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THE SPATIAL ORGANIZATION FOR DEVELOPMENT
IN LESOTHO

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Preface

The Urban and Regional Planning Programme (U.R.P.P.) is an applied human geography programme and trains students in urban and regional planning in order to comply with the manpower requirements of the Lesotho Government.

The programme started in 1978 and is a part of an agreement of co-operation between the National University of Lesotho (N.U.L.) and the Free University Amsterdam/State University of Utrecht, The Netherlands.

The field research forms a crucial element of the B.A. degree programme in urban and regional planning. In view of the above mentioned manpower requirements and the decentralization policy of the Lesotho Government, the emphasis is presently put on the aspects of regional planning.

The general objective of the present fieldwork programme has been formulated as follows:

"To identify the present spatial organization of development activities in the rural areas of Lesotho, to compare this with the structure of production in the various parts of rural Lesotho and the demand for assistance required in view of this production structure - from the Lesotho Government and other institutions, in order to achieve the country's development aims".

The research programme has been subdivided into five phases. This report deals with the results of the first phase of the research programme, for which fieldwork was carried out in 1979.



<u>Contents:</u>	<u>Page</u>
Preface	1
List of Maps	iii
List of Tables	iii
1. Introduction	1
2. Typologies of Regions and Criteria for Regionalization	2
3. Lesotho's National Space: Types of subdivisions and underlying criteria	6
3.1. Administrative Subdivisions	6
3.2. The Agro-ecological Subdivisions	13
3.2.1. Agro-ecology of Basutholand	13
3.2.2. The Lesotho Census of Agriculture	14
3.2.3. The Land Resource Study by Bawden and Carroll	14
3.2.4. Phillips' Division in Tentative Gross Bioclimatic Units	16
3.2.5. Concluding Remarks	17
3.3. Subdivisions for the Purpose of Elections and Data Collection	19
4. Recent Rural Development Efforts in Lesotho and their Spatial Aspects	21
5. Some Concluding Remarks	28
References	32

List of MapsPage

Map 1	The Districts of Lesotho	
Map 2	The Wards of Lesotho	
Map 3	The Urban Areas of Lesotho	
Map 4	The Constituencies and Enumeration Areas of Lesotho.	
Map 5	The Basic Agricultural Services Project - Map Showing the Six Blocks	

List of Tables

Table 1	A Summary of the Classification of Bawden and Carroll in comparison with the 1960 Ministry of Agriculture Report	15
Table 2	Phillips' Physiographic Units	16
Table 3	Altitude Variations per Zone per Source	17
Table 4	Areas of Land of Different Agricultural Potential	18
Table 5	Main Characteristics of the Big Area-based Development Projects	24

1. INTRODUCTION

Development planning in Third World countries is carried out at various levels of geographical scale. Initially, it was chiefly undertaken at the national level. However, the disappointing results of national level planning, partly related to the lack of experienced manpower, and the wish to create room for the participation of the local population in plan formulation and implementation resulted in an increase of attention for regional and village level planning.

This increased attention for planning at lower levels of scale than the national territory implied a growing importance for methods of regionalization and for typologies of spatial units, expressed in an extensive body of literature. For Lesotho, these studies are relevant with regard to rural planning in particular, since the country has a very low degree of urbanization. With the exception of Maseru, all urban areas are in fact rural service centres with populations below 15,000 inhabitants.

This paper aims to identify the characteristics and criteria for rural development in Lesotho, against the background of the types of regions distinguished in the literature. In addition, it tries to assess the effects of these efforts and to see how they are related to the specific spatial units selected and to the wider planning environment. Consequently, the following questions are dealt with:

- 1) What types of regions with regard to development planning are commonly distinguished and which criteria are used for regionalization?
- 2) Which types of sub-divisions of Lesotho's national space can be identified and according to which criteria have these sub-divisions been made?
- 3) What are the characteristics of Lesotho's rural development policy, how has this policy been implemented and what were its effects?
- 4) Which conclusions may be drawn from Lesotho's past experiences in the field of rural development, particularly with regard to the geographic/socio-spatial aspects of development planning?

2. Typologies of regions and criteria for regionalization

The general purpose of development planning is usually described as the design and formulation of programmes of action in order to change an existing situation or an on-going process, and to achieve a situation which is in accordance with a set of previously formulated objectives. Planning in itself is a process in which the inventory of the existing situation is an essential step between the formulation of the objectives and the drawing-up of the actual plan. Examples of such objectives may be taken from the development plans of Lesotho. According to the second five year development plan of Lesotho, the nation's broad aims are:

- Economic Growth
- Social Justice
- Maximum Domestic Employment
- Economic Independence (Kingdom of Lesotho, 1976, p. 20)

During recent years there has been a strong emphasis on regional planning in various countries. In general, two arguments have been forwarded to underline the importance of regional planning as a stimulating factor in the whole development process. Firstly, national plans and sectoral plans at the national level are usually not detailed enough to ensure effective implementation at the regional and local level. Secondly, national plans often show insufficient attention to the needs and ideas of the local population and, in this way negatively influence local participation.

Such emphasis on regional planning shows the need for regionalization of the national territory and demands a set of criteria for the delimitation of regions. Grigg (1967) listed a number of principles of regionalization, the most important of which were:

- (a) regions are designed for specific purposes and the purpose determines the criteria.
- (b) the accuracy of delimitation of regions increases with decreasing complexity of criteria used.
- (c) the initial division of an area into regions

should take place on criteria/properties considered the most important

(d) the division arrived at should be exhaustive and the regions delimited should exclude each other.

In the literature on regional planning and regional science, various types of regions are distinguished. The most common distinction is the one between homogeneous or uniform regions on the one hand, and nodal or polarized regions on the other. (see e.g. Grigg 1967, Hilhorst 1971). Uniform regions are delimited on the basis of similarity or homogeneity as the basic criterion (e.g. farm size, population density), whereas nodal or polarized regions are characterized on the basis of relationship between objects or parts and the occurrence of a focus or node.

Van Staveren and Van Dusseldorp (1980) distinguish four types of regions; based on four types of criteria or principles applied for delineation:

- Homogeneous regions, based on homogeneity of the crucial criteria.
- Functional regions, based on the concept of areal linkage or interconnection, which are similar to the nodal regions.
- River basins, with a certain homogeneity in terms of hydrologic entity, at the same time functional because of the inter-relationship through the hydrologic network.
- Ad hoc regions, created to undertake certain measures, e.g. flood areas, or areas where a development project is being executed.

There is some difference in opinion about the usefulness of the various types of regions for planning purposes. According to Grigg "It is of particular interest to note that whereas early planning regions were essentially uniform regions, modern students have turned increasingly to nodal regions as the basis of planning in industrial economies, although it can be argued that uniform regions are a more suitable basis for the less industrialized areas. (Grigg, 1967, p.482).

In contradiction to this, Van Staveren and Van Dusseldorp argue: "For regional planning and planned regional development, the functional or nodal region is the most suitable. The main reason for preferring a functional region is that regional planning, in aiming towards an integrated development, requires an organization that is ready and able to coordinate the activities of various government departments, and which maintains intensive lines of communication to both the local and the national level." (1980, p.13). The criterion of interdependency in the delimitation of planning regions is also opted for by Hilhorst (1971). His argument is not related to the functions performed by the planning organization but is based on the distinction between regionalization for the purpose of analysis on the one hand and for planning on the other. Since analysis of the present situation precedes planning activities, the distinction is also one of phases in the planning process. Homogeneous areas in terms of production activities may - and often will - be interlinked with other areas of a different nature. Such interdependency or functional relationship is reflected by commodity flows. In other words, functional planning regions consist of a varying number of interdependent homogeneous areas.

In many respects, this discussion on types of regions is a rather academic one. In most developing countries planning activities are carried out either directly by government bodies or channelled through the administrative framework. The shift of emphasis from the national to the regional level implies a more important role of the regional or district administration in plan formulation and implementation. Commonly, the planning area is an administrative unit, its boundaries are the administrative boundaries.

The principles of homogeneity and functionality may play a role only within this administrative framework. A rural district in a developing country can be homogeneous in ecological conditions, but heterogeneous in production structure, e.g. because of the distribution of land to various types of production units such as estates and small farms. The various parts of an administrative area may perform different functions such as the production of export crops

in one area, the production of food crops in order to meet the demand in the export area in another one, and the supply of wage labour in a third. (see e.g. Iliffe 1979). Both homogeneous and heterogeneous administrative units may show a nodal pattern of services. In other words, the actual situation in third world countries is usually much more complex than acknowledged in literature.

The spatial organization of development efforts in Lesotho illustrates the complexity of the situation in many developing countries.

3. Lesotho's national space: Types of subdivisions and underlying criteria.

In this section an attempt will be made to throw more light on the ways the national space can be subdivided, on the types of spatial sub-division of Lesotho, and on the various units and their present role in the process of development-oriented planning.

Lesotho's national space is sub-divided in various ways according to the purpose for which the subdivision has been made. Firstly, the country has an administrative system pertaining to a spatial sub-division of smaller units of various types, but all assigned with specific administrative tasks and duties. Secondly, studies about the country's national resources have resulted in a number of agro-ecological classifications and the identification of areas with a certain homogeneity in agro-ecological conditions, but with no official status in terms of government activities. Thirdly, the national government has subdivided the national space for specific activities outside the normal administrative routine, such as elections and data collection. Therefore, the following types of subdivisions of Lesotho's national space can be distinguished:

- 3.1. Administrative sub-divisions,
- 3.2. Agro-ecological sub-divisions,
- 3.3. Sub-divisions for the purpose of elections and data collection.

ed. 3.1. Administrative sub-divisions

In Lesotho the following types of administrative sub-divisions may be distinguished: districts, wards, chief's areas, headmen's areas and urban areas.

The districts have been introduced by the colonial government whereas the wards, chief's areas and headmen's areas are units which originate from the political structure of Lesotho as created by King Moshoeshoe I and his successors, albeit modified by colonial authorities. The urban areas, formerly called government areas, have also been created under the colonial administration.

The district as a unit of administration was introduced in Lesotho after Basutoland came under the rule of the Cape Colony as a consequence of the annexation by Great Britain in 1871. During the period 1871-1877 initially four, but later six districts were created.

After 1881 another three districts were added. Two of these were created by subdividing existing ones, while the third district was newly established for the purpose of making possible a more effective colonial administration of the less accessible parts of Basutoland. No information is available about the year in which this occurred.

Finally, in 1980 a new district - Thaba Tseka - was added by decreasing the territories of four existing districts. Therefore, at present Lesotho is subdivided into ten districts (see map 1).

With the exception of Thaba-Tseka, boundaries of districts have not been gazetted. Although district boundaries are indicated on the official maps of Lesotho, the key to the maps indicates that these boundaries are "approximate".

The subdivision in wards is closely related to the organization of chieftainship in Lesotho. The nation emerged out of a series of conflicts and wars, known as the Lifaqane, which occurred in large parts of Southern and Central Africa during the second quarter of the 19th century. The leader of the emerging nation - Moshoeshoe I - used his sons and trusted allies to forge the nation together by placing them as chiefs over sections of the population.

These sections kept their own chiefs who became responsible to Moshoeshoe's aristocracy. In this way a pyramidal structure was formed with substantial local differences, which gradually became more hierarchical and more centralized. As a result of the Pim Commission of Enquiry, (1935) changes in the administrative system were made, which implied an integration between the administration and local institutions, the recognition of chiefs by the colonial administration,

and the assignment of statutory powers and functions to the chiefs. In practice, it also meant a diminution of the number of chiefs, and a distinction between a paramount chief, 11 principal chiefs, 12 ward chiefs, 270 chiefs and 857 headmen (1950). Apparently the number has increased again after 1950: according to Hirschmann (1977) there were 1121 gazetted chiefs and approximately 2500 headmen in 1977. Since there is no fundamental difference between a principal and a ward chief, the national territory of Lesotho is sub-divided at present into 24 wards.

The delineation of the wards is the result of the so-called "placing system" carried out by Moshoeshoe and his heirs, and of the formal recognition of principal chiefs and ward chiefs by the colonial government. Boundaries of wards are known since chiefdoms are territorial units and chiefs know under which ward chiefs they have been placed. Mapping of the wards revealed that wards are not always contiguous territorial units. This is caused by the establishment in the mountains of cattle posts - temporary settlements of herd boys, who live there during some five months of the year as a consequence of the migratory movement of livestock in accordance with the seasonal variations of climate. Because of population pressure and shortage of land, people from the lowlands started to inhabit these "cattle post" areas permanently.

The cattle posts were established particularly by ward chiefs of those wards which did not extend into the mountain zone. As a result; the ward map shows a complex pattern of partly contiguous, partly non-contiguous spatial units with locally well-known, but at the same time not officially established boundaries. (see map 2). Chiefs' and headmen areas fall within wards and form the lower echelons of the Basotho political system. The boundaries are locally known, sometimes disputed but not officially mapped.

A comparison between the ward map and the district map shows that wards are only partly situated within districts, or coinciding with districts. In many cases wards are located in more than one district. In other words the original

Basotho political system and the superimposed system of colonial administration do not coincide or interlink spatially.

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The functions performed by the administrative units of ward and district changed over time, but information as to this is rather limited. One gathers that the political role of the chiefs was gradually reduced, and that more and more tasks in the field of administration were assigned to them. These changes took place in a gradual process of incorporation of the chiefs in the British colonial system, known as the "indirect rule". For our purposes, the present function of the spatial units ward and district, as appearing from the tasks undertaken by the officials involved, is more important, since this forms an indication of the position of these units with regard to development planning.

The function of the ward chief does not differ fundamentally from those of other chiefs, as outlined under the Chieftainship Act of 1968. This act gives - rather vaguely - as the main duties of a chief:

- " (a) to serve the people in the area of his authority
- (b) to promote their welfare and lawful interest
- (c) to maintain public safety and public order among them, and
- (d) to exercise all lawful powers and perform all lawful duties of his office impartially, efficiently and quickly according to law" (section 6(1))

In the next section of this act, the authority of a principal or ward chief is laid down, i.e. to give binding directions to any chief in his area who is immediately subordinate to him. The ward chief's position in the hierarchy of the chieftainship allows him to influence significantly the way in which lower ranked chiefs exercise the functions attributed to them.

In the field of rural development a major function of the chieftainship is its authority related to the allocation and

revoking of land, in accordance with the so-called Laws of Lerotholi. These Laws of Lerotholi form a set of practices and procedures concerning land law, as codified in 1903 by the Basutoland Council and confirmed by the Paramount chief Lerotholi. These laws have been amended and expanded frequently, lastly in 1959 (Duncan, 1960).

This set of regulations and the way in which the chief exercises his power in the field of landtenure arouses much controversy. Various opinions are ventured as to the security farmers have under present landtenure conditions. But the role of the landtenure system as to stimulating improved husbandry practices and a more productive agricultural sector is almost unanimously regarded as negative. According to a recent ILO report:

"At the heart of the problem of land and livestock management is the system of landtenure. Communal grazing is inconsistent with improved land and pasture management and improved livestock nutrition. Improvements in these areas are crucial to improvements in crop productivity (.....)

The land tenure system is so crucial to changes in the productivity of land and livestock in Lesotho, than we recommend an urgent and fundamental review. This should be undertaken with a view to providing smallholders with secure and negotiable titles to land" (ILO, 1979, p.131)

During recent years some changes have been made to the power of the chiefs in the field of land tenure. They boil down to the fact that advisors have been added to chiefs in the form of land advisory boards and - as a result of the Land Act 1979 - Land committees have been established under the chairmanship of the chief. However, it is not yet known whether this will change the position of the chief to any considerable extent. Moreover, it is definitely not the type of fundamental review called for in the ILO report.

The functions of the district administration with particular reference to planning have been studied in detail recently.

The report on "Local Administration in Lesotho" qualifies the role of the district in the following terms:

"Under the present system of local administration, the districts are field service areas of the Ministries of central government and all fieldstaff is directly responsible to ministerial headquarters in Maseru".
(van de Geer & Wallis, 1980 II-2)

Most ministries are represented at the district level and fieldstaff is usually posted at the district headquarters. The centralized nature becomes apparent from the direct line of command from the top downwards and from the limited role, in terms of horizontal coordination, played by the chief representative of the central government, formerly called District Administrator, and now District Coordinator. This centralization occurs in spite of a number of development tasks specified under the duties of the District Coordinator, among which:

"The development and maintenance of purposeful planning and efficient execution of development policies and projects in the district, in close co-operation with the Ministries/Departments concerned and their representatives in the District and when appropriate with the Central Planning and Development Office". (van de Geer & Wallis, 1980, p.II.11)

Co-ordination of development efforts and local participation had to be achieved also through the District Development Committee. Such committee under the District Administrator (=Co-ordinator) and composed of representatives of various ministries, chiefs, traders, and locally influential citizens, was established to discuss development issues. The actual performance of the Committees is considered to be rather poor indeed. (van de Geer & Wallis, 1980, p. II-16/II-21)

The conclusion one draws from the "Local Administration Report", is that a substantial number of developmental activities is carried out at the district level and by the district administration. This process takes place in a vertical way and very little horizontal integration seems to occur at the district level. The participation of

the local population is therefore highly limited. The main reasons for the centralized process of development activities seems to be of a political nature. Yet in 1980, the central government seemed to intend a strengthening of the district administration for planning purposes. According to a statement by the Prime Minister:

"....it is the Government's intention to create district planning units organically connected to the Central Planning Development Office. When this has been done, decentralization will be effected through a well-co-ordinated institutional hierarchy". *)

Finally, a brief remark has to be made about the urban areas. In the Land Act, 1979, (2nd schedule, section 2) sixteen urban areas are identified. (see map 3). In the same Land Act's notice on the declaration of urban areas, the boundaries are defined, but no underlying criteria for the delineation are mentioned. The urban areas are delineated in such a way that large portions of agricultural land are included. This agricultural land in urban areas is held under licence, a usufruct-right which can be terminated on no more than a three-months' notice. From this, one may conclude that the relatively large size of the newly created urban areas is meant to ensure an efficient implementation of urban planning policies, as the power of the chief to allocate land in these areas has been cut back significantly under the Land Act. Complicated procedures as to the allocation of land are evaded in this way.

*) Statement by Dr.L.Jonathan in the Interim National Assembly on March 13 1980.

ad. 3.2. The agro-ecological sub-divisions

There are four main studies about the sub-division of the Lesotho territory into homogeneous agro-ecological zones:

1. An internal report of the Ministry of Agriculture, entitled "Agro-ecology of Basutoland" (1963)
2. The Lesotho Census of Agriculture (based on the subdivision made by Douglas and Tennant, 1960).
3. A Land Resource study by Bawden and Carrol (1968).
4. A publication by Phillips on "Tentative Gross Bioclimatic Units"(1973).

An overview of the criteria used in the various studies and of the sub-divisions resulting from these, is presented below.

ad. 3.2.1: "Agro-ecology of Basutoland"

In this report six agro-ecological zones are distinguished:

- | | |
|-------------------------------|-----------------|
| - Upper Mountain Grazing Zone | 8500 ft. |
| - Lower Mountain Grazing Zone | 7000 - 8500 ft. |
| - Mountain Village Zone | 6000 - 7000 ft. |
| - Foothill Zone | 6000 - 7000 ft. |
| - Lowland Zone | 5000 - 6000 ft. |
| - Orange River Valley Zone | 5000 - 6000 ft. |

The aim of this study was to adjust the development of the rural economy to the prevailing natural conditions. As to the criteria for classification the report states: "... The Department of Agriculture has zoned the territory into different categories each of which has fairly individual characteristics in terms of climate, soil, topography, water resources, accessibility, altitude and vegetation". (Youthed, 1963, p.1). The classification should subsequently function as an indicator for (future) land use on the basis of which the Department of Agriculture should provide facilities and post specialized extension staff to achieve the objectives of district level development plans. For each zone the report, therefore, presents a brief description, a formulation of aims and of facilities whereby the latter two are specified as to conservation services, livestock services, and field crop services.

ad. 3.2.2. The Lesotho Census of Agriculture

The Lesotho census of agriculture (1960) sub-divides the territory into four categories viz.

- Mountain Areas 8000+ ft.
- Foothills (6000-8000)ft.
- Lowlands 5000-6000 ft.
- Orange River (Senqu) Valley

This classification is based on the one made by Douglas and Tennant in 1949. (1960 Agricultural Census, Part 1, p.35) The basic criterion for subdivision is altitude. The Orange River Valley is separated from the mountain zone above it by an imaginary line above which no winter wheat is grown.

Initially a distinction was made between Border Lowlands and Lowlands (the former being the area in part below 5000 ft. altitude), but in the absence of any significant difference between the two in the 1960 census results, it was decided to combine these two zones.

ad. 3.2.3. The Land Resource Study by Bawden and Carroll

The most detailed classification of agro-ecological zones so far, has been made by Bawden and Carroll (1968). These authors sub-divide Lesotho into land provinces, land regions and land systems. The land system is their basic unit, which consists of an area throughout which there is a recurrent pattern of topography, or relief, soils and vegetation (p.27). Land systems - a total of 27 in Lesotho - were grouped into six land regions being land systems with similar lithology and morphogenesis, i.e. "a distinct landscape pattern produced by similar climatic and geomorphological processes acting on similar rocks".(p. 27). Finally, the regions are grouped into two land provinces.

The table below summarizes the classification and compares it with the agro-ecological zones in the 1960 Ministry of Agriculture Report

Table 1: A Summary of the Classification of Bawden and Carroll in comparison with the 1963 M.O.A. Report by Youthed

Land Province	Land Region	Land System No.	Agro-ecological zones - M.O.A.
Mountain	Higher Mountain	1-3	Upper M. Grazing
	Lower Mountain		
	Slopes	4-6	Lower M. Grazing
	Lower Mountain		
	Flats	7-9	Mountain Village
	Foothill	10-12	Foothill
Lowland	Lowland	13-24	Lowland
	Orange River	25-27	Orange River Valley

Similarly as was the case in the 1963 report on the Agro-ecology of Basutoland, Bawden and Carroll are not only interested in an analysis of the present situation. They would like to provide data useful for planning purposes. In addition to land systems, they provide information on agricultural potential. The assessment of the land potential is based on the known variations in landform, soil and vegetation for each system and the available data on the general variations in climate per system unit. In addition, water resources were assessed separately.

The authors distinguished four broad categories, viz,

1. Land suitable for cultivation
2. Land suitable for grazing
3. Land suitable for both cultivation and grazing
4. Land unsuitable for agriculture

Further sub-divisions were made for the first three categories, but each time according to a different criterion. For the first category, the possible intensity of agriculture, i.e. semi-intensive and extensive cultivation was distinguished. In the extensive cultivation area, characterized by lower rainfall, higher degree of overgrazing and more serious erosion, the soils suitable for cultivation form a lower percentage of the total area and long rotations with short cropping periods are necessary to maintain soil fertility.

There is no difference in the range of crops to be grown between the two areas. Both types of land potential areas are located in the Lowlands and the Orange River zone.

The areas suitable for grazing are sub-divided in terms of type of livestock, viz. small-stock and large-stock. The small-stock area comprises the higher mountain slopes and is suitable for merino sheep only. The large-stock area covers the lower mountain slopes and is considered suitable for cattle and angora goats.

In addition, the latter area may supply winter grazing for the merino sheep.

The land suitable for cultivation and grazing is distinguished according to the accessibility criterion. The poor access land comprises the level areas located in the mountains, including the level shelves surrounding the Orange River Gorge. This is the part of the mountains where the bulk of the population lives, but where poor communications and marketing facilities restrict agricultural potential in addition to the limiting influence of the harsh winter climate. Winter cropping is impossible and maize and beans should not be grown. The slopes surrounding these mountain flats could be used for grazing.

The good access land is found in the foothills and should be used for the production of cash crops, fodder crops and livestock. According to Bawden and Carroll: " All the normal crops can be grown in this zone". (p.65)

ad. 3.2.4. Phillips' division in Tentative Gross Bioclimatic Units

Phillips subdivides Lesotho in six physiographic units as shown in the table below:

Table 2: Phillips' physiographic Units

<u>Physiographic subregion</u>	<u>Elevation (metres)</u>
Mountain (higher)	2900-3480
Mountain (lower)	2290-2900
Foothills	1830-2290
Riverine Valley in Foothills	1830-2000
Lowlands	1530-1830
Larger River Valleys	1400-1600.

This subdivision is based upon the criteria elevation, precipitation, humidity range, temperature, wind, potential evaporation, main current vegetation and vegetation potential climax. It appears, that also for this sub-division altitude zones are the main determinant.

ad. 3.2.5. Concluding Remarks

The altitude zones distinguished in the four publications vary in detail but coincide as to the broad aspects. The table below summarizes the altitude variations per zone per source. The overlap in the Bawden and Carroll classification is caused by the grouping of landsystems into regions, while the overlap in the Phillips classification is caused by the distinction between Riverine valley and Foothills.

Table 3: Altitude variation per zone per source

Zones	Agro-Ecology	Census Report	Bawden and Carroll	Phillips
1. Lowlands	5000-6000	5000-6000	<5000-6000	5020-6000
2. Orange R.V.	5000-6000	no alt.given	6000	6000-6560
3. Foothills	6000-7000	6000-8000	6000-6500	6000-7500
4. L.M.Flats	6000-7000	} >8000	7500	7500
5. L.M.Slopes	7000-8500		6500-10000	9500
6. Higher Mts.	>8500		8500-10000	10000

(altitude in feet)

The Bawden and Carroll report groups the land system units according to agricultural potential areas, on the basis of the observed variation in their main criteria and information derived from the Agro-ecology of Basutoland. These land potential categories can be grouped according to land regions/ agro-ecological zones as follows:

1. Land suitable for cultivation
 - 1.1. Semi-intensive
 - 1.2. Extensive
- } Lowlands/Orange R.V.
2. Land suitable for grazing
 - 2.1 Small stock
 - 2.2 Large stock
- Higher Mountain
Lower Mountain

3. Land suitable for cultivation and grazing

- 3.1 Poor access Lower Mountain Flats
- 3.2 Good access Foothills

In view of this close relationship between land potential zones and agro-ecological zones, either of the two classifications can be used as a first sub-division of the Lesotho territory, within which homogeneous production areas may be distinguished. In addition, cropping patterns in terms of potential seem to be relatively homogeneous within each agro-ecological zone.

The table below - included in the Bawden and Carroll report give the proportion of each land potential category in the total area of Lesotho (Bawden and Carroll, p.75).

Table 4: Areas of land of different agricultural potential

Category	Area		% of total area
	mi ²	km ²	
Land suitable for cultivation			
1. Land primarily suitable for semi-intensive cultivation	1 016	2 631	8.6
2. Land suitable for extensive cultivation	502	1 300	4.2
Land suitable for grazing			
3. Grazing land primarily suitable for smallstock	2 972	7 697	25.3
4. Grazing land primarily suitable for largestock	4 081	10 569	34.4
Land suitable for both cultivation and grazing			
5. Land suitable for cultivation and grazing; poor access	850	2 201	7.2
6. Land suitable for cultivation and grazing; good access	953	2 467	8.1
7. Land unsuitable for agriculture	1 436	3 723	12.2

The use of homogeneous agro-ecological zones for planning purposes in rural areas in third world countries is often advocated. In Lesotho the usefulness is complicated by the characteristics of the farming system, which sometimes implies the functional complementarity of various zones. Such complementarity exists with regard to livestock in particular, and appears from the seasonal migrations to the mountain areas.

ad. 3.3. Sub-divisions for the purpose of elections and data collection.

For the purpose of data collection Lesotho's national space is subdivided into enumeration areas. At present there are sixty constituencies and 1093 enumeration areas. During the year 1959 electoral divisions were made in preparation for the 1960 elections for district councils. To this end a number of areas of jurisdiction of various headmen were grouped together in such a way that a constituency was formed of approximately two hundred taxpayers.

For the 1965 national elections it was decided to create sixty constituencies. Taking into account aspects like population density, means of communication, geographical features, communal interests and existing administrative areas (not specified), units were created, "ensuring a more or less equal number of inhabitants of the age of 21 and older in each area".

For the 1966 Population Census a new system of data collection was introduced. On the basis of a number of practical criteria, new enumeration areas were made ensuring that no enumeration area boundaries would cut across constituency boundaries. (Kingdom of Lesotho 1966 p.28). This resulted in a total of 1093 enumeration areas. These units were also used for data collection during the 1970 Agricultural Census.

From a superimposition of a district map of Lesotho on a map showing the constituencies and enumeration areas (see map 4), we may conclude that in most cases these enumeration areas

fall within the district boundaries. But six percent of the nation's population (1976) lives in areas where constituencies/enumeration areas overlap district boundaries. This anomaly indicates that boundaries of districts were not always taken into account in the demarcation of these data collection units.

If the ward map is compared to the map showing the data collection units, it appears that ward boundaries were definitely not taken into account in the demarcation of the data collection units.

- - -

One may conclude that the various administrative areas, agro-ecological zones and data collection units show a complex jigsaw pattern of spatial organization relevant for development efforts. The two most important types of administrative areas, wards and districts only exceptionally coincide or interlock. Agro-ecological zones cross the borders of wards and districts, and, moreover, may not form homogeneous units with respect to the farming system - at least in certain part of the country. Data collection units form a different system again and the territory of these units may cross the borders of districts and wards, although data are not collected for their own sake, but as a means to facilitate development planning. This already complex pattern of spatial units relevant for development is further complicated by the territorial units selected for specific government efforts in the field of rural development such as the large scale area based projects.

4. Recent rural development efforts in Lesotho and their spatial aspects

The subsequent Lesotho five-year development plans do not contain a definition of rural development. In the plans, rural development is mentioned in combination with agriculture. The first plan targets for agriculture were growth-oriented - increase of domestic output and increase of agricultural productivity. The second plan mentions more specifically an increase of 38% in net agricultural output. Both plans also pay attention to social services, in particular to health services. The second plan states under the heading of social justice, the improvement of the quality of health and social services, and village services. From this, one gathers that rural development in Lesotho is seen primarily as an increase in agricultural output and productivity, combined with the improvement of certain types of social services, those regarding health in particular. However, in the chapter on agriculture and rural development, the attention goes almost exclusively to the production aspects. Therefore, the integration between the two aspects - production increase and service improvement - is weak in the plan and probably non-existent, in practice.

Crop production objectives occupy a central place, followed by livestock production and conservation objectives. Subsequently, attention is paid to agricultural services such as credit, co-operatives and training. Finally, some brief remarks are made about community projects, i.e. self-help efforts supplemented by government assistance to create amenities and infrastructure in the villages.

Crop production targets concentrate on yield and production increases to achieve self-sufficiency in basic grains and vegetable production, to arrive at higher cash crop incomes and to increase fodder crop acreages for better livestock. The livestock production targets also focus on a raise of productivity, here by means of improvements in nutrition, breeding, disease prevention and general management.

The Lesotho government's instrument to achieve these objectives was the large-scale, area-based development project, which becomes clear from the following quotations taken from the second five year plan:

"Government investment of manpower and finance for crop production will follow a definite strategy.....

Emphasis will be placed almost solely on production from the lowlands and foothills.For the non-mountain area the first priority of investment will be the three fully operational area-based projects, Khomokhoana in the northern lowlands and foothills, Thaba Bosiu in the central lowlands and foothills, and Senqu in the two southernmost districts." (p.81)

In addition to these three dry-land crop production projects, there were an irrigation project, Phuthiatsana, and a project primarily for livestock production, Thaba Tseka. However,

"The five large area based projects, Khomokhoana, Phuthiatsana, Thaba Bosiu, Senqu and Thaba Tseka, all have livestock components. For Thaba Tseka this component is paramount." (p. 102)

The enormous importance of these projects in the framework of agricultural development also becomes clear from the proportion of total investment in agriculture assigned to them:

- over 50% of total crop sub-sector expenditure was reserved for the four large area based projects with primarily a crop production objective;
- over 40% of total livestock sub-sector expenditure was reserved for Thaba Tseka.

These percentages exclude sums reserved for the projects in the fields of conservation and marketing.

The large-scale, area-based projects are not typical for Lesotho. They have been introduced in a number of third world countries, often at the initiative and/or with the support of the World Bank. This type of approach became particularly popular during the 1970's as a reaction to the lack of success of sectoral programmes. The area programme

was considered a specific type of integrated rural development, and in fact the main instrument to implement this type of strategy.

The area-based projects usually occupied a semi-autonomous position in the countries in which they were implemented. Although formally placed under or connected with a government ministry, the projects were autonomous in their decisions within the agreement between the government concerned and the donors. Such a high degree of autonomy was associated with the preference of the donors to exercise influence on the project activities and the absence of sufficient numbers of qualified local staff for these usually large-scale and complex projects, which made a large expatriate staff component necessary. Commonly, these area-based projects covered substantial areas, were highly output-oriented - in spite of their supposedly integrated approach - and often had a considerable mechanization component. This and the sizeable number of expatriate staff made this type of project a rather expensive one. Finally, the area-based projects were usually characterized by a top-down approach with little attention for the participation of the local population.

These general characteristics of area-based development projects also apply to those initiated in Lesotho. Leaving aside the Phutsiatsena irrigation project which never came beyond the design stage, the main characteristics of these projects in Lesotho may be listed as follows:

(see next page)

Table 5: Main characteristics of the big area-based development projects

Characteristics	Thaba Bosiu	Senqu	Khomokhoana	Thaba Tseka
Total area (ha)	121,000	637,000	19,000	53,000
Arable land (ha)	31,000	64,000	13,000	?
Grazing land (ha)	50,000	475,000	?	30,000
Criterion for delimitation	River basin	district boundaries	River basin	natural features
Total population	95,000	225,000	40,000	?
No. of households	20,000	45,000	8,000	1,528
No. of farm househ.	17,000	30,000	5,600	1,394
Duration of project	1973-77	1972-76	1975-79	1975-79
Planned expenditure (million £)	9.8	1.8	4.2	5.8
Actual expenditure (million £)	15.0	?	?	?

(free after Garaba, 1980)

The spatial aspects of these large, area-based projects can be dealt with under four headings: location; delimitation/type of unit; relation to other types of spatial units; and man-environment relationship.

With respect to location there was a slight emphasis of the area-based projects on lowlands and foothills. One of the four projects was situated in the mountain zone, one in the Orange River valley. The emphasis on lowlands and foothills was associated with the priority given to the expansion of food grains in Lesotho's development policy. In addition, the lowlands-foothills projects were evenly spread over this part of the country - one in the northern, and one in the central part. The Senqu River project concentrated on the southern part. Obviously, this distribution was inspired by political reasons. The pilot project on which these crop production projects were based, had been carried out in the Leribe area, situated in the northern part of the country - an area with better soils and relatively good infrastructural facilities, and as such not representative for the rest of the country.

The projects covered different types of areas. Thaba Bosiu and Khomokhoana were both river basins and the watershed of the river basins involved, formed the boundaries of the project areas. The Senqu project was named after a river but the project area coincided formally with the district boundaries of the Mophale's Hoek and Quthing districts. The Thaba Tseka project was delineated according to natural features - watersheds and rivers - but already before the execution of the project it had been decided that the project area was going to become a separate district. The delimitations of the project areas did not imply that the whole project area was going to be covered or that all farmers in the area were provided with a standard package of services. Project areas were sub-divided and sub-areas were dealt with in varying degree of intensity. In Thaba Bosiu a distinction was made between a nuclear area and two expansion areas. In Senqu the limited activities which took place were undertaken in a few small areas.

Apart from Thaba Tseka where the project in fact functioned as the initial stage of a district development plan, the project areas show little relation to existing spatial units. The project areas did not coincide with district boundaries as the lower level administrative unit - this in fact also applies to Senqu where activities occurred in small parts of the districts which formed the official project area - and there was no integration into or co-operation with the regular government services provided at the district level. Nor did project boundaries coincide with those of the wards as the main territorial unit in which land tenure issues are dealt with.

Finally, the relationship of project areas with ecological units is somewhat unclear. Although river basins seem to be obvious entities in terms of the physical environment, they do not necessarily form a functional unit for the local population. Here, one touches upon the man-environment relationship. The farming system in Lesotho has an arable farming and a livestock component. The stock migrates according to season and farmers in the lowlands may have

grazing rights in the mountain areas. If a project area coincides with a river basin - or, for that matter, with a district - farmers included in the project area may exercise part of their agricultural activities outside the project area. In other words, the project activities will cover part of the farming system only.

One should add here that environmental aspects were not omitted from the projects in the sense that soil conservation measures were included under the project activities - although with varying degrees of success. This does not mean, however, that the projects were well-adapted to local conditions and that project activities comprehended the various aspects of the farming system and the man-environment relationship of the population included in the project. It is mainly with respect to functional complementarity of various ecological areas in one farming system that project area delimitation in Lesotho poses difficulties.

A comprehensive evaluation of the large, area-based projects in Lesotho is not available. But the various area-based projects have paid ample attention to data collection and a substantial number of reports have been written about project activities undertaken, difficulties encountered, achievements made, and the presumed causes of success and failure. Unfortunately, the picture presented is largely one of very little success.

In Thaba Bosiu - probably the best-documented among the projects - the production per hectare decreased during the project period, the proportion of fallow land strongly increased and production costs went up because of a more intensive use of inputs. Luckily, prices for the main crops also increased, and thus incomes stagnated at the same level. In other words project activities did not result in higher farm incomes. The two other crop production projects also showed decreases in production and stagnating, or even decreasing incomes.

The failure of the large, area-based crop production projects can be related to inadequacies in the plans and in their implementation. With regard to the plans, one may say that they

- were too ambitious in terms of the size of the area to be covered, and the duration of the project;
- lacked knowledge of local conditions, particularly regarding farming systems and social structure;
- lacked attention for integrated rural development in terms of the relationship among various production aspects (agriculture-livestock-forestry), between production and conservation measures, and between production activities and social services.

With regard to the inadequacies in implementation, it was felt that project activities were adversely influenced by the shortage of qualified staff of various types (management, extension), the sometimes rather poor relationship between project staff and farmers on the one side and project staff and the Ministry of Agriculture on the other; the shortcomings in the supply of inputs and equipment, transport and maintenance; and the poor marketing services.

The apparent lack of success of the expensive large-scale, area-based rural development projects led to a drastic change in government policy. It was concluded that the lack of roads together with inadequacies in input supply and marketing services was the main constraint to agricultural output increases in the lowlands, foothills and Senqu river area. Therefore, the Basic Agricultural Services Programme (B.A.S.P.) was designed to assist the farmers in overcoming these constraints. In order to implement B.A.S.P., the non-mountain parts of Lesotho, i.e. 78% of the country's total arable land, was divided into six geographical blocks, mainly for the purpose of funding by different donors. Blocks were sub-divided further into two to four unit areas. In delimiting blocks and unit areas, account was taken of population size, and chiefdom and village boundaries. (See map 5)

The B.A.S.P. approach differs in a number of respects from the large area-based approach. First, B.A.S.P. is not working

in isolation but integrated into the administrative machinery. Second, it covers a more limited package of services provided to farmers and considered essential for agricultural output increases. Third, the project involves the strengthening of relevant government departments. Yet, also with regard to B.A.S.P., one wonders whether adequate attention has been paid to the general background for rural development in Lesotho.

5. Some concluding remarks

Development planning calls for a clear identification and demarcation of spatial units to which the planning activities refer. The national territory of a country is considered usually too big a unit to achieve effective planning. Although Lesotho is a relatively small country, its physical features make transport and communication difficult. In order to achieve the active participation of the local population, decentralisation of development planning and implementation is necessary.

The present sub-division of Lesotho's national space is highly complex and in certain respects not even accurately known. For example, exact boundaries of some districts and wards have not been mapped. Consequently, the present system is incapable of functioning as an effective spatial framework for decentralised development planning. A definite choice and subsequent delimitation of spatial units within the national territory is required. Such spatial units will have to form an interlocking, telescoping system, whereby smaller units fit into larger ones without crossing over the borders of these larger units.

At present, decentralisation of government administration is a much discussed issue in Lesotho. A workshop held at the National University of Lesotho in July 1980 arrived at a considerable number of recommendations, some of which referred to the spatial aspects of planning. The apparent spatial units selected are the districts and the villages.

For the former a District Development Committee (D.D.C.) was recommended as the main planning body; for the latter the Village Development Committee (V.D.C.) was selected as such. However, the territory of such a V.D.C. would not necessarily coincide with present villages under gazetted headmen. The District Co-ordinator (D.C.), with the assistance of the ward chief or the principal chief, should have the power to group villages together into "viable development wards". Although no criteria to assess such viability were mentioned, one may think of aspects such as size of territory and magnitude of population.

The workshop document mentions the D.C. who is the highest administrative officer in the district - as the liaison between the administration and the D.D.C. The latter largely consists of elected members and should form the body planning, co-ordinating and evaluating all district development activities. No mention is made of a district planning unit as a small technical body to assist the D.D.C. in the actual design of development plans in co-operation with the officers of the various departments represented in the district.

The present sub-division of Lesotho into ten districts was not considered a sacred cow by some workshop participants. However, more important than a complete reshuffle of districts, seems to be the exact delimitation of districts and other spatial units relevant to development planning, such as V.D.C. territories, and various data collection units, according to well-defined criteria.

It is obvious that one of the first activities to be undertaken by an planning organization at the district level is the execution of a district planning survey in order to arrive at a more-year development plan. Essential elements of such a district planning survey are: an inventory of the farming systems and non-farming activities; an inventory of services, their spatial distribution in relation to the spread of the population, and their spatial concentration in service centres; and an identification of constraints for development. In

Lesotho some data collection at the district level has started, after the appointment of district resource planners in 1980.

The design of a district development plan in Lesotho takes place, of course, under similar conditions as such an exercise at the national level. This implies that account has to be taken of the wider framework of general conditions for the improvement of agriculture and the country's role as labour reserve for the Republic of South Africa. Such a framework comprises the following factors:

- The almost complete absence of or the low level of incentives for agricultural improvement because of the low returns to labour in comparison with wage labour in the Republic of South Africa;
- the consequent shortage of labour in Lesotho agriculture, possibly in absolute terms but certainly in seasonal ones;
- the vulnerable physical environment for arable farming in particular in view of the climatological and soil conditions and the high incidence of soil erosion;
- the complex and generally unfavourable land tenure system as an instrument to stimulate an effective production system.

Lesotho is characterized by a high degree of dependence on labour migration to the Republic of South Africa with its sharply rising wages since 1976. Lesotho may only expect a substantial reduction in the magnitude of labour migration if remunerative activities are available at home in terms of similar returns per man/day as obtained through labour migration. If shortage of labour remains a constraint in certain districts, those activities with a relatively low level of labour input have to receive priority.

Income from wage labour is to a large extent used for the satisfaction of direct consumption needs and, in addition, for investment in livestock. In general, such investment requires less labour and provides higher returns than arable farming. But under the present conditions, i.e. with a strong

degree of overgrazing in large parts of the country, in association with communal grazing rights, these investments lead to detrimental effects on the vulnerable ecological environment. Erosion is a striking phenomenon in all parts of Lesotho. Therefore, any district development plan will have to pay ample attention to proper land use in accordance with land suitability, the integration between livestock rearing and arable farming, and the integration between conservation and re-forestation. The ILO report concludes that such a change in the agricultural system is only possible if collective grazing is discontinued and the land tenure system is changed drastically. (ILO, 1979)

The land tenure system is one of the most important facets of the politico-social circumstances in the rural parts of Lesotho. Changes in this system can be initiated by the provision of a legal framework established at the national level. The necessary changes have to be implemented, however, at the lower echelons of planning, i.e. the district and, particularly, the V.D.C. territory. With the assistance of technical specialists, a more optimal land use pattern can be established. A favourable pricing system for agricultural produce and a limitation of direct government intervention in the fields of production and marketing - a necessity as shown by experiences in the recent past - will reduce the costs of the bureaucracy and stimulate an economically effective farming system. This and the use of the deferred pay system to provide the D.D.C.'s and V.D.C.'s with funds for the implementation of their priorities in the field of rural development, may lead to an increase in the local population's participation in development planning and implementation.

Although the conditions for administrative decentralisation as such are considered favourable in Lesotho, the planning environment in general definitely is not. At the same time, decentralisation of planning efforts to the district and village level offers the best opportunities for success because the local conditions can be taken into consideration more easily and the people's participation is less difficult to organise.

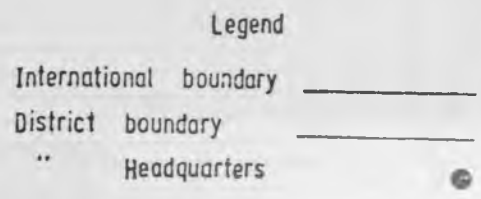
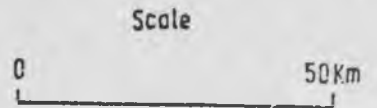
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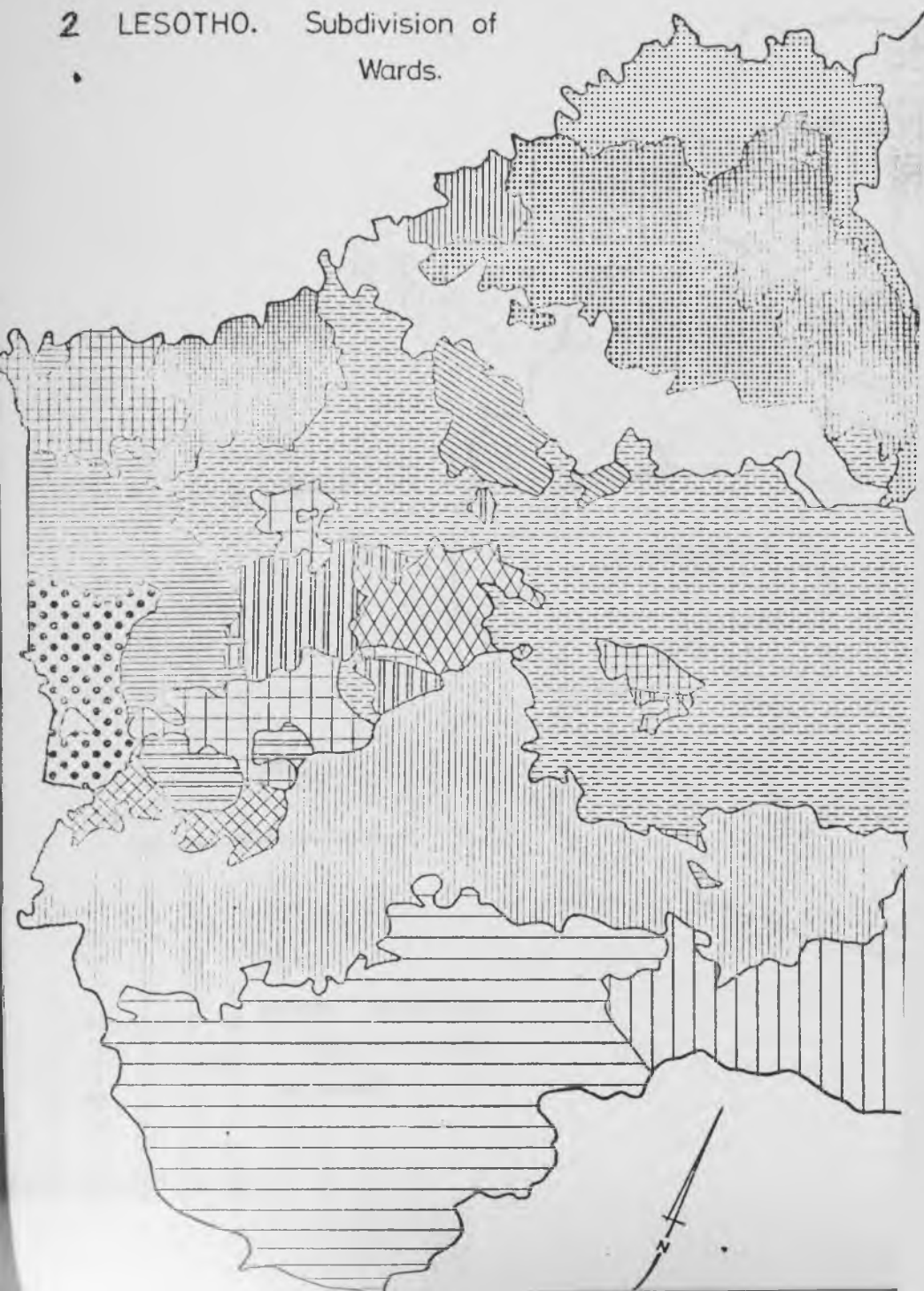
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1 Lesotho Districts.

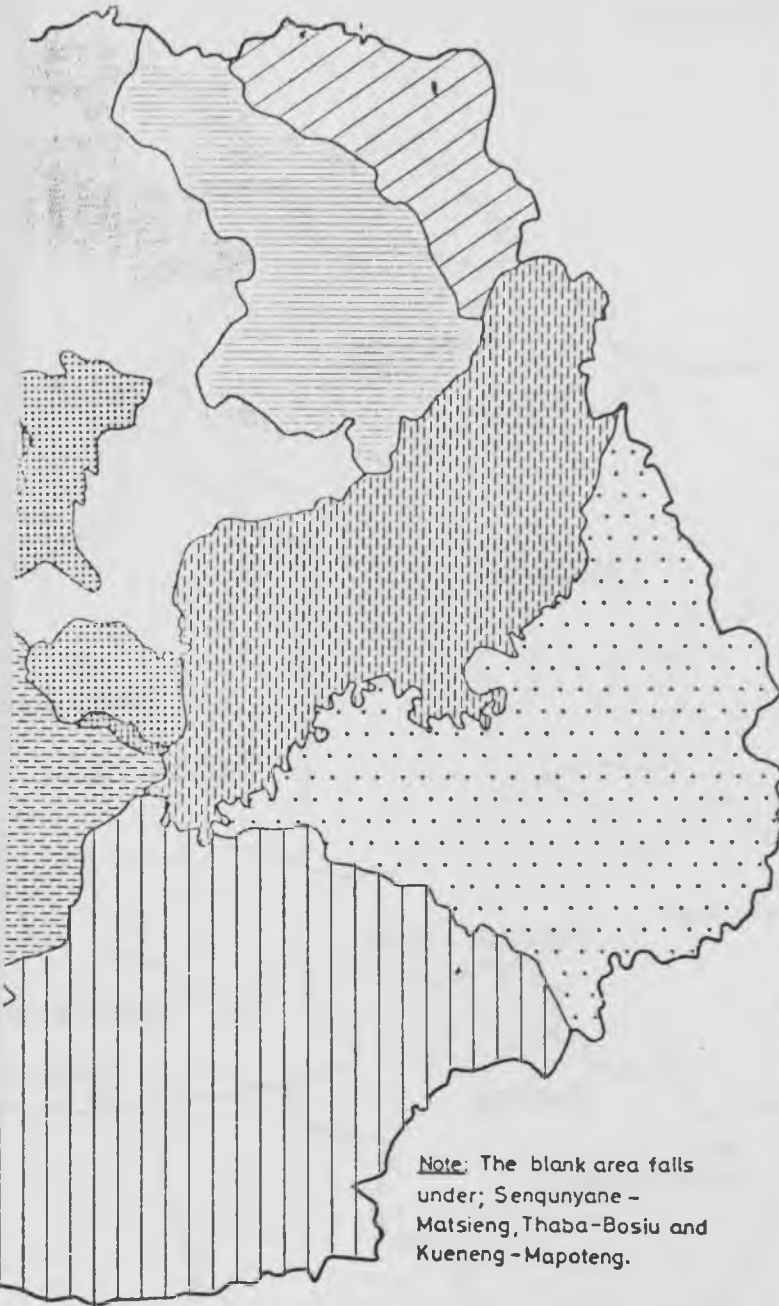


2 LESOTHO. Subdivision of
Wards.



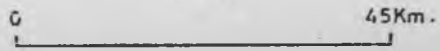
Legend

- Makhoakhoeng
- Maama
- Maqhaka-Majara
- Berea
- Tsikoane-Kolbere
- Qacha's Nek
- Koeneng-Moteng
- Phamong
- Makhoatleng
- Butha-Buthe
- Leribe
- Quthing
- Tebang
- Thaba-Tsoeu
- Tajane
- Ramabanta
- Rothe-Kolo
- Matelile
- SenquAyane-Matsieng
- Likhoele
- Taung
- Likoeneng
- Thaba-Bosiu

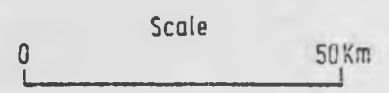


Note: The blank area falls under; Senqunyane - Matsieng, Thaba-Bosiu and Kueneng - Mapoteng.

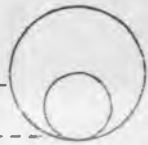
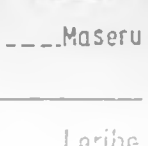

SCALE



3 Lesotho Urban Areas



Legend

- 7 to 10 Km radius 
- 5 Km radius 
- Township (Urban area) name Maseru
- District boundary 
- name Leribe

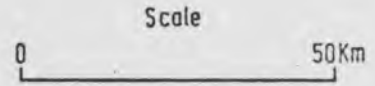




4
LESOTHO CENSUS MAP
 0 10 20km
 Legend
 Constituency boundary
 Enumeration area

Map compiled and drawn by J. Jilbert,
 L.V. Leotlela and L.G.A. Smits, N.U.L.
 Roma

5 LESOTHO: BASP Areas.



Legend

International boundary	—————
District	———
BASP	- - - - -
Block	· · · · ·
District Headquarters	⊙





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