant rural society and economy. But the paramount importance of labour migration is at least as marked as in the lowlands and foothills, and the distances migrants must travel are of course greater.

With these introductory remarks on zonation, we now turn to a comparative analysis of subsistence and poverty in Maseru district as a whole.

6. HOUSEHOLD CHARACTERISTICS IN MASERU DISTRICT

6.1. Demographic indicators

Comparing the composition of the 679 households enumerated in the lowland, foothill and mountain zones of Maseru district by URPP and DLPRD in 1982 - 1984, Table 6.1 shows no great differences in household size. The median size is four in the lowlands and foothills and five in the mountains; the tail ends of the distribution show the relatively higher frequency of large households in the mountain zone villages. Households of eight and more members make up 9.2% in the lowlands, 14.2% in the foothills and 19.0% in the mountains. However, households of four to six members are almost equally common in all three zones,

Table 6.1. Maseru district: household size

N = 679

Zone	Size of household									
	1	2	3	4	5	6	7	8	9	>9
	Percent									
Lowlands	9.2	13.3	11.2	17.3	17.3	11.2	11.2	5.1		4.1
Foothills	7.8	10.8	14.2	17.9	17.2	10.1	7.8	7.1	3.7	3.4
Mountains	6.2	9.9	10.6	15.5	17.3	10.9	10.9	6.0	5.6	7.4
Total	7.2	10.8	12.2	16.8	17.3	10.6	9.6	6.3	4.0	5.2

varying only from 46% of the total in the lowlands to 44% in the mountains, which do not prove to be statistically significant differences. Variation in household size is also reflected in the number of dependants: two is the median figure in the lowlands, and three in the other zones, while households with five or more dependants form 18.3% in the lowlands, 19.8% in the foothills and 27.8% in the mountains.

Table 6.2. Maseru district: number of dependants in the household

N = 679

Zone	Number of dependants					
	0	1 - 2	3 - 4	5 - 6	7 - 8	>8
	Percent					
Lowlands	13.3	36.7	31.6	16.3	1.0	1.0
Foothills,	14.8	34.6	30.7	13.8	4.7	1.3
Mountains	12.0	28.5	31.7	19.7	6.0	2.1
Total	13.4	32.4	31.2	16.6	4.7	1.6

The sex of the household head shows no significant differences by zone; as the data on the marital status of the household head brings out, there are some 5% more married heads in the foothills than in the other zones which, in our definition of the household head (section 3.1 above), would lead one to expect the somewhat lower proportion of female heads shown for the foothills. A higher incidence of married heads would in turn be expected on the basis of the age distribution of heads in the different zones: 52% of the heads in the foothills are under 50 years old. In the lowlands, the figure is 44% and in the mountains 46%. These differences could in turn be related back to the relations between household size and number of dependants in each zone, but no attempt is made to do so here.

Table 6.3. Maseru district: sex of household head

N = 679

Zone	Male	Female
	%	%
Lowlands	71.4	28.6
Foothills	75.8	24.2
Mountains	72.9	27.1
Total	73.9	26.1

Table 6.4. Maseru district: marital status of household head

N = 679

Zone	Single	Married	Divorced	Widowed
	%	%	%	%
Lowlands	1.0	65.3	5.1	28.6
Foothills	1.7	70.3	2.7	25.3
Mountains	1.1	65.8	4.6	28.5
Total	1.3	67.7	3.8	27.1

Table 6.5. Maseru district: age of the household head

N = 639

Zone	(20	21-30	31-40	41-50	51-60	61-70	>70	Unknown
	Percent							No. of cases
Lowlands	1.0	10.2	12.2	20.4	29.6	17.3	9.2	
Foothills		12.3	17.1	22.5	14.7	17.7	15.7	(3)
Mountains	0.4	6.9	17.8	21.5	21.5	19.0	13.0	(37)
Total	0.3	9.9	16.6	21.8	19.6	18.2	13.6	(40)

Although inspection of the data suggests a coherent pattern of slight differentiation in these demographic features, statistical tests do not show any reason why data from the various zones should not be grouped together for the district as a whole.

In order to give an impression of the potential earning power of households in the different zones, three more variables are presented. The first of these (Table 6.6 below) is the number of 'workers', i.e. the number of household members whose principal source of subsistence was reported as being their own income generation - as opposed to those dependants whose principal subsistence source was reported as the work, remittances or charity of others. Table 6.7 shows the distribution of those migrant workers who earn wages in South Africa or elsewhere in Lesotho, away from their home area. Table 6.8 then shows the principal sources of subsistence of household heads.

Table 6.6. Maseru district: number of 'workers' per household

N = 679

Zone	Number of workers					
	0	1	2	3	4	>4
	Percent					
Lowlands	1.0	46.9	28.6	12.2	9.2	2.0
Foothills	2.7	43.4	31.3	15.2	4.4	3.0
Mountains	1.1	37.7	33.1	16.5	6.3	5.4

Table 6.7. Maseru district: number of migrant workers (to South Africa and other parts of Lesotho) per household

N = 679

Zone	Number of migrant workers		
	0	1	>1
	Percent		
Lowlands	46.9	43.9	9.2
Foothills	42.8	49.5	7.7
Mountains	50.7	39.8	9.5

Table 6.8. Maseru district: principal source of subsistence of household head

N = 665

Zone	Principal source of subsistence					No. of cases
	Agri-culture	Migrant labour S. Africa	Wages Lesotho	Local informal sector	Other	
	Percent					
Lowlands	56.1	22.4	12.2	7.1	2.0	
Foothills	50.4	31.3	13.7	3.9	0.7	(13)
Mountains	59.0	30.4	2.8	6.0	1.8	(1)
Total	54.9	29.6	8.9	5.3	1.4	14

The number of economically active workers (Table 6.6 above) in the household shows that the somewhat larger household size in the foothills compared with the lowlands is not reflected in the distribution, while the difference between foothills and mountains is clearer. We believe that again this is due to the relatively higher incidence of young household heads in the foothills, which would lead one to expect relatively more dependants and relatively few active workers. Keeping in mind that migrant labour to South Africa is mainly undertaken by young men, the same characteristic may be adduced to explain the differences between the zones in the proportion of households with one or members earning wages in South Africa or Lesotho. This is higher for the foothills than for the other zones, especially the mountains. This suggestion is supported by the data on the household head's principal source of subsistence: in the foothills, 45% of the heads are principally engaged in earning wages elsewhere, as against 35% in the lowlands and 33% in the mountains.

Some of the variables discussed in this section are linked at a statistically significant level, whereas others are not. An example of the former is the relationship between the age and sex of the household head; an example of the latter is the lack of a link between the sex of the household head and the number of economically active workers. No full treatment of such linkages is attempted in this report for the district as a whole; some have been dealt with in the reports on the individual zones, and some will be mentioned in chapter 7 below.

6.2. General sources of subsistence

It has often been argued, in DLPRD reports and elsewhere, that Basotho today must have a cash income in order to survive. This comparative discussion of the sources of subsistence of rural people in Maseru district therefore begins with the question of how this cash income is obtained by the households surveyed in the various zones.

Table 6.9 below shows the two wage income sectors (work for wages in South Africa and Lesotho) and the two local sectors potentially generating cash, i.e. the local informal sector and agriculture. It indicates the percentage of households in each zone that have at least one member earning his/her subsistence in these sectors. The high overall importance of agriculture stands out, followed by migrant labour, and in contrast to the much lower proportions of households with members earning their primary subsistence in Lesotho's wage sector or in local work outside agriculture. However, the pattern is not completely uniform between the zones. In terms of employing household workers, migrant labour is most important in the mountains and least important in the lowlands, while wages earned in Lesotho are more important in the lowlands and much less so in the mountains. These findings illustrate earlier comments in section

5.2 on the differences between these zones in Maseru district, but also the paramount importance of wages and therefore often of migration for residents of all three zones.

Table 6.9. Maseru district: percentage of households with one or more members reporting primary involvement in sectors potentially generating cash income

N = 679

Zone	Sector			
	Migrant labour	Wages Lesotho	Local informal sector	Agriculture
	Percent			
Lowlands	34.7	24.5	11.2	72.4
Foothills	42.4	18.2	15.2	61.3
Mountains	44.4	8.5	8.8	67.6
Total	42.1	15.0	11.9	65.5

Table 6.10 below gives more detail on the subsistence situation in the district, based on respondents' definitions of household members' principal and subsidiary sources of subsistence (see 3.1 above and Appendix A). It shows the actual numbers of household members involved in various sectors, by zone. Again it highlights the importance of the agricultural sector, in providing what respondents consider the primary subsistence of one and often more economically active workers in a substantial majority of the households in each zone. To what extent this primary involvement in agriculture is actually a 'last resort' is not immediately clear from these data, but the high incidence of households where two or more members are primarily involved in the sector - over a quarter in lowlands and foothills and 44% in the mountains - contrasts with the pattern in other sectors.

Table 6.10 also provides data on the role of local agricultural and non agricultural work in providing secondary sources of subsistence. Once more the contribution of agriculture is considerable, especially in the mountain zone. Data on the secondary role of other local employment cannot unfortunately be compared between zones. Accurate information about the true contribution of local off farm employment to subsistence requires careful enquiry. The subject was not covered in the 1982 lowlands survey by URPP; an attempt was made to include it in the DLPRD 1983 foothills survey, but we only

feel a reasonably accurate picture was obtained for the mountains in 1984. The contribution of the sector to subsistence in the mountains was discussed in section 3.4 above.

Table 6.10. Maseru district: sector involvement of households by number of members and by zone

N = 679

<u>Primarily involved in:</u>	Zone	Number of members				
		0	1	2	3	>3
		Percent				
Migrant labour in South Africa	Lowlands	65.3	33.7	1.0		
	Foothills	57.6	39.1	3.4		
	Mountains	55.6	39.1	3.9	1.4	
	Total	57.9	38.3	3.2	0.6	
Wage employment in Lesotho	Lowlands	75.5	21.4	3.1		
	Foothills	81.8	16.5	1.7		
	Mountains	91.5	6.0	2.5		
	Total	85.0	12.8	2.2		
Local informal sector	Lowlands	88.8	11.2			
	Foothills	84.8	12.1	3.0		
	Mountains	91.2	7.7	1.1		
	Total	88.1	10.2	1.8		
Agriculture	Lowlands	27.6	45.9	17.3	4.1	5.1
	Foothills	38.7	35.0	17.5	5.4	3.3
	Mountains	32.4	23.2	29.2	9.5	5.7
	Total	34.5	31.7	22.4	6.9	4.6
<u>Secondarily involved in:</u>						
Agriculture	Lowlands	59.2	38.8	2.0		
	Foothills	64.0	29.0	5.4	1.0	
	Mountains	52.5	29.2	14.1	1.8	2.5
	Total	58.5	30.5	8.5	1.2	1.3
Local informal sector	Lowlands	n.a.	n.a.	n.a.	n.a.	n.a.
	Foothills	57.2	36.7	4.7	1.0	0.3
	Mountains	27.5	48.2	18.3	4.2	1.9

Table 6.11. Maseru district: household subsistence categories

Subsistence category	Percentage of households		
	N=98 Lowlands	N=297 Foothills	N=284 Mountains
Landless,	21.4	16.8	11.3
- wages South Africa	10.2	9.8	9.2
- wages Lesotho	4.1	3.0	0.4
- local farm labour	5.1	2.4	0.4
- local off farm	2.0	1.7	1.4
Access to land,	78.6	83.2	88.7
- + head's SA wages	12.2	26.3	19.0
- + child's SA wages	13.3	5.1	15.5
- + wages Lesotho	12.2	11.4	3.2
- + local off farm	3.1	8.8	7.0
- farming 'only'	37.8	31.6	44.0
All wages RSA	35.7	41.2	43.7
All wages Lesotho	16.3	14.4	3.6
All local off farm	5.1	10.5	8.4
All farming and farm labour	42.9	34.0	44.4

Table 6.11 above provides a summary of subsistence in Maseru district in the form of our subjective interpretation of what constitutes the single most important source of subsistence for a given household, in combination with farming if it has access to land. The manner in which this categorization was obtained has been described in section 3.2 above. The upper part of Table 6.11 presents the subsistence categories as classified in section 3.2 and in an earlier DLPRD report (36). The lower part of the table rearranges the categories to follow the format of the tables in this section. We have already indicated our belief that research to date has not fully uncovered the complexity and increasingly significant contribution of the local off farm sector, not all of whose facets are likely to be reported by a household in a single interview such as those upon which this report is based. It is therefore unlikely in fact that households in the 'farming only' subsistence category derive every cent of their subsistence from this source; there are likely to be various small, local off farm ways in which they add to their income. Some such households may also have unreported sources of income from the formal wage sector which were not stated by the respondent because of their irregularity; or major capital transfers may take place in kind into these households in the form of agricultural equipment, clothing or livestock - bridewealth transfers are not covered at all by our simple questionnaires, for example. All reconnaissance surveys of the type reported for Maseru district here can do is outline the principal features of the rural economy and suggest broad

categories of subsistence and poverty. The details of how households pull the strands of income generation together to ensure their survival call for much more intensive investigation.

6.3. Agriculture and livestock

Previous sections have indicated the involvement in agriculture of the large majority of households surveyed in all three zones of Maseru district. At the same time, as was shown for the mountain villages in chapters 3 and 4 of this report, the distribution of resources for agricultural production is skewed and few households seem to have sufficient resources to farm independently. A first comparison of the three zones, as provided in Tables 6.12 to 6.16 below, confirms that this is the case for the whole district, although there are some significant differences between the zones.

In the district as a whole, 15.2% of surveyed households held no fields. Apparent land scarcity is highest in the lowlands. One out of every five households is landless, and only one in five have use rights of the 'ideal' three fields or more. While the foothills are in an intermediate position, the contrast between lowlands and mountains stands out: in the latter, one out of ten households is landless and two out of five have three fields or more. The proportion of households without access to arable land can be expected to rise in all parts of the district, thus accelerating the decline in agriculture's contribution to rural subsistence. There has been a lengthy debate in Lesotho, as elsewhere, about the relationship between land tenure and agricultural productivity (37). More recently, discussion has focused on the impact of the 1979 Land Act, which was designed to remove some of the commonly perceived constraints of the customary tenure system (38). Although the precise nature of the tenure/productivity relationship can never be defined, it is clear that the proportion of rural Lesotho households with access to arable land will continue to fall, and that the proportion of those with access who have the resources or the inclination to cultivate their fields will fall also. Sharecropping and hiring will probably fill the gap.

Already, a majority of households in each zone has no major farming tools at all, rising to two thirds of the foothill households. In the mountains, a plough is almost the only implement owned; only very small minorities have more than one implement and have a harrow, planter or cultivator in addition to a plough. In that respect, the minorities owning major tools in the lowlands and foothills are better equipped - implying a more skewed distribution. 15% and 13% respectively own three or more such implements (including carts for the lowlands and carts and sledges for the foothills). Notwithstanding the differences between the zones, the main conclusion must be that in order to farm, the majority in each zone has to make arrangements with other households in order to obtain the necessary implements.

Table 6.12. Maseru district: number of fields held

Zone	N	Number of fields				
		0	1	2	3	>3
		Percentage of households				
Lowlands	98	22.4	24.5	31.6	12.2	9.2
Foothills	297	19.2	23.9	26.3	27.6	3.0
Mountains	284	11.3	18.3	30.3	31.7	8.5

Table 6.13. Maseru district: number of large agricultural tools owned

Zone	N	Number of tools				
		0	1	2	3	>3
		Percentage of households				
Lowlands	98	54.1	24.5	6.1	12.2	3.1
Foothills	297	66.7	10.4	9.4	6.7	6.7
Mountains	284	63.0	32.0	2.8	1.4	0.8
Total	679	63.3	21.5	6.2	5.3	3.6

Table 6.14. Maseru district: number of draft animals held

Zone	N	Number of draft animals				
		0	1 - 3	4 - 6	7 - 10	> 10
		Percentage of households				
Lowlands	98	57.1	19.4	16.3	3.1	4.1
Foothills	297	62.5	17.2	10.1	7.4	2.7
Mountains	284	45.1	26.1	15.1	9.2	4.6

The same is true for draft power (computed as the sum of oxen, bulls and cows managed by the household). Again, the overall majority of households have no ploughing animals at all. If a minimum of four animals is assumed to be necessary, then less than a quarter of all households own that many; if a more strict criterion of six animals is applied, the overall proportion with adequate draft teams drops to 11%. As Table 6.14 shows, the situation is slightly better in the mountains than in the lowlands, while it is worst in the foothills.

The distribution of draft animals is a partial reflection of the distribution of livestock, measured in terms of the number of livestock units managed by the household (Table 6.15 below). The

Table 6.15. Maseru district: number of livestock units held

Zone	N	Number of livestock units					Mean no. per hh.
		0	1-3	4-6	7-10	>10	
		Percentage of households					
Lowlands	98	45.9	20.4	15.3	10.2	8.2	3.6
Foothills	297	59.5	13.2	9.5	7.4	10.5	3.4
Mountains	284	24.9	25.6	12.1	12.8	24.6	8.5

Table 6.16. Maseru district: percentages of households owning large agricultural tools and equipment

N = 679

Zone	Plough	Planter	Cultivator	Harrow	Sledge	Cart
Lowlands	41.8	17.3	19.4	n.a.	n.a.	7.1
Foothills	30.4	14.1	13.9	2.0	13.9	3.7
Mountains	37.0	2.8	1.1	3.0	1.1	0.0
Total	34.8	9.9	9.3	-	-	2.7

data show that livestock is much more unequally distributed than land. Substantial groups, ranging from 25% in the mountains to as much as 60% in the foothills, manage no livestock at all. As might be expected, herds and flocks are larger in the mountains

than elsewhere and more important in the household's subsistence. Total livestock holdings differ more between the zones than ownership of cattle. The mean cattle holdings per household - bearing in mind the skewed distributions these means conceal - are 2.0 head for the lowlands, 2.4 for the foothills and 3.4 for the mountains.

The superficial data on implements and draft power presented above indicate the high pressure there must be on the available ploughs and draft teams at critical periods in the agricultural season and the likelihood that on a substantial proportion of cultivated land key operations are not performed at the best times and/or with adequate soil preparation. The apparent scarcity of draft power and implements is somewhat mitigated by various intricate forms of agricultural cooperation between households. Our investigations have only looked at some of the more formal types of cooperation involving agreed transfers of produce or money between households, i.e. sharecropping and hiring of inputs (Table 6.17 below). Overall, some 30% sharecrop their own land, over a quarter hire inputs and about a quarter are in a position to sharecrop the fields of other households. Differences between the zones in these respects are not statistically significant. It is nevertheless tempting to assume a link between the low proportion in the foothills that sharecrops out and the fact that the distribution of tools and animals is so skewed in this zone.

Table 6.17. Maseru district: some forms of agricultural cooperation, by zone

N = 679

In year prior to survey, did household:	Zone	Percentages	
		Yes	No
- sharecrop its own land	Lowlands	32.7	67.3
	Foothills	30.1	69.9
	Mountains	27.5	72.5
	Total	29.4	70.6
- sharecrop any other land	Lowlands	30.6	69.4
	Foothills	22.3	77.7
	Mountains	28.5	71.5
	Total	26.1	73.9
- hire implements, draft power or labour	Lowlands	not asked	
	Foothills	28.7	71.3
	Mountains	26.1	73.9
	Total		

The various agricultural cooperation links can be characterized in summary form by placing each household in an 'agricultural network category' (section 3.5 above), as shown in Table 6.18 below. A few tendencies at which we have already hinted are made clearer by this table. First, landless

Table 6.18. Maseru district: agricultural network categories

Category	Percentage of households		
	N=98 Lowlands	N=297 Foothills	N=284 Mountains
Landless,			
- involved in agriculture	18.4	9.8	8.5
- not involved in agriculture	4.1	9.4	2.8
Access to land,			
- sharecropping own land	31.6	28.6	24.6
- not sharecropping	27.6	37.4	40.8
- sharecropping other land	17.3	12.8	21.5
- sharecropping both ways	1.0	2.0	1.8

households still tend to be involved in agriculture, through sharecropping, renting out of implements or labour, or otherwise. However, in the foothills a much lower proportion is involved in this way than in the other zones. Second, in all zones the majority of land holders is involved in sharecropping arrangements of one kind or another. Again, there are differences between the zones: for example, the need to sharecrop the household's own land is highest in the lowlands and lowest in the mountains.

There are no comparative data available on crops planted, fields fallow or crop yields. They would in any case refer to single and quite different crop years, so it would hardly be valid to compare them. Fieldwork in the foothills and especially in the mountains took place after drought seasons. Data in Table 6.19 on the sale of farm produce should therefore be interpreted with caution. They cannot be taken as typical differences between the zones. Also, as was suggested for the mountain zone in section 3.5 above, sales of grain and animals do not necessarily mean that the household has a surplus; an urgent need for cash may cause a household to sell what it directly needs for its own subsistence. With all these qualifications it is still clear that, in the years of the surveys, crop production and livestock management contributed to the cash needs of only a minority of households.

Table 6.19. Maseru district: sale of farm produce

	Percentage of households		
	N=98 Lowlands	N=297 Foothills	N=284 Mountains
Sale of crops	12.2	8.4	17.3
Sale of animals	9.2	4.4	27.8
Sale of wool, mohair	n.a.	6.4	26.8

Combining the information presented so far on the skewed distribution of farming assets in Maseru district and the low percentage of households which sell farm produce, we consider finally what proportion of rural households in the district can in fact farm and to what extent they are dependent on other households in order to do so. Table 6.20 tries to summarize the position for each of the three zones. Perhaps the most

Table 6.20. Maseru district: cumulative distribution of crop production assets

% of households with:	N=98 Lowlands	N=297 Foothills	N=284 Mountains
No fields, no tools, no draft	14.3	14.8	7.7
No fields but some tools and/or draft	9.2	4.4	3.5
Fields but no tools, no draft	28.6	40.1	32.7
Fields and some draft, no tools	9.2	9.8	20.8
Fields and tools, no draft	12.2	6.4	4.6
Fields and tools and some draft	26.5	24.6	30.6
At least one field, one tool and 6 draft animals	8.2	11.8	13.7

outstanding feature of the crop production situation in the district is that in each zone there are more households owning fields but no tools or animals for farming than there are households having fields, at least one tool and at least some draft animals. Households with the assets to farm independently in terms of these indicators form a small minority in all three zones.

Bearing in mind that the size of the sample from the three zones upon which this survey of Maseru district is based is relatively small, we conclude from the data presented that while agriculture is impoverished throughout the district, it remains somewhat more vigorous in the mountains than in the other two zones. There is less of a land shortage, livestock holdings are larger, sales of animals, wool and mohair are more significant and a larger proportion of households have some land, some tools and some draft power. Given the reputation of the foothills as a zone of relatively high agricultural potential, it is surprising to see from the DLPRD data that in some ways this appears to be the most agriculturally backward zone in Maseru district. This may be because of in migration by young households from the mountains seeking more accessible places in which to live but with little involvement in agriculture in their new locations. The foothills are closer to alternative economic opportunities in urban Lesotho, but the lowland communities studied, which are closer still, appear to be retaining something of an agricultural base more successfully. These comments must once more be qualified, however, by recognition of the small numbers of villages studied in each zone.

6.4. Local development participation and government contacts

In the DLPRD surveys of communities in the foothills and mountains of Maseru district, questions were asked about household members' membership of local development related and traditional institutions, participation in development activities and attendance at public pitso meetings. Questions were also asked about what visits the household had had from extension officers in the six months before the survey. The information derived from these questions in the mountain zone is summarized in section 3.7 above.

Unfortunately such information was not gathered in the survey of lowland communities undertaken in 1982, and a full district comparison of these variables is therefore not possible. A further and more serious problem is that this is an area where it is less easy to lay any claim to representativeness on the basis of a small sample of communities like that upon which this report is based. The extent of involvement in traditional institutions may be comparable from one village to the next, but involvement in development related institutions or development projects depends upon how many of these happen to exist in the community in question. Thus our data show that development involvement is apparently higher in the mountain communities

studied than in the foothills, but this is largely because there were active food for work road building projects taking place in the mountain villages in the period just before the 1984 survey. The fact that household heads attended more pitsos in the mountains than in the foothills similarly cannot be claimed to represent a general zonal trend.

One safe generalization, supported by DLPRD foothill and mountain data, is that the level of extension services in the district is extremely low throughout the district. Agricultural and other extension services in Lesotho are overstretched and underpaid. In many instances their training is not appropriate for the type of generalist advice they are called upon to give in rural communities, and in others the type of agricultural production package they recommend is not suited for technical or economic reasons to the villagers they hope to assist. A particular need is for extension to concentrate more upon women as de facto household and agricultural managers.

Following this outline of basic aspects of rural conditions in Maseru district, we attempt in the next chapter a preliminary analysis of indicators of subsistence and poverty for the three zones combined.

7. SUBSISTENCE AND POVERTY IN MASERU DISTRICT

It was stated in an earlier DLPRD report (39) that one aim of the project's research on rural conditions in Maseru district was, through surveying selected areas, to contribute to the identification of the poorest groups and of the mix of strategies employed by the various subsistence strata to maintain or improve their levels of living. Taking DLPRD survey results from the foothills of Maseru district and comparing them with the results of other rural surveys, the earlier exercise (40) explored certain hypotheses about which characteristics could most usefully be checked in an attempt to identify the poorest households, or at least to differentiate the better off from the more impoverished.

The exercise began with the idea that the first and most important characteristic of poor households would be that they would have no members in wage employment. Secondly, it was suggested that the poor would have no livestock, and in particular no cattle. Thirdly, poor households would be expected to have few or no large agricultural implements. It was also hypothesized that poor households' crop production would be lower and that they would own fewer 'modern possessions'. Demographically, many of the poor households were expected to be female headed and small. But it was recognized that the sort of variables being checked could only give an approximate picture of a household's poverty status, particularly since they did not

fully indicate the household's stage in the family development cycle.

The investigation proceeded by trying to find those index variables which had the highest predictive value in separating the poorest 25 to 50% of the households from the remainder. To this end, dichotomies were created between 'wealth = 0' and 'wealth = 1' groups, according to various criterion variables. The scores of the pairs of 'wealth' groups so created were then checked on wealth indicators other than the criterion variables and the differences assessed for statistical significance. The three 'standard' sets of criteria for defining the poor, 'wealth = 0' group (and, conversely, the 'wealth = 1' group) were that the poor group would have:

- no wage worker and no livestock;
- no wage worker and no cattle;
- no wage worker.

It was found that a dichotomy based on whether the household had a wage worker and livestock had value in terms of other indicators of prosperity, but that in fact the richer group under this definition contained households of very different types. Within the richer group, so defined, no statistically significant relationship was found between ownership of livestock and presence of a wage worker in the household. In other words, some of the 'wealth = 1' households have a wage worker but no livestock, and some have livestock but no wage worker. The cash income levels of these subgroups of households are likely to be substantially different. Much the same problem applies to the identification of poorer households in terms of lack of wage worker and cattle.

Overall, it was found that the best crude indicator for dividing a rural population into richer and poorer households is simply the presence or absence of a wage worker. This can only be described as crude because it ignores the stage the household has reached in the family cycle. It should be clear from the descriptions of Maseru district households earlier in this report that a senior household, even if it has no migrant child remitting cash home, can be comfortably established if it has succeeded in laying down an agricultural base and other capital acquisitions earlier in its career. One way of refining the 'wage worker' criterion is to refer not to presence or absence but to the number of such workers in the household. This tends to split the population neatly into the 40-40-20 percentage groups to which reference is commonly made in analyses of poverty: the poorest 40% have no wage worker, the middle 40% have one, and the richest 20% two.

In this chapter we try to apply parts of the analysis attempted in the earlier DLPRD report to the data now available for Maseru district as a whole. Computing problems and lack of time caused by other research commitments have made this a much more superficial and incomplete analysis than we had hoped. What

we present here can only be regarded as preliminary comments for what we will propose in chapter 8 could be a much more intensive analysis of the data on Maseru district, and Lesotho, which are now available.

7.1. Subsistence, agriculture, and demographic indicators

We begin with a check for Maseru district as a whole of the interrelations between certain demographic, subsistence and agricultural characteristics of households. This check is similar to the analysis carried out for the mountain zone of the district in chapter 4 of this report, although time and computing constraints make it far from complete. Unless otherwise stated, it can be assumed that we have established no statistically significant differences between the zones in the variables discussed.

Taking relationships between demographic and subsistence variables first, the statistically strongest relationship among those we have checked is between the sex of the household head and his/her age. The proportion of female headed households increases steadily with the age of the head, as husbands die or abandon their families.

Table 7.1. Maseru district: age by sex of household head

Sex of household head	Age of household head							Cases
	<20	21-30	31-40	41-50	51-60	61-70	>70	
	Percentage							
Male		98.4	89.6	87.1	74.4	56.9	41.4	29
Female	100.0	1.6	10.4	12.9	25.6	43.1	58.6	11

This strong relationship between the age and sex of the household head complicates other relationships between the age of the household head and subsistence or agricultural variables, however, because often these latter variables are influenced by the sex of the household head. Conversely, the sex of the household head does not always correlate directly with such variables where these variables are influenced by the age of the head: effectively, triangular relationships tend to exist.

Reference has been made earlier in this report to the concept of 'workers' as household members who are economically active, i.e. not dependent for their principal source of subsistence upon the income generation of others. Such members

may be active in agriculture or local off farm work, or they may be migrant workers in the formal wage sectors of Lesotho or South Africa. Not surprisingly, both the number of 'workers' and the number of migrant workers correlate significantly with the size of the household when these variables are checked for Maseru district as a whole.

Table 7.2. Maseru district: number of 'workers' by household size

No. of workers	Household size						N = 679
	1	2 - 3	4 - 5	6 - 7	8 - 9	>9	
	Percentage						
0	14.3	1.9	0.4	0.7			
1	85.7	54.5	39.4	35.8	18.6	5.7	
2		37.8	40.3	29.9	27.1	8.6	
>2		5.8	19.9	33.6	54.3	85.7	
% of all households	7.2	23.0	34.1	20.2	10.3	5.2	

Table 7.3. Maseru district: number of migrant workers by household size

No. of migrant workers	Household size						N = 679
	1	2 - 3	4 - 5	6 - 7	8 - 9	>9	
	Percentage						
0	95.9	63.5	39.8	33.6	37.1	20.0	
1	4.1	36.5	52.8	56.2	47.1	34.3	
>1			7.4	10.2	15.7	45.7	

All those household members who are economically active contribute to the subsistence of the household, and as expected we observe from Table 7.2 above that the number of such 'workers' increases with the size of the household. But a number of large households have no migrant worker. Overall, as Table 7.4 below

shows, 46.7% of all households surveyed in the district have no migrant worker in Lesotho or South Africa, although more than half of this group have two or more economically active workers at home.

Table 7.4. Maseru district: number of migrant workers by number of economically active household members

N = 679

Percentages of all households

No. of migrant workers	No. of economically active household members				Total
	0	1	2	>2	
0	1.8	18.7	17.5	8.7	46.7
1		22.8	11.2	10.6	44.6
>1			2.9	5.7	8.7
Total	1.8	41.5	31.7	25.0	100.0

What these tables imply is that whereas the relationship between the size of the household and the number of its economically active members is direct and strong, the relationship between the size of the household, its number of economically active members and its number of migrant workers is more complex. Referring to the family cycle through which households pass, it may be recalled that migrant workers are only probable at an early to middle stage in the cycle; they may be

Table 7.5. Maseru district: number of migrant workers by age of the household head

N = 639

Age of household head

Number of migrant workers	Age of household head						
	<20	21-30	31-40	41-50	51-60	61-70	> 70
0	100.0	7.9	40.6	41.0	53.6	59.5	67.8
1		87.3	56.6	48.9	36.0	30.2	24.1
> 1		4.8	2.8	10.1	10.4	10.3	8.0

found at a later, senior stage, if children of the household are able to migrate to work and have not yet set up their own, separate families. These tendencies are shown in Table 7.5 above, where it can be seen that substantial proportions of households in the mature age ranges have one or more members (usually children) in migrant wage employment and that the proportion tails off as old age is reached.

With regard to the sex of the household head, we find that it is not significantly related to the number of economically active members in the household; but it does relate significantly to the number of migrant workers. Female headed households in Maseru district are less likely to have these principal earners of cash income, as can be seen from Table 7.6 below. A few female headed households can be seen to have more

Table 7.6. Maseru district: number of migrant workers by sex of household head

N = 679

No. of migrant workers	Sex of household head		
	Male	Female	Total
	Percentages		
0	40.4	64.4	46.7
1	50.8	27.1	44.6
> 1	8.8	8.5	8.7

than one migrant workers: presumably these households are headed by widows with migrant children who have not yet set up separate families.

Turning to the relationship between the subsistence categories into which Maseru district households fall and some of their demographic features, the familiar processes through which households pass are summarized by Tables 7.7 and 7.8 below, showing the relationship between subsistence category and household size and head's age respectively. Table 7.9 shows the distribution of subsistence categories by sex of the household head. Again the disadvantaged position of female headed households can be seen. Fewer female headed households are landless, because by old age, which is where many female headed households are concentrated, land has been acquired and at least some retained by the widow - whereas many young, male heads are without fields. But only 29.4% of the female headed households fall into categories which have access to land and receive wages from South Africa or Lesotho. 43.9% of the male headed

Table 7.7. Maseru district: household subsistence category by household size

N = 679

Subsistence category	% of all households	Household size						Median
		1	2-3	4-5	6-7	8-9	> 9	
		Percentage						
Landless	15.2	3.9	27.2	48.5	13.6	5.9	1.0	4
Access, farming only	37.6	14.1	31.4	29.4	13.8	8.6	2.7	4
+ head's SA wages	21.2	0.7	13.9	41.6	29.2	9.7	4.9	5
+ child's SA wages	10.6	4.2	7.0	22.2	27.8	19.4	19.4	7
+ local off farm	7.2	8.2	32.6	16.4	26.5	12.2	4.1	3
+ wages Lesotho	8.1	1.8	12.8	40.0	23.7	14.5	7.3	5

Table 7.8. Maseru district: household subsistence category by age of household head

N = 639

Subsistence category		Age of household head						Age un-known	
		< 20	21-30	31-40	41-50	51-60	61-70		> 70
		Percentages							Cases
Landless		60.3	20.8	12.2	8.0	3.4	2.3	10	
Access, farming only	100.0	6.3	30.2	31.7	45.6	46.6	57.5	12	
+ head's SA wages		28.6	34.9	36.7	9.6	7.8	9.2	9	
+ child's SA wages		1.6	2.8	5.8	13.6	19.8	17.2	5	
+ wages Lesotho		3.2	4.7	7.2	12.8	10.3	10.3	1	
+ local off farm			6.6	6.5	10.4	12.1	3.4	3	

Table 7.9. Maseru district: household subsistence category by sex of household head

N = 679

Subsistence category	% of all households	Sex of household head	
		Male	Female
		Percentage	
Landless	15.2	17.9	7.3
Access, farming only	37.6	31.7	54.2
+ head's SA wages	21.2	25.7	8.5
+ child's SA wages	10.8	9.2	15.3
+ wages Lesotho	8.1	9.0	5.6
+ local off farm	7.2	6.6	9.0
farming only, or farming + local off farm		38.3	63.2
farming + wages		43.9	29.4

households fall into these more prosperous categories. Another way of indicating the difference between the subsistence status of the two types of household is by comparing the principal source of subsistence of the household head in each case, as in Table 7.10 below. This shows that whereas 48.1% of male household heads are in wage employment, only 10.2% of female heads are so employed.

A number of relationships between households' demographic characteristics and agricultural variables have been tested. The number of draft animals the household has is significantly related to the size of the household, and the number of fields held is significantly linked to the age of the household head; but it is not related to the number of household members. This is probably because the acquisition and loss of fields is a delayed process, lagging after household growth and shrinkage. A young couple may have two or three children before they are able to obtain a first field, and an old couple or widow may still hold three or two fields, although single member, residual households commonly pass some of their land on to children or others before they die.

Table 7.10. Maseru district: principal source of subsistence of household head by sex of household head

N = 679

Principal source of subsistence	Sex	
	Male	Female
	Percentage	
Totally dependent on others	1.2	1.8
Agriculture	46.7	79.2
Local off farm employment	4.0	8.9
Wage employment Lesotho	10.3	4.8
Wage employment South Africa	37.8	5.4
No or low cash earning	51.9	89.9
Wage employment	48.1	10.2

As the number of fields held by the household increases, it is not surprising to find that the number of household members for whom agriculture is the principal source of subsistence rises, although the process is not automatic: Table 7.11 below shows that some persons in households without land are reported as dependent primarily on agriculture (either as labourers or sharecroppers) while some landed households have no member primarily involved in farming - presumably because they stated other sources of income as making a greater contribution to their subsistence, which is easy to believe.

Table 7.11. Maseru district: number of fields held by number of household members for whom agriculture is the principal source of subsistence

N = 679

No. of fields	% of all households	Number of household members				
		0	1	2	3	> 3
		Percentage				
0	16.3	38.0	7.9	2.6	2.1	
1	21.6	26.5	23.3	16.4	12.8	12.9
2	28.7	20.1	31.6	34.2	42.6	25.8
3	27.1	12.8	31.2	39.5	31.9	38.7
> 3	6.2	2.6	6.0	7.2	10.6	22.6
Total	100.0	34.5	31.7	22.4	6.9	4.6

This summary analysis of the relationships between Maseru district households' demographic, agricultural and subsistence characteristics confirms the types of linkage and process which were earlier reported from analysis of conditions in the three separate zones. We now make a brief attempt to apply to the district survey population the criteria earlier identified for differentiating between the richer and poorer groups of households.

7.2. A preliminary approach to indicators of poverty

We indicated at the beginning of this chapter how earlier DLPRD work had suggested that populations of households can be divided into two groups - richer and poorer, or 'wealth=1' and 'wealth=0' - on the basis of various criteria. Ideally the application of a single check on a household would indicate whether it fell into the poorest 25-50% of the population or in the larger group which is somewhat better off. In fact any such dichotomy, and the variables which define it, can at best be only a crude indicator of relative wellbeing. Analysis so far suggests that the best single indicator of relative poverty versus relative wealth is whether the household has at least one of its members in wage employment. This normally implies migrant labour in South Africa or urban Lesotho, since there are almost no formal sector, wage paying jobs in the rural areas. For some purposes, it has been suggested, it may be preferable instead of simply registering the presence or absence of a wage worker in the household to count the number of these workers - classified for simplicity as either none, one or more than one. Alternatively, a dual criterion may be applied, in which the poorest, 'wealth=0' households are defined as those which have neither a wage worker nor any livestock - the latter being assumed to be an index of relative prosperity.

In this section we will attempt a necessarily superficial analysis of the applicability of these poverty indicators to the combined survey data for Maseru district as a whole. Three sets of criteria will be applied: households will be placed in the poorer, 'wealth=0' group if they have no wage worker and no livestock; or if they have no wage worker. Thirdly, households will be placed in one of three classes according to the number of wage workers they have, as just outlined.

We will then compare the scores of the poorer and richer groups defined in each of these three ways on various demographic variables, as well as other variables which may serve as indicators of relative poverty or prosperity. One major reason why such analysis can only offer a crude index of the subsistence status of a household is that it pays little direct attention to the age of the household, or in other words the stage it has reached in the family cycle of demographic and economic development and decay. We will therefore include in the analysis the age of the household head, as a surrogate for the stage the household has reached in the cycle, and the number of

economically active 'workers' among its members, which gives an idea of the stage of economic maturity or decline it has achieved.

A first step is to compare the way in which application of the three criteria divides the district survey population into proportions of poorer and richer households. This is shown in Table 7.12 below. The results are largely analogous to those obtained with other data sets in earlier DLPRD analysis (41).

Table 7.12. Maseru district: division of survey population into richer and poorer groups according to various criteria

N = 679

'Wealth ='	Criteria		No. of wage workers	
	No livestock, no wage worker	No wage worker		
	Percentage			
0	20.9	46.7	0	46.7
1	79.1	53.3	1	44.6
			>1	8.7

When the poorer group is defined simply in terms of absence of a wage worker, almost half of the households fall into this category. But it is important to note that for the survey population drawn from the three zones of Maseru district as a whole, 53.3% of households have at least one member in wage employment either in South Africa or in urban Lesotho. When the double criteria of lack of a wage worker and lack of livestock are applied, the 'wealth=0' group falls to a fifth of the total. Using the number of wage workers in the household as the criterion, we do not find the 40-40-20 split this sometimes produces, but approximately a 45-45-10 division.

Turning to the ways in which the richer and poorer groups defined according to these three sets of criteria score on various demographic variables, we find first that with regard to household size, the hypothesis that poorer households are smaller is confirmed with a statistically significant difference between the groups, whichever criterion is applied (Table 7.13 below). When the number of wage workers is used, the much larger size of households with more than one wage worker is made clear. These are normally mature households with children not yet separately established who are away at work in South Africa or urban Lesotho.



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