R. M. K. Silitsheña

Intra-Rural Migration and Settlement Changes in Botswana

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INTRA-RURAL MIGRATION AND SETTLEMENT

CHANGES IN BOTSWANA

R M K Silitshena

AFRICAN STUDIES CENTRE, LEIDEN
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R M K Silitshena

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgements</td>
<td>ii</td>
</tr>
<tr>
<td>List of Tables</td>
<td>iii</td>
</tr>
<tr>
<td>List of Figures</td>
<td>v</td>
</tr>
<tr>
<td>A Note on Tribal Names</td>
<td>vi</td>
</tr>
<tr>
<td>A Note on Currencies</td>
<td>vi</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td><strong>PART ONE</strong></td>
<td></td>
</tr>
<tr>
<td>Chapter One Botswana: A Geographical Background</td>
<td>6</td>
</tr>
<tr>
<td>Chapter Two The Kweneng District: A Geographical Background</td>
<td>27</td>
</tr>
<tr>
<td>Chapter Three The Study of Settlements and Settlement Changes</td>
<td>43</td>
</tr>
<tr>
<td><strong>PART TWO</strong></td>
<td></td>
</tr>
<tr>
<td>Chapter Four Chiefly Authority and the Organization of Space in Botswana</td>
<td>53</td>
</tr>
<tr>
<td>Chapter Five Reasons for Permanent Migration to the Lands</td>
<td>77</td>
</tr>
<tr>
<td>Chapter Six Permanent Settlements at the Lands: the Role of Government Policies</td>
<td>118</td>
</tr>
<tr>
<td><strong>PART THREE</strong></td>
<td></td>
</tr>
<tr>
<td>Chapter Seven Permanent Settlements at the Lands and Social Provision: Some Policy Issues and Problems</td>
<td>149</td>
</tr>
<tr>
<td>Chapter Eight Permanent Settlements at the Lands and Trading</td>
<td>165</td>
</tr>
<tr>
<td>Chapter Nine Permanent Settlement at the Lands and Local Administration and Justice</td>
<td>181</td>
</tr>
<tr>
<td>Chapter Ten Conclusions</td>
<td>191</td>
</tr>
<tr>
<td><strong>APPENDIX I</strong></td>
<td>198</td>
</tr>
<tr>
<td><strong>BIBLIOGRAPHY</strong></td>
<td>218</td>
</tr>
</tbody>
</table>
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## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table No.</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Trading Licences in the Kweneng District (1977)</td>
<td>36</td>
</tr>
<tr>
<td>4.1</td>
<td>Dates of Permanent Settlement at the lands by head of household</td>
<td>55</td>
</tr>
<tr>
<td>5.1</td>
<td>Distances to Gabane Lands</td>
<td>89</td>
</tr>
<tr>
<td>5.2</td>
<td>Distances to Molepolole Lands</td>
<td>89</td>
</tr>
<tr>
<td>5.3</td>
<td>Farmers Using Progressive Methods (lands)</td>
<td>92</td>
</tr>
<tr>
<td>5.4</td>
<td>Main reasons given for settling permanently at the lands</td>
<td>94</td>
</tr>
<tr>
<td>5.5</td>
<td>Advantages of living at the lands</td>
<td>94</td>
</tr>
<tr>
<td>5.6</td>
<td>Disadvantages of living at the village</td>
<td>96</td>
</tr>
<tr>
<td>5.7</td>
<td>Ownership of means of transport (lands)</td>
<td>97</td>
</tr>
<tr>
<td>5.8</td>
<td>Ownership of means of transport (village)</td>
<td>98</td>
</tr>
<tr>
<td>5.9</td>
<td>Transport charges in the Kweneng District (1977)</td>
<td>99</td>
</tr>
<tr>
<td>5.10</td>
<td>Distances between homestead and fields (lands)</td>
<td>104</td>
</tr>
<tr>
<td>5.11</td>
<td>Percentage Distribution of Activities of Boys, ages 9-13 by month</td>
<td>106</td>
</tr>
<tr>
<td>5.12</td>
<td>Use of progressive methods in livestock management</td>
<td>107</td>
</tr>
<tr>
<td>5.13</td>
<td>Reasons for not settling at the lands before</td>
<td>108</td>
</tr>
<tr>
<td>5.14</td>
<td>Household Income from Gathering</td>
<td>110</td>
</tr>
<tr>
<td>5.15</td>
<td>Distances to where firewood is gathered (village residents)</td>
<td>111</td>
</tr>
<tr>
<td>5.16</td>
<td>Distances to where firewood is collected (lands)</td>
<td>112</td>
</tr>
<tr>
<td>5.17</td>
<td>Reasons in Gabane why people have settled at the lands</td>
<td>115</td>
</tr>
<tr>
<td>5.18</td>
<td>Reasons why people still return to the village after harvest</td>
<td>116</td>
</tr>
<tr>
<td>6.1</td>
<td>Bechuanaland Government: Recurrent Expenditure 1899/900 - 1960/61 (P'000)</td>
<td>120</td>
</tr>
<tr>
<td>6.2</td>
<td>Funding Water in the Bechuanaland Protectorate</td>
<td>127</td>
</tr>
<tr>
<td>7.1</td>
<td>Cases treated by the Mobile Clinics June 1979</td>
<td>150</td>
</tr>
<tr>
<td>7.2</td>
<td>Success Ratios of boys and girls by location</td>
<td>151</td>
</tr>
<tr>
<td>7.3</td>
<td>Kweneng Lands Schools: Teacher-Pupil Ratios 1979</td>
<td>156</td>
</tr>
<tr>
<td>Table No.</td>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>8.1</td>
<td>Mark up allowed under Price Control Regulations</td>
<td>168</td>
</tr>
<tr>
<td>8.2(a)</td>
<td>Frequency of Purchase of Groceries in Mopopolo</td>
<td>171</td>
</tr>
<tr>
<td>8.2(b)</td>
<td>Frequency of Purchase of Groceries at Mopopolo lands by Mopopolo residents</td>
<td>172</td>
</tr>
<tr>
<td>8.3</td>
<td>Where Grocery Supplies are obtained by Mopopolo people when they are at the lands</td>
<td>174</td>
</tr>
<tr>
<td>8.4</td>
<td>Distances to Shops where Groceries are purchased</td>
<td>176</td>
</tr>
<tr>
<td>AP1</td>
<td>Estimating Distances</td>
<td>203</td>
</tr>
<tr>
<td>AP2</td>
<td>Number of households interviewed</td>
<td>214</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure No.</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Botswana: Topographical Features</td>
<td>10</td>
</tr>
<tr>
<td>1.2</td>
<td>Botswana: Mean Annual Rainfall</td>
<td>11</td>
</tr>
<tr>
<td>1.3</td>
<td>Botswana: Vegetation</td>
<td>14</td>
</tr>
<tr>
<td>2.1</td>
<td>Kweneng District</td>
<td>28</td>
</tr>
<tr>
<td>2.2</td>
<td>Population Distribution 1971 Kweneng District</td>
<td>33</td>
</tr>
<tr>
<td>2.3</td>
<td>Molepolole</td>
<td>38</td>
</tr>
<tr>
<td>4.1</td>
<td>Dates of Permanent Settlement at the Lands for Head of Household</td>
<td>56</td>
</tr>
<tr>
<td>5.1</td>
<td>Diagrammatic Representation of Settlement and Land Use in Botswana to early 20th Century</td>
<td>83</td>
</tr>
<tr>
<td>5.2</td>
<td>Changing Land Use Pattern in Tutume</td>
<td>87</td>
</tr>
<tr>
<td>5.3</td>
<td>Distances to Molepolole Lands</td>
<td>90</td>
</tr>
<tr>
<td>5.4</td>
<td>Main reasons given for settling permanently at the lands</td>
<td>95</td>
</tr>
<tr>
<td>5.5</td>
<td>Settlement and Land Use at the Lands</td>
<td>105</td>
</tr>
<tr>
<td>5.6</td>
<td>Why other people still return to the village after harvesting</td>
<td>114</td>
</tr>
<tr>
<td>6.1</td>
<td>Eastern Kweneng - Distribution of Schools at the Lands</td>
<td>137</td>
</tr>
<tr>
<td>6.2</td>
<td>Eastern Kweneng - Distribution of Health Services</td>
<td>143</td>
</tr>
<tr>
<td>6.3</td>
<td>Sources of Water for Lands Population</td>
<td>144</td>
</tr>
<tr>
<td>8.1</td>
<td>Eastern Kweneng - Distribution of Retail Shops at the Lands</td>
<td>166</td>
</tr>
<tr>
<td>9.1</td>
<td>Routes of Appeal for lands cases</td>
<td>188</td>
</tr>
<tr>
<td>AP1</td>
<td>Molepolole and Lands</td>
<td>206</td>
</tr>
<tr>
<td>AP2</td>
<td>Mmamarobole Lands</td>
<td>209</td>
</tr>
<tr>
<td>AP3</td>
<td>Medie: Land Use</td>
<td>210</td>
</tr>
</tbody>
</table>
A Note on Tribal Names

In referring to the people of Botswana or the individual tribes, two usages are common. The Setswana-speaking people of Botswana are sometimes called simply the Tswana or Batswana. The latter term is now generally reserved for all the citizens of Botswana. In the book both terms are used, with the term Batswana used to refer to people of Botswana. However the people that this book is about are Setswana-speaking people of Botswana.

There is a similar division in terminology with respect to individual tribal groups. Thus the people of the Kweneng District are either the Kwena or Bakwena; those of the Central District, the Ngwato or Bangwato, etc, etc. Both terminologies are used in the book. The unabridged one is also used as an adjective.

A Note on Currencies

Monetary values in the book are expressed in British pounds sterling, South African rand and Botswana pula. The first is used to express monetary values during the early part of this century. The South African currency has for most of this century been the legal tender in Botswana. The South African rand was the legal tender until August 1976, when the pula was introduced. (Two Pula = approximately £1.50.)
INTRODUCTION

A unique feature of Botswana, which distinguishes it from most African countries south of the Sahara, is the existence in large parts of the country of large nucleated villages. These villages, varying in population from 1,000 to over 15,000 people, are sometimes referred to as agro-towns to emphasize their main characteristics - (a) they are not ordinary villages; and (b) they are towns of farmers. An indigenous urbanisation on this scale is found only among the Yoruba of Nigeria. Although similar, to some extent, in form, the Tswana villages are in many respects dissimilar from the Yoruba towns.

The literature on the subject of settlements in Africa suggests that living in nucleated settlements was the norm for most African societies until the onset of colonialism. So radical have been the settlement changes since then that the dispersed settlement pattern is now the norm for most of contemporary Africa. Botswana, with its large villages such as Serowe, Kanye, Molepolole and Mochudi, has thus remained one odd exception.

The villages, sustained mainly by crop and livestock agriculture, have always formed social and economic foci for the rural economy and society. The system of land use as practised in the mid-20th century was as follows: the fields, called the lands, were found outside the village at distances varying from 5 to 50 kilometres. Because of the generally long distances to the lands, every household maintained a temporary shelter at the lands for use during the agricultural season. After harvest everybody returned to the village. Beyond the zone of fields and at distances of up to 300 kilometres from the village were the grazing areas, the cattle posts.

The Botswana villages are now undergoing some radical changes as a result of permanent migrations to the lands and cattle posts. This study sets out to investigate, with special reference to the Kweneng district:

a. why some people are now settling permanently at the lands instead of migrating seasonally between their fields and villages;
b. what the implications of their decision to live at the lands are for the rural economy and society, viz: the provision of social services and trading and chieftaincy and local government.

The study starts by noting that living in nucleated settlements is embedded in Tswana culture. It then examines how the villages have related to the activities, particularly crop and livestock agriculture. With respect to the former, it is realised that the village has in the course of this century become increasingly divorced from its lands, thus necessitating seasonal migration between the two. The seasonal movements between villages and lands appear to have been an inconvenience that was forced on the people. The analysis therefore starts by examining the reasons for the existence of nucleated settlements among the Tswana. The main explanation is sought in the socio-political organization of the Tswana tribes until independence in 1966.

Towards the end of the 1960s, evidence of some households living permanently at their lands started coming to light. Most of what we know about the phenomenon of settlement at the lands owes very much to the work of Lucy Syson in the Shoshong area, in the Central District. In concluding one of her studies she noted that:

"Although a movement to living on the lands is discernible, about its speed, the reasons for it, the factors which stop other people from following and the type of people who do move, far too little is known."

(Syson, 1972:43)

This study addresses itself to some of these gaps.

In trying to explain the main motive for migrating permanently to the lands, a distance model based on the work of Chisholm is used. The use of this model is justified on the grounds that the people at the lands themselves obviously perceive the distance between their former village and their lands as an obstacle to the smooth running of their agriculture. No one reason, however, could adequately cover all the cases. Other reasons given for settling at the lands are also analysed. Living at the lands
is impossible without water and difficult without schools and health facilities. A chapter is therefore devoted to the role of government policies, particularly in the areas of water and social provisions, in encouraging settlements at the lands.

The consequences of permanent settlements at the lands are numerous, far reaching, and in some cases, complex. Detailed attention is given to some of them. The first one is the effect of new settlement patterns on the cost of providing social services. The problem here is that the new settlements are not duplicates of the traditional villages, i.e. they are dispersed rather than nucleated. The analysis focuses on the quandary in which the authorities find themselves: it is socially and politically desirable to provide services at the lands but they appear to have not fully reconciled themselves with the costs involved in so doing.

Secondly, the new settlements appear to have provided an opportunity and challenge to a new breed of traders that has been created by new legislation. This study, therefore, examines in considerable detail the new trading systems – the small general dealers and hawkers – at the lands and shows how they relate to the pre-existing trading system based in the village.

Finally, the study examines the social and political consequences of these settlement changes. It examines in some detail the impact of permanent migration from the village on the traditional political and judicial system. Detailed attention is thus given to the new institutions that have come into being at the lands. Also examined is how the new settlements relate to the new local government system that is village-based.

A situation of almost total ignorance on the phenomenon of settlements at the lands dictated a particular methodological stance. The absence of studies in this area precluded the generation of hypotheses. What was therefore needed was a methodology that made possible the collection of a large mass of data out of which generalizations could be made. The method that lent itself to this requirement was the questionnaire survey. There were two questionnaire surveys: one was on three Molepolole lands of varying distance from the village, and the other, a random sample of households in Molepolole itself. The questionnaire surveys were supplemented by other specialised questionnaire surveys (e.g. a survey of traders), oral data collections and in-depth interviews.
The study of settlement changes resulting from the permanent migration to the lands is of academic interest. The study is a contribution to the mammoth work of Professor Schapera. Schapera completed his fieldwork in the early 1940s. Since then very little work has been done on settlements and yet there have been dramatic economic and political changes, especially since 1966, that have had some impact on settlements.

Settlement at the lands can also be viewed purely as a migration process compared with other migration processes in Botswana, such as labour migration to South Africa and internal rural-urban migration. A glance at the migration literature reveals that a considerable body of knowledge has been built up on the other types of migration.

The interest in the study of rural settlements goes beyond mere academic interest because what happens in the rural areas has some policy implications. Botswana has since 1972 placed great emphasis on rural development as a major focus of national planning. For rural development policies to work, it is not enough to provide the "economic nuts and bolts", e.g. money, manpower and institutions. It is important, in fact very necessary, to take into account the spatial dimension within which rural development takes place.

For example, in the provision of social services, it is necessary to know where the people are. There is a danger that service provision may not be in line with population distribution. In the context of Botswana, we may, by concentrating services in the villages, be neglecting a larger segment of the population.

In Botswana, it is, however, heartening to note that the spatial aspects of planning, especially at district level, have not been neglected. Each district has two planning officers, District Officer Development (DOD) and District Officer Lands (DOL). The DOL is the one who is responsible for the spatial aspects of planning. The author has had considerable liaison with the DOL (Kweneng). The interest shown in the research by the two district officers in Kweneng has been a source of tremendous encouragement.
At a national level the spatial dimensions of planning are the responsibility of the Department of Town and Regional Planning (DTRP). The DTRP has a planning officer responsible for each district. This officer liaises with the DOL in the district. The DTRP planning officers and the DOLs have been instrumental in the production of district and village land use maps.

The author has worked closely with the DTRP since the inception of this research project. The cooperation has included, among other things, the exchange of information. Such cooperation needs to be encouraged. The work of the planners can only be strengthened if academics keep them fed with the results of their research.

The later part of the research for this book overlapped somewhat with the National Migration Survey (NMS) (1978-1979). The analysis of the NMS data took place from mid-1982 to the end of that year. The author worked closely with the NMS team and took part in the analysis of some of the data. Some of the author's results provided some useful hypotheses for the NMS. The results of the latter survey do indeed confirm some of the author's findings contained in this report.
CHAPTER ONE

Botswana: A Geographical Background

In this chapter an attempt is made to provide a background and context to the changes that are taking place in settlement patterns.

It is essential, for example, to understand the nature of the physical environment in order to understand some of the problems of the agricultural sector. Similarly, it is impossible to understand the underdeveloped nature of the rural economy without reference to the history of how it got incorporated into the general Southern African economy dominated by South Africa. Policies which affect the rural economy have been introduced and are continually being introduced. It is important not only to describe these policies but also to note how people react to them. The rural areas are part of the national economy and so an introduction to the broad economy of Botswana should help the reader not familiar with the subject not only to get a sound background but also to understand some of the issues discussed in later chapters.

In order to appreciate what is happening in Botswana, one must start by appreciating its position and size. Botswana lies in the interior of Southern Africa. Most of its borders are with the White minority-ruled states of South Africa, and Namibia. The present Government is very much aware of the implications of this geo-political position of the country:

"The nature of Botswana's existing economic relations, its geographical position, as well as the size of the country, calls for a policy of maintaining friendly relations with as many countries of the world as are well disposed towards Botswana. Botswana, a non-aligned country, is concerned to diversify its external economic relations, and in particular to improve its economic links with Zambia and other African states to the North. But Botswana recognises that it is an integral part of the Southern African Region."

(Republic of Botswana, 1970: 18)

Geography and history have thus condemned Botswana to a situation where it has to live and deal with these states. Since independence, attempts have been made to forge links with other independent African states,
particularly Zambia.¹

In order to understand its geopolitical position and its dependency on South Africa, it is essential to review the history behind the birth of the country of Botswana. Botswana (Bechuanaland Protectorate until 30th September 1966), was colonized from the South. The British Government was initially not interested in colonizing a tract of land that seemed barren. They, particularly the Rhodes-ians (i.e. Cecil Rhodes and his friends) had, towards the end of the last century, fixed their sights on Central Africa. They were anxious that the "Road to the North" through present-day Botswana remained open. The Boer "menace" in the Transvaal after 1840 and the advances of the Germans from the West Coast threatened the Road (Stevens, 1967: 118-19). The British, under pressure from the missionaries, whose evangelization efforts were meeting with frustrations, declared a Protectorate over much of Southern Botswana in 1885 (Dachs, 1972).

Formal administration was, however, not created until 1891. The order-in-council which created it left the chiefs with considerable authority over their subjects. The chiefs regarded this order-in-council as the final word in defining their powers and relationship with the imperial power. Any subsequent attempts at reforming the institution of Chiefship were therefore resisted by them very resolutely.

In addition to being willing and participating agents of colonialism, the missionaries were major forces in social and economic change (Dachs, 1972; 1975; Schapera, 1970). They played a major role in the establishment of schools and hospitals (Schapera, 1970; Schiele, 1972).

¹ Relations with Zambia are very close. The two countries recently signed an agreement which set up the Botswana-Zambia Permanent Commission of Cooperation. The Commission will plan and implement programmes - in the fields of trade, monetary, financial and payment arrangements, transportation and communication, energy etc - with the aim of improving the economies of the two countries (Botswana Daily News), June 5 1979 p.1

Botswana has no diplomatic relations with South Africa but has diplomatic relations with a number of African states through its office in Lusaka (Zambia). Botswana plays an active part in the Organization of African Unity and the informal organizations of Frontline States and the Southern African Co-ordinating Conference (SADCC).
Alongside the missionaries, a first group of white people to visit the country were traders - representing "mercantile capitalism of the Cape" (Parsons, 1977: 117). During the unsettled times of the mid-nineteenth century, the most needed articles by Batswana were guns and ammunition (Sillery, 1974: 73). Other items of trade included cloth and clothing, salt, blankets, hoes, cooking utensils and knives. In return the traders obtained ivory, cattle and hunting trophies such as skins and ostrich feathers (ibid).

The initial impact of this external trade, as exemplified by the Ngwato case, was to stimulate the local economy, but without creating a base for a self-sustaining growth. The period 1887-96 was one of great boom. The importation of new seeds, ploughs and wagons had a dramatic effect on agricultural production (Parsons, 1977: 123). This period thus marked the "peasantization" of the Batswana.

The incorporation of the Tswana economy into the wider capitalist economy had far-reaching implications. The main one was that Batswana had surrendered control of their own destiny to forces that were beyond their influence. Thus the collapse of the cattle market between 1902 and 1910-11 put a very severe strain on the Ngwato economy. The local tribal economies were increasingly becoming appendages of the South African economy, dominated as it was by the Rand monopoly capitalism. The cattle prices were determined by the Johannesburg market (Parsons, 1977: 131). Thus the South African decision to impose the "notorious" minimum weight restrictions on imported livestock placed a severe strain on the Bechuanaland economy (Ettinger, 1972). The boom in crop production was similarly affected; the White regimes were bent on protecting settler farmers against any competition even from their own local African farmers.

It was under these conditions that the migratory labour system to the mines assumed greater importance in the economy of Bechuanaland. For labour, particularly cheap labour, was one commodity that the South African mining industry, in particular, needed in ever-increasing quantities in order to maintain and increase its profit levels. And so the Batswana were "proletarianized" and Bechuanaland, like other African countries in the region, became a labour reserve economy for the South African mining economy.
The Physical Environment

The Bechuanaland economy, particularly agriculture, was not helped by the rather hostile environment, particularly climate. Much of Botswana is a large plateau averaging 1 000 metres above sea level (Figure 1.1). It is hilly and broken in the east but is generally undulating to flat over the bulk of its 570 000 km². More than 70% of the country to the west is a semi-desert – the Kgalagadi (Kalahari) Desert. The Kgalagadi is covered by a thick mantle of sand, averaging 800 metres in thickness.

Drainage consists of three basins: viz, the Molopo-Nossop in the south; the Limpopo in the east, and the Okavango in the north-west. Of these, the most exploited for water for human and animal consumption is the Limpopo River System. A number of dams have been built across the rivers for these purposes. The well-known ones are the Gaborone Dam on the Notwane River and the Shashe Dam – the latter provides water for Selebi Phikwe and Francistown. In addition, a number of small dams for watering livestock have been built. However, the most important sources of water for both human and livestock consumption are boreholes.

The Okavango rises in Angola and brings a mean annual flow into Botswana of about 6.3 million acre feet. The swampy delta constitutes the largest amount of unused water that is lost through evaporation. Possible use of this water for irrigation has been a subject of investigation for many years (Potten, 1976; Botswana Society, 1977). Only small amounts that overspill into the Boteti River are used in the processing of diamonds in Orapa (Silitshena, 1978: 46). The impediments to the full utilization of the Okavango waters include the prevalence of the tsetse fly and mosquito, poor sandy soils and remoteness (Botswana Society, 1977: 190-2).

The most important physical element affecting the lives of ordinary Batswana is rainfall. The mean rainfall annually varies from 650 mm in the north-west to 250 mm in the south-west (Fig 1.2). Rainfall is seasonal, falling during the period from the end of September to early May. The trend of the isohyets reflects the pattern of rain-bringing wind systems – viz the air from the Atlantic, moving in over Angola and the Zaire Basin and
Fig. 1.2
BOTSWANA
MEAN ANNUAL RAINFALL

RAINFALL IN MILLIMETRES

Above 650
600 - 650
550 - 600
500 - 550
450 - 500
400 - 450
350 - 400
300 - 350
250 - 300
Less than 250

Source: Dept. of Surveys and Lands, Gaborone.
the moist maritime air from the Indian Ocean (Cooke, 1978). The main population belt is along the line of rail which receives an average of 500 mm of rainfall. 80% of Botswana's population is found in this belt.

Botswana lies at the western and southern limits of rain - bringing air masses so that the actual incidence of rainfall over the country is subject to very great variability in both space and time, and mean figures for rainfall have little real value. Generally, variability bears an inverse relationship to amount so that the more reliable rains are experienced in the north and east (Cooke, 1978: 4). The net amount of water gained from rainfall is rather small because most of it is lost through rapid run-off and high evaporation rates, "so that little moisture is available for recharging soil storage or supplying moisture for the crops" (Cooke, 1978: 4-5).

Given these rainfall patterns, Botswana is prone to drought. Very little work has been done on drought cycles. Strong evidence appears to have been noted for a 20-year cycle in the summer rainfall zone of South Africa of which Botswana may be thought of as an extension (Cooke, 1978: 6).

The recurring droughts have been a cause of considerable misery to the people of Botswana - by making arable agriculture impossible and at the same time decimating the livestock. The drought in the mid-1960s for example resulted in the loss of more than a third of the national herd (Fosbrooke, 1971: 174-5). Botswana have devised various strategies for dealing with drought. They include ploughing smaller, less risky areas of land, turning to hunting and gathering, moving livestock to new grazing and water, and migration (including migrating to the mines) (Odell, 1979). Water is thus a major constraint on Botswana's development.

The environmental base of agriculture is not helped by the poor soils (Cooke, 1978: 8-9; Field, 1978: 40-41). More than two thirds of Botswana is covered by geologically recent wind blown sands of the Kalahari System. The soils developed on this are largely structureless and composed of coarse to fine sand with a modal grain size most commonly in the fine category. This material readily absorbs rainfall so that there is rarely any surface run-off and therefore no streams. Thus moisture cannot move
easily down through the fine sand and is rapidly lost from the surface by evaporation and by transpiration from the plants which can utilise this moisture.

In the east of the country, beyond the eastern limit of the Kalahari sand, the soils which are derived from igneous and metamorphic rocks are broadly described as ferruginous tropical types. They are generally weakly developed medium to coarse grained sands and sandy loams which easily lose their structure under heavy rain, overgrazing and cultivation.

Soils and rainfall have an effect on vegetation and this in turn affects grazing and other human activities. The vegetation of Botswana basically consists of a number of bush and tree savannah types (Fig 1.3). As a result of low rainfall and poor soils, the grasses, particularly in the Kgalagadi Desert, have low productivity, and recommended stocking rates are low. Because of the harsh environment, grasses, especially the sweet varieties, are highly susceptible to overgrazing, which has resulted in severe denudation and bush encroachment in many parts of Botswana (Posbrooke, 1971).

The Role of Colonial Government

It would be erroneous to conclude that the underdevelopment of Botswana is a result of the rather harsh and unhelpful environment. While the environment does set some limits, it cannot be held responsible for all the ills of Botswana. Other factors, in particular the role of the colonial government, need to be explored.

The point has already been made that the main motive behind British annexation of Bechuanaland was to ensure that passage to the prized possessions in the north was not blocked. Another factor in the British attitudes towards the Protectorate was the understanding which the British Government reached with the South Africans at the conclusion of the Anglo-Boer War in 1902. The understanding was that at least Bechuanaland and Basutoland would be transferred to the Transvaal and the Orange Free State respectively (Sillery, 1974: 120). The issue of transfer later became a contentious one between the British and the South Africans (Sillery, 1974: 120-25). Transfer to South Africa was very much resisted by the Protectorate chiefs (T. Khama, 1955).
Fig. 1.3
BOTSWANA VEGETATION

Source: Dept of Surveys and Lands, Gaborone.
These factors, coupled with the fact that the country was thought to be devoid of natural resources, may go a long way to explain the lack of interest on the part of the British. They did not even bother to establish the administrative headquarters within the country; Bechuanaland was governed from Mafeking (in South Africa). Colonial economic and social policies can be understood within this context. It remains here to emphasize the point that the main function of the administrative machinery was to maintain law and order.

In order to meet the administrative expenses, a hut tax (later converted to a poll tax payable by all adult males) was imposed. However, in view of the fact that the internal economy was under-developed, most people had to migrate to South Africa to work in the mines to raise money for taxes and other necessities (Schapera, 1947: 121ff).

Other than some limited attempts at improving livestock (and later arable) agriculture, very little was done to develop the local economy. The economy as depicted in Schapera (1947) was very backward indeed. Large numbers of men were thus left with no alternative but to migrate to South Africa. In 1940 there were nearly 19 000 registered migrants working in South Africa, a ten-fold increase on the 1910 figures (Schapera, 1947: 32). This figure was 8% of the total population, then estimated at 250 000 (Schapera, 1947: 10). While labour migration helped to generate the needed cash income, it also helped in undermining the traditional agricultural economy of the Protectorate (Schapera, 1947: 163). The absence of the able-bodied men did not augur well for agriculture. Kooijman has also reported that the males who remained behind refused to plough for the families of the migrants because they were not paid for their services (Kooijman, 1978: 75).

The access of Batswana to the South African labour market was guaranteed under two conditions: (a) the understanding that Bechuanaland would at some stage be incorporated into the Union of South Africa - it was for this reason that the "natives" from Bechuanaland were treated as indigenes of South Africa, i.e. they did not require travel documents to enter South Africa; (b) Bechuanaland, alongside Basutoland and Swaziland, was a member of the Southern African Customs Union (SACU).
SACU was formed in 1910. The Agreement with South Africa, provided for the application of a common external tariff, at the South African rates, for the whole of the customs union area, and for the free interchange of products between participating countries (Landell-Mills, 1971: 263-4). The Customs Union, however, operated in favour of South Africa. The High Commission Territories (Bechuanaland, Basutoland and Swaziland - BLS) were forced to import from a more expensive source in order to protect South African industries and their share of the customs and excise revenue pool was severely under-estimated (Landell-Mills, 1971). Much more than this, the customs union frustrated any attempts of industrialisation in the BLS countries (op. cit.).

The main towns, Francistown and Lobatse, were thus mainly commercial towns serving the north and south of the country respectively. During the middle 1950s an abattoir in Lobatse, to process beef for export, was expanded. The abattoir remains the most important industry in Botswana, accounting for more than 90% of the labour force employed in the manufacturing sector.

Finally, in order to appreciate the effect of the colonial past on the present, we must look at the micro (Reserve) level. Once the borders of the Protectorate were demarcated, the next thing was to draw the boundaries between the territories of the various tribes in the Protectorate. These tribal territories were called reserves. Nine reserves, viz Ngwato, Tswana, Kwena, Ngwaketse, Kgatla, Rolong, Tati, Malete and Tlhokwa, were created between 1899 and 1934 (Schapera, 1947: 4). Each reserve was occupied by

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2 The reserves have since 1965 been replaced by Districts. The present district boundaries correspond closely to the boundaries of former reserves. Exceptions are: the South East District is composed of Malete and Tlhokwa reserves, and the Southern District is a combination of Ngwaketse and Rolong reserves, and the Tati (now part of the North East District) is much bigger than the earlier reserve because of the land, purchased from the freehold farms, that has been added to it to relieve population pressure.

While Bechuanaland was by and large a black man's country, there were areas that were set aside for European occupation. These were mainly along the border with South Africa, mostly east of (or astride) the railway. Land tenure was freehold. These were the Gaberones and Lobatsi Blocks in the South, Tuli Block, along the Limpopo, and Tati, in the Francistown area. The other area of European settlement was the Ghanzi Block, in the Kgalagadi. The Europeans in Ghanzi were of Afrikaner extraction.
the principal Tswana tribe, that provided the ruler (chief), and the subject tribes. Each of the reserves, constituting a "nation" (morafe), was independent of the rest and had, through its own chief, direct contact with the colonial administration. Stevens has summed up the position this way:

"The absence of a homogenous population, such as exists in Basutoland and Swaziland, inhibited a strong sense of national consciousness. The lack of homogeneity also encouraged the development and expression of divergent views and interests on all levels of political life and gave a distinctive character to the country's constitutional and political situation. Lacking a centralised tribal authority for the whole Protectorate, local tribal authorities could have freedom in their dealings with District Commissioners." (Stevens, 1967: 114)

The Tswana Society, centred on the Chief, was a stratified one. At the top was a group related to the chief, "the nobles" (dikgosana); after them were "commoners" (batlhanka), descendants of aliens incorporated long ago; then there followed "immigrants" (bafaladi), people belonging to groups more recently admitted, and finally the serfs, slaves or semi-slaves (malata) (Schapera, 1953: 36-7; Prah, 1977:13). The last group was common among the Kwen, Ngwato, Tswana and Ngwaketse and were made up of such peoples as Basarwa (Bushman), Bakgalagadi and Hambukushu, etc. The people lived in villages varying in size from 1 000 people to more than 30 000 (Schapera, 1955: 8). The centre of the village was the main Kgolga (council-place) near the Chief's home. The village was divided into wards. "The ward (also referred as Kgolga) is a patrilineal but non-exogamous body of people forming a distinct social and administrative unit under the leadership and authority

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3 The malata groups were exploited by their overlords, the Tswana-speaking peoples. The relationship between the two was feudal (Prah, 1977). The malata herded the cattle of their overlords and even hunted for them. They were literally owned by the families to which they were attached (Schapera, 1970; London Missionary Society, 1935).

4 Residence in nucleated settlements is a characteristic of the Tswana-speaking peoples, who constitute an overwhelming majority of the country's population. The Kalanga in the NE District live in dispersed homesteads (Werbrner 1971; Woto, 1976). The Basarwa in the Kgalagadi live in bands that move seasonally within their territories according to availability of food (Barnard, 1979). The Herero, a pastoral group, live in scattered homesteads and are engaged in seasonal migrations between different ecological zones in search of pastures for their cattle (Almagor, 1978). The Bayei and Hambukushu of Ngamiland also have a preference for dispersed settlements (Schapera, 1943).
of a hereditary headman" (Schapera, 1953: 46). It varied in size from 100 to 1,000 people. Each ward had its own kgotla near the home of the headman.

The spatial distribution of the wards often reflected the social structure described above. The wards were arranged concentrically with the chief's ward in the centre (Tlou, 1974: 24-25).

Interest has also been focused recently on the internal dynamics of Tswana villages. Schapera and Roberts (1975) have examined changes that took place within a ward over a given period of time (in this case 40 years). The study revealed that, although the population had trebled over the period, the social structure had not changed much. There had not been much fission (a common occurrence among the Tswana) as the lineage segments identified in 1933 still survived in 1973. Nor had the geographical features of the ward changed much; additional homesteads had been accommodated in the pre-existing gaps and two adjacent sites. Gardner (1974) has examined the factors at work in the growth of Serowe, the largest village in Botswana. He found that, with the increasing congestion at the centre, it was the royal wards that tended to relocate, while the commoners' wards surrounding the chief's ward would split, one part relocating while the other remained in situ. The general physical growth of the village was found to be influenced by topography, the black turf soil (montmorillonite) and the availability of water.

Outside the village and arranged concentrically around it were three land use zones, of cultivation, grazing and hunting, arranged in that order (Parsons, 1977: 115). In the course of the 20th century the zone of cultivation gradually expanded and migrated further out as soils near the village became exhausted. On the other hand, the grazing areas, called cattle-posts, have always been far from the village, in areas chosen for their accessibility.

5 The principal crop has always been sorghum. Millet is also grown extensively in the north, in Tati area. Maize has become important in recent years. The other main crop grown is beans – the main cash crop. Other small crops include sweet reeds and melons.

6 There is evidence, however, that between the village and the zone of cultivation there was previously a zone of grazing where milking cows were kept (see Chapter 5).
to water and for the quality of their pasture. In some instances, they were more than 100 miles from the village (Schapera, 1953: 23).

The herdsmen, either the adolescent sons of the owner or his servants, normally maintained a hut or two at the cattle-post. The oxen and a few milk cows were kept at the lands during the ploughing time and were returned to the cattle-post afterwards. The separation of grazing and cultivation areas was enforced rigidly in the course of the 20th century (Schapera, 1970: 97). With the introduction of the "borehole technology", cattle-posts started to spread towards areas with no surface water, particularly to the sand veld on the Kgalagadi, in most instances with unfortunate ecological consequences.

We can conclude this section by noting and emphasizing the point that villages in colonial Botswana were important social and economic centres. The village where the chief lived was the capital. The activities of traders and missionaries, referred to above, had resulted in the establishment of shops, and schools and hospitals, respectively. But whatever social services existed were minimal and resulted from the self-help efforts of the people themselves.

Recent Developments

Political events in 'stagnant' Bechuanaland moved rather swiftly after 1960, with the formation of the Legislative Council and of the nationalist political parties (Stevens, 1967: 141-45). Developments that followed culminated in Britain granting independence to Botswana in September 1966 (Sillery, 1974: 155-61).

One of the last tasks of the British Government was to help with the construction of a capital for the new nation. After an examination of a number of possible sites, the site of present-day Gaborone was selected (Best, 1970a).

A relatively impressive collection of studies on the phenomenon of internal rural-urban migration has built up in recent years. They have shown that

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7 In addition to cattle, which played a key role in the economy of Batswana (Schapera, 1953), other livestock kept were goats and sheep.
Botswana migrants are behaving like migrants in other parts of Africa: they are young, their main motive for migrating is economic, they migrate to the nearest town, a large number live in spontaneous (squatter) settlements, and most still maintain strong links with the rural areas (Republic of Botswana, 1974a, Stephens, 1977; 1976; Malikongwa, 1976; Kerven, 1977; Mcliver, 1977; Cooper, 1978; 1979).

The independent Government of Sir Seretse Khama inherited a country with a terrible legacy of poverty which was exacerbated by one of the worst droughts in its history. A large portion of the rural population was reduced almost to pauperism and was dependent on UN famine relief programmes for food. Needless to add that the economy, dependent on the reduced and emaciated livestock, was very shaky. The country could not balance its budget without grants-in-aid from the British Government. With this background it would have needed a diehard optimist to hope that it could ever come to enjoy any measure of economic independence. These limited resources dictated more cautious policies towards providing public and social services.

Botswana's fortunes took a turn in 1967 with the discovery of diamonds at Orapa (Silitshena, 1975; 1976). The find proved to be commercially viable and considerable. The current annual production from Orapa is 2.4 million carats, thus putting Botswana among the top five diamond producing countries in the world. Soon after the discovery of the Orapa diamond pipe, another, but smaller was discovered at nearby Letlhakane. The mine was commissioned in late 1977 and produces 320 000 carats per annum (Silitshena, 1976a). In 1975 another Kimberlite pipe, containing a higher proportion of gem diamonds, was discovered in the Jwaneng area, 90 km north-west of Kanye. The mine was commissioned in January 1982 and a more open town than Orapa has been built.

At almost the same time as Orapa was being opened, a copper-nickel mine was being developed at Selebi Phikwe, some 90 km south-east of Francistown. The mine, with a projected production of 3 000 tons of copper-matte per month and a life expectancy of 25 years, was planned to start production in December 1973 and to reach full production early in 1974. A succession of technical difficulties, which were not corrected until early 1976, delayed the project. Secondly, the mine came on stream at a period of low metal
prices, which further delayed profitability. In the light of these difficulties there has had to be some financial restructuring of the company.

The development of the new mines, particularly the Selebi-Phikwe mine, offered prospects and possibilities for the exploitation of one mineral, coal, whose existence has been known since the turn of the century. The development of this resource had been hindered by its distance from the main markets in South Africa and Rhodesia and by its relatively poor quality compared to South African and Rhodesian coals. The desire to create as many linkages within and between the mining sector and other sectors as well as the desire to have its own independent energy system resulted in the opening of a coal mine at Morupule, near Palapye (Silitsheana, 1975a).

The mining sector has had a considerable impact on the economy. Its share of the Gross Domestic Product increased by more than 15 times between 1967/68 and 1973/74 (Republic of Botswana, 1977:7). Its greatest impact has been on exports and central government revenues. Before 1971/72, more than 95% of the exports by value were accounted for by agricultural products, but at present mineral products account for over 60% of total value of exports. The revenues that accrue to the central government, facilitated by the mining agreements between the Government and the mining companies (Silitsheana, 1976: 20-25), are considerable. But the mining sector is not able to cure one of Botswana's major ills - unemployment. The mines have directly created only 4 000 jobs. Together with associated industries and services, not more than 7 000 jobs have been created; about one third of the 20 000 currently employed in South Africa.

The assured and increasing revenues coming from mining, enabled the Government to expand the provision of social services, particularly in the rural areas. In January 1980, it was able to achieve its goal of free primary education.

The availability of cash from the mining revenues has enabled the Government to focus on rural development - in particular the provision of social services, water development, and agricultural development generally.

The focus on rural development has been necessitated partly by the realization that mining, because of its capital-intensiveness, will not solve the unemployment problem and that the scope of industrialization is very limited.
Industrialization of an import substitution type is, however, being given some encouragement. Various policies, such as the protection of rights of property owners and very generous tax and other incentives (Botswana has one of the lowest rates of Corporation tax), are being pursued to encourage foreign investment (Silitshe, 1978a: 14). The success of this sector has been very modest, largely because of the free entry of cheap South African manufactures, the small internal market and the relatively high costs of water and electricity. Thus as much as 80% of industrial land is occupied by service plants and only 2% of the labour force in formal employment is employed in manufacturing.

85% of the estimated 900 000 people of Botswana therefore continue to live and derive income in the rural areas - a factor which makes a focus on rural development logical. The rural economy is characterised, first, by the low incomes - less than a quarter of the urban incomes. There is also disparity in incomes within the rural households. The Rural Income Distribution Survey (RIDS) of 1974/75 revealed that the top 5% of rural households receive as big a share of total incomes as the lower 70% of the rural households. The main factor accounting for high incomes is the ownership of cattle, which is extremely uneven. According to the RIDS data, 45% of rural households owned no cattle. 8 Rural incomes also differ according to geographical locality; the median income per household of large villages was P887 compared to P610 for a household in the small villages, lands and cattle-post areas.

While there are other sources of income such as brewing, trading and collecting, the main source of income for the majority of rural households is arable agriculture. But arable agriculture is in general below subsistence level. 9 Productivity of sorghum, at approximately 100 kg per hectare, is very low. This figure reflects partly the poor soils and unpredictable rainfall. It also reflects the non-intensiveness of arable agriculture:

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8 This figure is disputed by some authorities. They argue that it is rather large. Werbner (personal communication) argues that it does not hold for the North East District; for other comments see Chapter 2, footnote 2.

9 The only tribal area with a developed arable sector is the Barolong Farms in the Southern District. Here, although agricultural productivity is low, production is very high on account of mechanization. For growth and structure of agriculture in the Barolong Farms see Comaroff (1977).
the use of chemicals and fertilisers is rare (Lucas, 1979:17).

It is, however, possible to argue that the poor state of crop agriculture is a result of decades of neglect in favour of livestock agriculture. Thus credit and marketing facilities have only been recently provided. In the case of the latter, the Government established the Botswana Agricultural Marketing Board (BAMB) in 1976. Until then the farmers' only outlet for their surplus produce was the traders, who bought sorghum from them at P3 per 90 kg bag (Republic of Botswana 1976: 114). While the BAMB offers the farmers a higher price for their crops (P6 per 90 kg bag of sorghum in 1978), it has been argued that this price represents a low return to the farmer for his efforts (Lipton, 1979). The RIDS has concluded:

"It would appear that many subsistence farmers feel discouraged by this price, so they try to make sure that they only produce enough grain for their own immediate needs. The farmers do not want to produce a surplus for sale, because they feel that the sale price does not compensate them for the effort in producing extra harvest."

(Republic of Botswana, 1976: 114)

The depressed state of crop agriculture and limited employment opportunities in Botswana mean that labour migration to South Africa continues to be an important source of cash for many households in rural Botswana. Lyby (1977) has produced some figures which show that quite substantial sums of money are remitted by migrants to the rural areas in the Southern District. Kwame Afririe (1977) has found the same situation in Ngamiland. Gulbrandsen (1977) has concluded:

"I would not hesitate to suggest that an abrupt cancellation of this migration-opportunity to South Africa in the short-run, would imply ruin and economic crises in numerous families. The ramifications would probably be worse than that of a serious drought, particularly in the case of the poorer households."

(Gulbrandsen, 1977: 10)

The need for very dramatic changes in the arable agricultural sector resulted recently in the formation of a working committee in the Ministry of Agriculture to review all the aspects of this sector. The proposed programme for reforming the arable sector, called the Arable Lands Development Programme (ALDEP), started by examining as many factors - technology, transport,
marketing system, storage, health, education, etc - as possible that have a bearing on arable agriculture. In the light of discussions emanating from this series of papers, a policy on arable agriculture has been formulated.

In the livestock sector, the Government has already introduced a new policy, "National Policy on Tribal Grazing Land" (TGLP), that will transform the land tenure system (Republic of Botswana, 1975). The main aim of the policy is to deal with the problem of overgrazing by removing the herds of large stock-owners (or of cooperative groups of few stock-owners) from the communal grazing areas to the newly created commercial grazing areas. Farmers in commercial grazing areas will be expected to adopt enlightened stock management practices in exchange for exclusive use of the land on a fifty-year lease. 10

The slowly changing rural economy is epitomised by the seemingly adapting village. While signs of abandoned homesteads are common, more common perhaps than ever before, the villages give an impression of continuing vitality; absorbing new elements and retaining the old ones (Grant, 1974; Pahl, 1976). Decades of investments in schools, shops and hospitals have ensured that they remain the social and economic foci of the rural economy.

Some of the policies of the present Government, e.g. making the large villages administrative headquarters of the Districts, are contributing to the importance of the villages. A recent policy of the Government that has improved the economic base of the villages is the encouragement of the brigade movement. The brigades are primarily educational institutions whose main aim is to impart vocational skills to primary school leavers who are unable to find places in secondary schools. Training and productive work are combined so that the sale of products is used to help cover costs of training (Republic of Botswana, n.d.d.; van Rensburg, 1974).

Starting in 1965 with the Serowe Builders Brigade, the brigade movement has spread to almost every other major village in Botswana. Typical activities

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10 TGLP has generated much controversy in Botswana. Some people see it as the beginnings of an enclosure movement and argue that rather than narrow the gap between the rich and the poor, it is going to increase it.
include intensive horticulture, brick making and building, furniture manufacture, textile and clothing, and engineering (motor car and tractor repair and service) (Silitshena, 1979). In addition to being centres of education, the brigades are centres of employment. In 1978, for example, there were 630 trainees and 260 employees at the Serowe Brigades.

The most dramatic, if not revolutionary, changes in rural Botswana have been in the area of institutions. The Chief has been relegated to a minor position and his erstwhile functions and powers have been distributed to the elected District councils and the more representative Land Boards. The former are charged with governing the districts through a local civil service headed by the Council Secretary and the latter are responsible for allocating, and overseeing the use of, land (Tordoff, 1973; 1974). The changes in institutions provides one of the major keys to the understanding of what is happening in the rural economy today.

Concluding Remarks

In order to understand the present state of the rural economy of Botswana, it is essential to understand its past, in particular how it was incorporated into the world capitalist economy through South Africa. The few developments—provision of health and educational and retail facilities—that took place during the colonial period, were concentrated in villages. Moreover, a system of indirect rule through the Chiefs ensured that the villages retained their traditional importance as social, political and economic centres. The period since 1966 has seen the emergency of a new government that is not sympathetic to the regime of the chiefs. It has cut the chiefs to "size" and transferred some of their former powers and functions to the newly-created institutions. The independent government has since the early 1970s, as a result of improvements in the economy, promulgated policies of increasing the coverage of social services and of improving agricultural productivity in the rural areas. All these policies have had a dramatic impact on settlement patterns.

The changes in settlement patterns are taking place within a rural economy that is still very under-developed. The consequence of under-development
is that the rural economy is still linked to South Africa and it is now also linked to the new urban centres. The point that has to be emphasised is that although its economy has become diversified since 1967, Botswana remains an agricultural country.
CHAPTER TWO

The Kweneng District: A Geographical Background

The district (Fig. 2.1) gets its name from the main Tswana-speaking group, the Bakwena, found here. The Bakwena, the most senior of the Tswana tribes found in Botswana, moved into this area from the Transvaal about the beginning of the 18th century (Sillery, 1952: 105). The original Bakwena state covered a much wider area than the present district. It included the southern part of the present Central District, the South-East and Kgatleng Districts, part of the Southern District and even the western part of the Transvaal.

The split with the Bangwato and Bangwaketse, who settled to the north and south respectively of the Bakwena, helped to define the northern and southern boundaries. The Bakgatla, their former allies, came about 1869 and were given land by the Bakwena near the eastern boundary (Sillery, 1952: 142). The boundaries were, however, not clearly defined and border disputes were frequent and sometimes vicious (Sillery, 1952: Silitshehena, 1976b).

The people who were living in this area before the advent of the Bakwena were the Basarwa and the Bakgalagadi. Both groups proved no match for the Bakwena, who pushed them westwards towards the desert and even subjugated them (Okiihiro, 1973) — and thus began a system of vassalage that has been well documented (Hermans, 1977: 56-7).

The Bakwena economy before 1885 was dominated by pastoral activities supplemented by hunting, gathering and crop agriculture (Duggan, 1977: 41). The Bakwena roamed over the area and village sites changed frequently (Sillery, 1952: 107-9). There is evidence that some of the sites, e.g. Molepolole, were settled intermittently more than two times. The reasons for changes of settlement sites were many — wars with other groups, internal disputes, drought, etc.

The interaction with other Tswana groups was not always a hostile one. There is evidence of a thriving trade in cattle skins (karosses), and iron implements with neighbouring Tswana groups (e.g. Bamalete) (Okiihiro,
1973: 105-6). There is also some evidence of Kwena participation in the Portuguese trading system based on the East Coast (Okiiro, 1973: 106).

The modern history of the Kweneng started in the early 1840's with the arrival of missionaries and traders, and of Boers in the Transvaal. David Livingstone was the first missionary to work among the Bakwena. He lived with them from 1845 to 1851 and during that time tried hard to convert them to Christianity and generally tried to change their ways of living (Okiiro, 1973: 107-8). Thus began the tradition of a resident missionary who not only preached but was also a close political adviser of the chief and was a source of social change. Price was one missionary who lived long with the Bakwena. The reading of his wife's letters reveals an interesting insight into many aspects of Kwena life during the late 19th century, the relationships between missionaries and the tribe, the frustrations and prejudices of the missionaries and the resistance of the people to these outside influences (Long, 1956). The missionaries introduced schools, hospitals and the new technology such as irrigation and new building styles. Little by little, and almost imperceptibly, these new ways were adopted by the Bakwena.

The European traders came into the Kweneng in the early 1840's. The new trading system based in Cape Town soon superseded the previous systems. The items of trade were the usual ones noted in Chapter 1 (see p. 8). The main items, ivory and ostrich feathers, came from the Kgalagadi and the Bakwena, like the Bangwato to their north, acted as middlemen. The Kwena participation in this trade had significant political, economic and social consequences. Economically, it made the Kwena, and the Ngwato, the two most influential Tswana groups by the mid-19th century. Politically, it started a process of incorporation, which resulted in the Bakwena losing their independence (Okiiro, 1973).

The fact that the Bakwena controlled the areas where the ivory and the ostrich feathers came from had a major impact on the people living there. The Bakgalagadi and Basarwa were used as hunters and ivory porters by the Bakwena traders based in Molepolole (Okiiro, 1973; 1975).
After 1837, the Bakwena state came under increasing pressure from the Boers running away from the British at the Cape. The Boers had established themselves in the Transvaal and after their defeat of Mzilikazi, chief of the Ndebele fleeing from Zululand, they assumed that the Bakwena state had also fallen into their hands (Okehiro, 1973: 109). The Boers also wanted to control the area from where ivory and ostrich feathers came (ibid). From about 1852, there were running battles between the Bakwena and Boers. The Bakwena lost lives and cattle in some of these skirmishes, but not their sovereignty. Such was the background that made the Bakwena seek and later accept, albeit unwillingly, British protection in 1885.

The Colonial Period

The impact of colonial rule on Botswana has been described in Chapter 1. It will not be necessary to repeat what has already been said above.

Among the first acts of the colonial government was the drawing of boundaries between the various tribes. The boundaries of the Bakwena Reserve (now Kweneng District) were fixed by 1899. The Kweneng District covers an area of 38,122 square kilometres.

Like the rest of Botswana and for the same reasons, the economy of the Kweneng was under-developed. The result was that labour migration played a very important role in the economy. In 1939, the District Commissioner of the Kweneng Reserve reported that "the wages earned by these (migrant) workers form the main source of income in the District, and without them trade and tax collection would be almost at a standstill" (quoted in Duggan, 1977: 44).

The other sources of income were the occasional sales of livestock and crops. The poor state of crop agriculture can be gauged from the fact that one-third of the traders' imports by value were grains (Duggan, op cit, 43).
The Physical Background

Duggan has placed great emphasis on the hostile environment, particularly unreliable rainfall, as one of the main explanations of agricultural under-development.

The relief, climate, soils and vegetation features described in Chapter 1 are represented in the Kweneng District (see Figs 1.1, 1.2 and 1.3). Thus the altitude is about 1 000 metres above sea level. The rainfall averages about 500 mm in the eastern part of the district and it decreases as one moves westwards. As with the rest of Botswana, the rainfall is variable and erratic. The soils vary from the clay loams in the east to the sandy soils of the Kgalagadi in the west. Similarly the vegetation changes from tree savannah with acacia shrub in the east to shrub savannah in the west. Finally surface drainage is limited to the eastern part, particularly the south-eastern corner of the District. The main river is the Metsemotlhaba, which is a tributary of the Limpopo. The Metsemotlhaba and its tributaries provide the only dammable streams. There is no doubt that this physical environment is a limiting factor but, as already argued above, it is not the main factor.

The development or otherwise of an area depends upon government policies and the area's human and natural resources.

The Population of the Kweneng

The population of the Kweneng was 62 251 in 1971 excluding 6 142 absenteees (Rep. of Botswana, 1972a). It is projected to reach 70 015 in 1980 (Kweneng District Council, n.d.: 2). This projection assumes a growth rate of less than 1% on account of high out-migration rates. The slow growth rate is attributed mainly to the loss of population to the urban areas.¹

¹ This is rather curious. While it is true that some migrants who go to South Africa and urban areas within Botswana never come back, it is doubtful that the extent of out-migration is so large. If the Kweneng pattern is similar to that of the rest of the country (and there is no evidence that it is different) we should expect its population to grow at a rate of at least 2.5%. The Central Statistics Office and the District council must have taken the number of all absenteees, including the vast majority who are away temporarily, in computing their projection.
As would be expected, the population is young. According to the 1971 Census 50.4% of the Kweneng population is 14 years and under; 20% is between the ages of 15 and 29, 11.5% between 30 and 44 and only 14% is 45 and above (Republic of Botswana, 1972: 130).

The overall population density is 2.0 people per square kilometre. However, the population is not evenly distributed. The densities are highest (up to 20 persons per square kilometre) in the south-eastern corner of the District where the majority of the population is found (Fig 2.2). The villages near Gaborone, particularly Mogoditshane, are experiencing a fast growth rate, partly on account of urban-rural migration from Gaborone. They are thus becoming dormitory villages of Gaborone (Silitshena, 1976c).

Beyond Molepolole and further west, the population is sparse and is restricted mainly to scattered and isolated villages, whose locations are dictated by the availability of water (Fig 2.2). The predominant population here is Kgalagadi and Sarwa. The Bakgalagadi settlements differ tremendously from those from the Bakwena in the east. Solway has noted:

"The village basically forms an arc around the pan and is extremely spread out. Coming from Eastern Botswana one is immediately impressed by this feature; groups of compounds are separated by large tracts of bush and it is often impossible to see one group of compounds from another. This is typical of many Bakgalagadi villages and the stated reasons for this are that people like quiet and thus prefer to live far from their neighbours ...."

(Solway, 1979: 1)

Another feature of the population of the Kweneng is a large number of absentees. The majority of absentees go to the mines in South Africa while a smaller proportion goes to the urban areas within the country. It is estimated that at any one time between 5 000 and 8 000 male adults are absent from the district (Kweneng District Council, n.d.: 3). The majority of the absentees falls in the age-group of 18-54.

The ethnic composition of the population is diverse (Schapera, 1952: 52-63; see also below). However, the majority of the population, including the Bakgalagadi, is Setswana-speaking. The Bakwena, found mainly in the east, are the most numerous and have traditionally subjugated other groups,
Fig. 2.2
POPULATION DISTRIBUTION 1971
KWEENING DISTRICT

LEGEND

500-2000
2000-4000
4000-6000
over 6000 persons

Represents 50 persons

SCALE 1: 1,500,000

50 20 10 0 30 60 90 120 Kilometres
particularly the Bakgalagadi and Basarwa (Okihiro, 1975).

In addition to the people of Tswana origin, there are an estimated 2 500 Basarwa. Esche (1977: 11-12) found that 22% of the Basarwa were heavily dependent for their living on the Batswana (mainly as herdsmen and general servants); 54% were semi-dependent (but still derived most of their living from hunting and gathering), and only 24% were independent hunter-gatherers. The Basarwa necessarily interact most with the Bakgalagadi with whom they live. The semi-feudal relationship between the two has persisted to the present (Solway, 1979: 15-18).

The Economy of the Kweneng District

The economy of the Kweneng is based mainly upon subsistence crop agriculture, livestock farming, hunting and gathering and migrant labour. There is almost no cash employment.

Arable agriculture is clearly the largest employer. It is, however, most intensively practised in the south-eastern corner of the district where better rainfall and soils favour it. In the north and west of the district it is practised along the fossil river valleys but rainfall is much more unreliable. Arable agriculture is generally of subsistence type and negligible surpluses for sale are produced. Many households, the majority in fact, are net importers of grain.

The village-based system of arable agriculture found in the east contrasts sharply with the system found in the west. In the west Solway has found that people traditionally live close to their lands:

"People currently living permanently at lands area have not moved there from the village. They have either been living there for many generations or have moved there more recently from remote parts of the desert."

(Solway, 1979: 15)

Livestock farming, particularly cattle raising, is one of the most important activities, and with large expanses of the veld, is the most economically viable. However, here, as elsewhere, it is dominated by the large cattle
owners. It is estimated that 60% of the Kweneng households do not hold any cattle (Kweneng District Council, n.d.: 4). This figure seems to be an over-estimate.\(^2\)

It has been said that the livestock industry has been hampered by poor management practices which have resulted in the abuse of the land (Kweneng District Council, n.d.: 4). Consequently, the cattle-posts are severely over-grazed. Thus the Kweneng District is also being carved into commercial and communal grazing areas in accordance with TGLP. Two commercial areas have already been demarcated and divided into farms. The first is south of Kutse Game Reserve, between the east-west road and the border with the Southern District; the second one is on the north-east corner. The rest of the area other than the area set aside for wildlife management, is classified as communal grazing and arable land (Kweneng District, 1978).

Hunting and gathering also constitute an important source of livelihood. Hunting is especially important in the western parts of the district where it is relied upon not only as a source of food but also as a source of cash income from the sale of skins and trophies. Further west, and particularly in the Kutse Game Reserve, a large variety and number of game is found, which is a tourist attraction. The small tourist industry helps to generate some income.

Gathering is an important source of livelihood for some Basarwa groups as already mentioned. The collection of firewood is important in the south-east corner. Firewood is gathered for both domestic consumption and as a commercial activity. The sale of firewood to the villages and to Gaborone has resulted in the depletion of firewood resources, thus making this activity increasingly difficult.

There also exists, outside trading and Government services, a small cash sector. This sector is dominated mainly by the brigades, the Kweneng Rural

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\(^2\) The author's surveys in Molepolole and the three lands found about 32% of the households - both village and lands - without any cattle. Solway (1979: 8-9) found a very small number of households that did not hold any cattle at Dutlwe.
Development Association in Molepolole, the Botsewelelo Centre in Thamaga and Pelegano Village Industries in Gabane. The following activities are found in these institutions: sewing centres (training and production), pottery, engineering workshop and filling station, forestry and nursery, vegetable and fruit production, poultry, a hotel, handicrafts, brick making and building and the sale of building and fencing materials. These activities provide direct employment and/or training for approximately 250 people (Kweneng District Council, n.d.: 6).

A very small proportion earns its living by trading, mainly as general dealers and hawkers. In June 1977 the different types of licences were distributed as shown in Table 2.1 below.

**TABLE 2.1 Trading Licences in the Kweneng District (1977)**

<table>
<thead>
<tr>
<th>Licence</th>
<th>No. of Holdings</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Dealers</td>
<td>36</td>
</tr>
<tr>
<td>Small General Dealers</td>
<td>38</td>
</tr>
<tr>
<td>Restaurant</td>
<td>36</td>
</tr>
<tr>
<td>Chibuku/Traditional Beer</td>
<td>10</td>
</tr>
<tr>
<td>Filling Stations</td>
<td>3</td>
</tr>
<tr>
<td>Specialist (e.g. Chemist)</td>
<td>2</td>
</tr>
<tr>
<td>Butchery</td>
<td>8</td>
</tr>
<tr>
<td>Fresh Produce (vegetable &amp; fruit)</td>
<td>5</td>
</tr>
<tr>
<td>Blacksmith</td>
<td>1</td>
</tr>
<tr>
<td>Wholesale</td>
<td>1</td>
</tr>
<tr>
<td>Hawkers</td>
<td>71</td>
</tr>
</tbody>
</table>

Source: Kweneng District Council n.d. 6

The different licences and trading generally in the Kweneng are treated fully in Chapter Seven.

In addition to the formal sectors described above, there is also what one could classify as a non-formal commercial sector, which includes activities like the unlicensed sale of firewood and beer, which are important sources of income for the poorer rural residents. Beer brewing acts as a "redistribution mechanism" for income coming into the rural areas. The gathering of firewood is mainly for domestic consumption acting as an import substitute for other fuels.
The largest cash earning sector in the district is the migrant labour industry. It is estimated that over P4 million is paid in wages to miners from the Kweneng (Kweneng District Council, n.d.: 5). The dependency upon migrant labour is increasing, because many migrants are attracted by the recently increased wages and are pushed by the failure of rural incomes to keep pace with these increased returns (ibid). Recruitment is generally higher in the west: in Letlhakeng, for example, 25% of the population is absent at any one time. The rates in the east do not generally exceed 14% (op. cit: 5-6).

What has emerged from the discussion so far are wide contrasts in environments, people and activities between the east and the west of the district. The east is very much similar to the rest of the eastern belt of Botswana, while the west is part of the Kgalagadi system that extends from the western parts of Southern District through the Central District to Ngamiland. These were the considerations that were taken into account in the selection of the study area.

Settlements in Eastern Kweneng

Finally, since this is a study of settlement changes in the eastern Kweneng, it is necessary to review the traditional settlement pattern found in this area.

The main Kweneng settlement has always been Molepolole. Its site has been settled on and off in the past. It has, however, been settled continuously since 1864. The original site, chosen because of its defensive position and reliable water supply (Long, 1956: 18) was on top of the nearby hill. Mrs Price has also reported that there were "several towns below", which must have been wards occupied by refugee tribes. The Kwena chiefs are still buried in the "royal" cemetery at the old site.

The Bakwena moved the village to the lowland below in times of peace. In the past it was relatively easy to move the village because simple building materials were used in the construction of houses. After colonization, the situation changed. Thus Chief Sebele's decision in 1900 to move the village from the hill to Borakalalo (near the present-day Secondary School) "caused
much hardship and expense, as by this time the people had learned to build good houses of brick". (Sillery, 1952: 113).

When the next chief, for whimsical reasons, asked the people to move back to the hill, some of the people refused to move from Borakalalo. Thus when Kgari Sechele became chief in 1932, Molepolole was two villages in one; one at the hill and the other below. He built his home half-way between the two, i.e. at the present site of the chief's house and main kgotla. He then asked everybody to move towards him and there was some resistance. In due course and with the support of the colonial government, everybody, especially the people on the hill, gradually moved. 3

Molepolole (Fig 2.3) has always been the capital of the Kweneng. It was here that the Kwena chiefs lived and it was from here that their authority reverberated to the outlying areas. The British also established their local administrative offices here - thus enhancing the status of Molepolole. This administrative role it has continued to play. It is the headquarters of the District Council. The District Council Secretary and his staff are occupying the converted house of the colonial District Commissioner, with other officers being housed in the converted tribal granaries. Not far from the Council Secretary's offices are the Land Board and Education Secretary's offices, both also in converted accommodation.

A kilometre away westwards towards the hospital and the secondary school is the Government enclave (Fig 2.3). It consists of the District Commissioner's offices, the police, the District Agricultural offices, the post office and the offices of the primary school inspectors.

Molepolole is also an important commercial centre. In the nineteenth century it was the centre of the Kgalagadi trade. Since then traders have established large shops in this village. The control of their trading licences was a cause of much friction between the earlier chiefs and the colonial government (Sillery, 1952). Molepolole has the highest number of shops and the highest order of goods and services in the Kweneng. Thus in addition to the two

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3 F Kgosidintsi, interview, Molepolole, 15.2.1976
filling stations, it is also served by two commercial banks.

It is also the most important social centre. The only secondary school in the district is located here. Here also is found the regional hospital. Finally, there are community services - the churches, and halls. For anyone coming from outside and with nowhere to stay, the only hotel in the district is available: it is clean and modern. Beer flows in the numerous bars and shebeens. Many a returning migrant has been known to squander his hard-earned fortune on beer and women in Molepolole, and thus return to his village outside Molepolole ready to sign on for another contract! Thus, to all intents and purposes, Molepolole is the town of the people of the Kweneng District. It is here they come to shake the dust! These factors help to account for Molepolole's rather large population. In 1971, it had a *de facto* population of just over 9 000. Its present population is estimated at 14 000.

Outside Molepolole there were a few small villages. They each came into existence under some peculiar circumstance. Silitshena (1976b) has categorised them into three types - refugee, border post and resource villages.

The refugee villages are those of immigrant tribes that came to seek shelter from the Kwena. Such groups might be a small band that had seceded from the parent tribe as a result of succession disputes. Examples of refugee villages are Gabane (Bamalete), Thamaga (Bakgatla) and Mmankgodi (Hurutshe). These groups were each allowed to live in their own village if they had come with their own chief. Such a chief would then submit to the authority of the Kwena chief in Molepolole, and, formerly, paid tribute to him. The chief of an immigrant tribe had limited autonomy, if any: the laws that governed his people were made in Molepolole. The refugee villages were generally sited strategically near the borders.

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4 Private homes, where beer is served. The beer served may be locally brewed or imported. Although the prices are relatively higher than in the bars, the patrons enjoy privacy and can drink on credit.

5 This was amply demonstrated for the Gabane people during a dispute which they had with Kgari Sechele in 1932 over the appointment of a chief (see Chapter Four).
The border post villages as would be expected were the villages sited near the boundaries of the Kwena State to guard against foreign incursions. The culprits were formerly neighbouring Tswana tribes – the Bangwato, Bangwaketse and the Bakgatla. Later they included the Boers, the British South Africa Company and the concessionaires. Examples of border post villages were Kopong (near the border with the Bakgatla), Lephephe (near the border with the Bangwato) and Mogoditshane (the border with European-held land).

The resource villages were started by people who wanted to exploit the local (agricultural) resources. Such villages are Kumakwane (irrigation agriculture producing wheat, vegetables and lucerne), Mmopane (large-scale mechanized farming producing sorghum) and Lentsweletau (livestock farming) (Silitsheha, 1976b: 101-2).

These villages had their proportionate share of the new developments – the schools, shops, boreholes, etc. These services have been expanded since independence and have been augmented by the new ones such as post offices and clinics. The provision of these services were major factors in the stabilization of the villages, which consequently led to the increase in the distance to the lands (see Chapter Five). The smaller villages are now acting as centres for the surrounding lands and cattle post areas.

We can conclude this section by noting that in the east everybody belonged to a village. Living in the village was enforced whether one lived in Molepolole or Thamaga or Kopong.

**Conclusions**

It is clear from the above discussion that the Kweneng District is very much representative of Botswana, particularly southern Botswana: there are similarities in the physical environment, population, economy, etc. As in other areas of southern Botswana, we can divide the district into two distinct regions – the east and the west.

The east is part of the eastern belt that straddles the line of rail. It is characterized by nucleated settlements, dependence on subsistence crop agriculture by a large majority of the population, and nearly adequate
coverage of social services in the villages. The culture of the people in the east is village-centred. There is evidence that living in the village used to be enforced. This is discussed fully in Chapter Four.

In the course of the 20th century these villages have become stabilized. As a result of stabilization and population growth, together with other factors analysed in Chapter Five, the lands have increasingly become divorced from these villages. The implications of these developments for farming have been great as shown in later chapters. This study is the story of why some people are now abandoning their homes in the village to settle permanently near their lands. Such a development is not unique to Botswana: in Chapter Three we review studies of settlement changes in other parts of Africa to see what light they throw on the Botswana situation.
CHAPTER THREE

The Study of Settlements and Settlement Changes

Before examining settlements and their changes in Botswana, it is useful to start by looking at the related literature on other parts of Africa. The main purpose is to find out how much is known and what light this knowledge can throw on the problem being investigated. In the process, it will be possible to appreciate what gaps exist and therefore the contribution that this study makes.

It is perhaps useful to start with definitions. The term "settlement" in geography has a very wide connotation; it includes the study of buildings (house types) and building materials, farmsteads, fences and fields, towns, villages (site, form and function etc), relationships of individual units being studied, i.e. patterns - which can be nucleated (closely knit together) or dispersed (widely separated) etc (Baker, 1969; Hudson, 1976). There is of course no agreement on the definition of settlement geography (Stone, 1965; Jordan, 1966; McMaster, 1968). However, for all their differences, all settlement geographers have one thing in common: they are all interested in the physical aspects of settlements. This has shown itself clearly in their study of settlements in Africa.

This study is about the villages of Botswana and the changes taking place in them. The use of the term "village" in the African context is not universally accepted. McMaster (1968) considers it inappropriate because of its English connotation - the village church, etc. Silberfein (1973) on the other hand uses the term "village" as well as "hamlet" in describing African settlements. However, it is not necessary to be delayed by this controversy. Suffice it to note that the words "village" and "hamlet" are used very loosely in Africa. At one extreme, "village" is used to refer to a large collection of households which are located very closely together, as in southern Botswana. At the other extreme, it is used to describe a collection of homesteads which are scattered over a wide area as in Zimbabwe and parts of north-east Botswana.
This suggests that villages can either be nucleated, i.e. where individual households are located very closely together, or dispersed. There are changes in patterns when (a) migrations from nucleated villages result in dispersed settlements; (b) previously dispersed homesteads come together (or are forced) to form nucleated settlements; and (c) movements in either direction result in the modification of the previous pattern.

A review of the literature suggests that we can divide studies of settlement changes into three broad categories viz: studies of resettlements, studies of induced nucleations and studies of spontaneous settlement change. This book is concerned mainly with the last category which will be discussed in detail below.

Various types of resettlement studies have been reviewed by Chambers (1969). Other resettlement studies include Baldwin (1957) – a study of the Niger Project, the two main objects of which were (a) the production of oilseeds for export and of subsistence crops for local consumption, and (b) the resettlement of peasant farmers from the more populous areas to the hitherto empty land in Northern Nigeria; the Chambers (1970) and Colson (1971) studies of the resettlement of people whose lands were later flooded by the waters of the Volta and Kariba Dams respectively; and Roide (1971) – a study of an agricultural resettlement scheme, the main aim of which was to demonstrate that rural life could be as profitable and attractive as urban life.

Studies of induced nucleation (e.g. Hunter, 1967; Udo, 1965; Huizer, 1971; and Silitsheha, forthcoming) all tell stories of governments attempting to put people in nucleated villages, where social services can be provided more cheaply. In Tanzania, the Ujamaa Village programme is linked with a desire to create a new society based on the tenets of African traditional communalism (Huizer, 1971).

**Studies of Spontaneous Settlement Change**

The changes which are spontaneous are the ones which result from the free movement of individuals or of defined groups. One may argue that when social groups leave a settlement as a result of social pressures there
is no spontaneity in such a movement. Spontaneous here is used to define movements where people take individual decisions whether or not to move.

First, it should be made clear to the reader that the study of settlement change cannot be easily isolated from a general study of settlements. The ways in which individual scholars view settlements have implications for the explanations they offer for settlement changes. This brings us to the second point: that studies of settlements and settlement changes reflect a diversity of practitioners. The two poles are represented by social anthropologists (interested in villages as units of social and political organization) and by human geographers (interested mainly in the physical aspects of settlements). Moreover among geographers there is a diversity of topics studied. This last observation relates to the lack of theoretical works among the studies of settlement change.

An extreme example of work in the anthropological field is that of Bohannan (1954). His study examines settlement changes resulting from movements of social groups (lineages) and individuals. The main reason for the movement of lineages is to ensure that they maintain the same amount of territory at any one time vis à vis other lineages. The movement of individuals or of individual households (the "disjunction type") is explained this way: "Adult Tiv leave their agnatic segments for a shorter or longer period of time whenever their rights and duties, their network of personal relations, become so tangled that to stay on would do violence to one or more relationships and to their own rights" (Bohannan, 1954: 11). There is no mention of the Tiv economy and settlement changes are explained only in social terms.

In similar vein is a monograph, The Yao Village, by Mitchell. He defines a village as a "spatial group which recognizes its identity against similar group" (Mitchell, 1956: 46). Such a definition has implications for village boundaries: "The boundaries of a village may not always be clear. Clusters of huts which are part of one village may be physically nearer another, but in the minds of the Yao, who see not only huts but also the social relationships of people occupying them, there is no confusion at all." (op. cit: 111). And since the village is a social unit, it ceases to exist
once the headman has lost control of the group. "Some time after a village has broken up and the name has not been heard of for some years, some survivor revives it and resuscitates the village" (op. cit: 122 footnote 1).

Although the Yao village is a social unit built around the headman, it is characterized by social divisions, the lineages, and in this case, the matrilineages. The small social units are sorority groups. Village formation results from segmentation of these matrilineages or sorority groups, i.e. when a part of a social group breaks away to found its own village (op. cit: 131-32). Segments break away because of accusations of sorcery. "The Yao believe that death 'breaks the village' and that conflicts through sorcery lead to death. Therefore, conflicts are the real cause of village splits." (op. cit: 125). Fear of sorcery can also have the opposite effect (op. cit: 126).

Mitchell, in this thorough study of the social and political organization of the Yao, only mentions the economy of the village as a background. As a result he does not recognize economic groups and thus economic changes are not seen as factors in settlement change. Cunnison (1959), on the other hand, admits the importance of economic factors (the commercialization of the fish industry, the development of agriculture and communications) in settlement change from nucleated to linear and dispersed (Cunnison, 1959: 6-25); and yet he gives an overwhelming weight to social factors. His people prefer a village which is "healthy, harmonious, free from sorcery and premature death, and where they prosper" (op. cit: 136). Their prosperity depends largely upon the absence of sorcery. So a chief who cannot prevent sorcery from menacing his people faces the danger of losing his village.

The anthropologists' preoccupation with single explanations has been matched by a similar preoccupation by geographers. Morgan's study of 'grassland towns' is a case in point (Morgan, 1957). Morgan's concern for physical characteristic can be seen right at the beginning, i.e. in his definition of the grassland towns. He defines them in terms of nucleations and population (op. cit: 214). The changes in patterns from dispersed to nucleated and vice versa are explained in terms of population density.
Other geographical studies, especially studies of the disintegration of nucleated settlements, have tended to place emphasis for change on the political explanation. Pre-colonial nucleated settlements have been attributed to defence considerations (Udo, 1965; Gleave, 1966; Siddle, 1968; and Spittler, 1977). The imposition of colonial rule, however, led to the cessation of inter-tribal warfare that had necessitated living in nucleated settlements. However, such an explanation is not complete for as McMaster (1975) has remarked: "Explanations of nucleation or dispersal of rural settlement purely in terms of the need for protection or its removal should convince no-one" (McMaster, 1975: 326).

The dispersal of nucleated villages has also been explained in economic terms (Udo, 1965; Siddle, 1968). According to Siddle the introduction of cash cropping was a factor in the decision of people to migrate from the "war towns", while Udo's people wanted to settle near their fields. The problem here is that we are not told, other than that the fields were distant, why it became economically difficult to operate agriculture from the village. What distances are considered long? Morgan (1957), for example, mentions distances of ten miles being travelled between the village and the fields every day. One question that these studies do not answer is how the settlement relates to the agriculture that sustains it.

There is a clear need, therefore, for bridging the gap between studies that attribute settlement changes to economic factors and the locational studies that examine the relationship between settlement and agricultural land use. The latter studies, which are reviewed in Chapter 5, explain the land use patterns around villages in terms of the costs (financial, time and human energy) involved in overcoming the distances between the settlements and the fields. The locational studies describe the static patterns and have not been used to explain dynamic situations. The marrying of these two is one of the contributions of this study.

Finally, a few geographers (notably Udo, 1965; Gleave, 1966; and Siddle, 1968) have included social factors among their explanations of settlement changes. However, these explanations are subsidiary to the main political and, secondly, economic explanations. This is to be expected because if they follow the social explanations in detail, they will infringe on the
territory of the social anthropologists.

A point that has to be emphasized, and this is in line with the approach of this study, is that people are whole - they are not only social beings or economic men. The problem with the anthropological school is that it has tended to neglect the economic aspects of village life in trying to explain settlement changes. On the other hand, the geographical school has tended to neglect (or treat as being relatively unimportant) the social aspects of villages. A fuller explanation of settlement changes must take account of the contribution of these two broad schools. This study attempts to illustrate the usefulness of such an approach.

One possible explanation of the settlement change that is severely neglected by the literature is the general influence of government policies. The only aspect of Government intervention that is considered is a direct one as when governments are involved in villagization programmes mentioned above.

There is no doubt that people react to general government policies. Gleave (1966) has reported a negative reaction on the part of people in Northern Nigeria to the government policies of grouping services so as to combat dispersal:

"The majority preferred the higher returns for the low input involved in bush fallowing to the higher inputs and lower returns associated with intensive farming. They preferred the inconvenience of fetching water and travelling for other services to being superintended and controlled by the extension personnel of the Agricultural Department. They settled around rather than in the settlement schemes."

(op. cit: 47-8)

On the other hand Cunnison has reported a positive reaction to the development of communications - particularly of main roads - in the northern part of Zambia. To be near the main road "is to be at hand for markets and beside the swirl of economic activities. It is to be modern and progressive, in touch with development of the Copperbelt, for regular bus services from there ply up and down the main road" (Cunnison, 1959: 25). This reaction was responsible for the emerging linear patterns of settlement.
Looking at the literature, it is, therefore, interesting to note that studies have neglected this area of investigation. Such an omission is curious since it is known that with the onset of colonial rule African societies have been subject to various government policies. Government policies to change the rural economy have increased since independence. Our understanding of settlements, in those countries where governments have promulgated policies of rural development, cannot be complete if we neglect the influence of government policies. This study represents an attempt in this direction.

Studies of settlement change have tended to limit themselves mainly to the discussion of the causes of dispersion (e.g. Udo, 1965; Siddle, 1968). The result is seen as the changes in settlement patterns. If we assume that, given the rules that operate at any given time, settlement represents a balance between economic, political and social forces, then it follows that any change should have a chain reaction. Studies of settlement change have not analysed the economic, political and social implications of such change. Only Pauw (Pauw, 1960) has attempted an analysis of the political consequences of the disintegration of nucleated settlements for the Tswana chiefdoms of South Africa. As with other gaps observed in the literature, this study has attempted to examine this problem.

Finally, the study of settlements in Africa is bedevilled by the lack of theoretical works. This reflects the paucity of existing studies, which is exacerbated by the fragmentation of the literature. The units (the African societies themselves) are so many and variations between them so great, that McMaster (1975) has cautioned against hasty generalizations. The only exception is the work of Silberfein. Silberfein (1973) has attempted to find regularities in pre- and post-colonial settlements and settlement changes. Settlements in pre-colonial Africa, she asserts, rotated through a sequence of two stages of homestead - hamlet (or village) - homestead cycle. The cycle started with a nuclear family occupying a homestead; then when children got married and built their own homesteads, the settlement grew to a hamlet. The growth of a settlement was marked by the intensification of agriculture - and a productivity gradient developed. Hamlets broke up with the death of the family patriarch.
Such a model does not seem to be supported by the existing literature. The literature suggests that nucleation was the general norm and that agriculture was not intensive, with the exception of societies in the hills and the Wakara on Ukara Island (Lake Victoria).

Just as muddled is her colonial and post-colonial model of village-homestead-village. Silberfein has made generalization from insufficient information, in some instances on the basis of one study. Secondly, examples (and worse still quotations!) are taken out of their context. Thirdly, she has not succeeded in formulating a clear and consistent argument. Her argument has been obscured by lumping together and treating as homogeneous, different types of settlement changes - spontaneous, induced and resettlements. Regrettably, Silberfein has not succeeded in providing a theoretical framework for the study of settlement changes in Africa.

Conclusions

The review of the literature leads us to conclude that:

a) the study of settlements as well as settlement changes suffers from the fragmentation of the literature. There is a substantial amount of work that has been done by social anthropologists, whose main interest has been the social and political organization of African societies. There is a small, but growing literature, contributed by geographers who have been preoccupied with the physical and economic aspects of settlements. This study attempts to show the need for bridging the gap between these two schools in order that a fuller understanding of settlements and the forces that bring about changes in them can be achieved.

b) the geographical studies are themselves atomized. Individual studies have tended to focus on one aspect of settlements to the neglect of others - thus leading to a partial understanding of settlements and their dynamics. This study suggests the need for bridging the gaps between the various strands of the geography literature.
c) there is a dearth of studies that analyse the possible impact of general government policies on settlement changes.

d) studies have generally concerned themselves with the description of the causes of settlement changes and there has been no attempt at analysing the economic, political and social implications of these changes.
This part of the study is devoted to the explanation of permanent migration to the lands. Chapter Four sets the scene by attempting to explain the existence of nucleated settlements in Botswana until 1966. The data collected in the course of research is analysed and presented in Chapter Five and in subsequent chapters. Chapter Six examines the government policies which are either encouraging or have a potential for encouraging settlement at the lands.
CHAPTER FOUR

Chiefly Authority and the Organization of Space in Botswana:

Towards an Explanation of Nucleated Settlements among the Tswana

Before we can proceed to analyse the reasons why people are migrating to the lands, it is essential to understand the institutional framework in which this migration is taking place. A major factor in the concentration of people in villages, and one which few scholars have appreciated, has been the role played by the chief in controlling the various kinds of movements of his people. Scholars have tended to attribute nucleated settlements to ecological factors and defence considerations. While these explanations are no doubt important, they are nonetheless inadequate.

In Botswana the imposition of colonial rule did not result in the dismantling of the traditional political system. It modified it somewhat, but in many ways, it reinforced it. This had a tremendous effect on the chiefly control of people's movements. The traditional system of tribal politics based on villages (agro-towns), that progressively disappeared in most parts of South Africa, was preserved almost intact right up to independence in 1966.

The argument presented here is that for as long as the chiefs held sway, buttressed by the colonial regime, dispersion of population to lands and cattle-post areas was impossible or only a very remote possibility. The reduction or removal by the post-colonial government of the powers of the chiefs to control the movements of their people has created a framework within which permanent migrations to areas of agricultural activity are possible. The new institutions, notably the District Councils and Land Boards, which have inherited the chiefs' powers and functions, are more democratic and sensitive to the wishes of the people. The District Councillors have to face election every five years and cannot therefore afford to be as autocratic as the chiefs were before them.

The curbing of the powers of the chiefs by the independent government was not a sufficient cause of permanent migrations to the lands as such.
Rather, as already pointed out it created a situation in which people could behave in a way they felt was rational. The most important reason for settling at the lands was in order to be near the lands and livestock. However, the desire to be near the fields must always have been there but for as long as the Chiefs disallowed the practice of living at the lands, it was not possible. In the course of oral interviews, especially with the older generations, it became very clear that permanent migrations to the lands on a large scale were not possible until after independence.

It may also be argued that ten years is not a sufficiently long time for people to perceive the political changes that have taken place, especially since chieftaincy has not been abolished. Indeed, the chiefs acted initially as District Council Chairmen and are still ex-officio members of the Land Boards. However, the few studies that have been undertaken in this and related areas indicate that Batswana are conscious of recent political changes (Parson, 1975; Kooijman, 1978: 42-43). Kuper (1970) has shown how the "new men" even before independence were already starting to assert themselves over the traditional leaders. Since independence the "new men" have publicised the new institutions that have been created and have used their influence in them to curry favour. The former Kweneng Council Secretary blamed the growth of small and uneconomic schools at the lands on the Councillors who encouraged their constituents to start these schools on the understanding that the District Council would later take them over. Another way of measuring political knowledge has been to ask people to whom they go for the allocation of land. The author has not come across anyone who does not know that he should go to the Land Board.

It is true, however, that some people started settling permanently at the lands long before independence. The 1964 census report was the first official publication to mention this development. Thus for all its seeming stringency, the chiefly regime was not able to top everybody from settling at the lands. However, there are differences between "lands settlers" then and now. In the first place they were very few. Secondly they did not consider themselves as having abandoned their homes in the village. They knew that they were breaking the law and were keenly aware of the consequences of their actions, so they maintained as close links with
the village as possible. They maintained their huts in the village and the
men attended the kgotla meetings as regularly as they could. In these and
many other ways, they remained an integral part of the village population.
The need to maintain contacts with their "former" village was partly forced
on them by the absence of social services, especially schools, at the
lands. (Chapter Six).

Since independence living at the lands permanently has not been considered
criminal and those who live there no longer conceal the fact. While some
still maintain their huts in the town for use when they visit the hospital
or for use by their children going to secondary school, etc, many have
abandoned their huts and allowed them to crumble.

During the surveys that were carried out in 1975, an attempt was made to
find out when households, especially the head, settled permanently at the
lands. Of the 272 households which gave the dates of their settlement at
the lands, 172 or 60% had moved since 1966 (see Table 4.1 and Fig 4.1 on
the next page). It is tempting to conclude that the vast majority of the
households now settled at the lands have done so since 1966, and therefore
to see the curbing of the excessive powers of the chiefs as a major factor
in this development.

**TABLE 4.1** Dates of Permanent Settlement at the Lands by Head of Household

<table>
<thead>
<tr>
<th>Dates</th>
<th>No.</th>
<th>Per cent</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950 and before</td>
<td>17</td>
<td>6.01</td>
<td></td>
</tr>
<tr>
<td>1951 - 1955</td>
<td>12</td>
<td>4.24</td>
<td>10.25</td>
</tr>
<tr>
<td>1956 - 1960</td>
<td>34</td>
<td>12.01</td>
<td>22.26</td>
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<tr>
<td>1961 - 1965</td>
<td>37</td>
<td>13.07</td>
<td>35.33</td>
</tr>
<tr>
<td>1966 - 1970</td>
<td>88</td>
<td>31.10</td>
<td>66.43</td>
</tr>
<tr>
<td>1971 - 1975</td>
<td>84</td>
<td>29.68</td>
<td>96.11</td>
</tr>
<tr>
<td>not stated</td>
<td>11</td>
<td>3.89</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>283</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author's Fieldwork
Fig. 4.1

Dates of permanent settlement at the lands for head of household

<table>
<thead>
<tr>
<th>Dates</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950 and before</td>
<td>17</td>
<td>6.01%</td>
</tr>
<tr>
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<td>88</td>
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<tr>
<td>1971 - 1975</td>
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<td>29.68%</td>
</tr>
<tr>
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<td>11</td>
<td>3.89%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>283</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Source: Based on Table 4.1
The Ecological Explanations of Nucleated Villages

The ecological explanation of Tswana settlements takes two forms: the first is a very simplistic and severely deterministic one that explains these settlements in terms of the location of water resources (Kooijman, 1978: 63). According to this explanation, which confuses location with nucleation, the dispersion of settlements is counteracted by the limited nature of water resources. This simple ecological explanation has been convincingly criticised by Monica Wilson:

"It has been suggested that concentration was due to shortage of permanent water, but settlements moved, showing that there was more than one spring in their territory, and each cattle post had some water supply. In fact concentration results in long queues of women waiting for water at the wells, a problem which might be obviated if settlements split up. Moreover, the largest of the ancient settlements recorded, Kaditshwene, was in well-watered country."

(Wilson, 1969: 154)

A more elegant ecological model is the one presented by Sansom in an article that contrasts the dispersed settlements among the Nguni in the East (Type A) and the nucleated settlements among the Sotho-Tswana speaking peoples in the West (Type B). The dispersed Nguni settlements, which are characterized by the concentration of all land uses in one place, he ascribes to the terrain that is composed of "small-scale repetitive configurations that contained a variety of natural resources", (Sansom, 1974: 140). Thus with a more abundant rainfall and relatively evenly distributed good soils, it was possible to practise both arable and pastoral agriculture within a locale.

In contrast among the Sotho, and the Tswana in particular, the relatively uniform ecological environment militates against the concentration of the four land uses (residence, agriculture, pastoration and hunting) in one place. The terrain here is such that:

"a variety of resources is less frequently contained in small convolutions of Zulu hill country. On the inland plateaux one is often confronted with large expanses of relatively uniform country. To move from one type of plant to another, or to find different soil types, one must travel over larger distances. There is a general
problem of finding a constant water supply and water resources are often far apart. Because people need to exploit variations of terrain, they must range over an extensive area. To accommodate a ranging and open strategy, the tribal territory replaces the district in supplying the self-contained area in which the variety of its inhabitants' requirements will be satisfied."

(Sansom, 1974: 142-3)

Therefore if the tribal territory is to be exploited efficiently there must be areas set aside for each of the land uses, with the chief applying some regulatory mechanisms. The resultant economy is one that "turned men outward". According to Sansom, each man surveyed the tribal territory from the town, seeing in it a wide gambit for personal opportunity" (Sansom, 1974: 145).

Fascinating as the Sansom explanation may look, it is too sweeping and simplistic to be adequate. It certainly rules out the current developments where people living at the lands are practising pastoral agriculture alongside farming. Nor would it explain the Barolong case, where, as Comaroff (1977: 1-5) has shown, for peculiar historical reasons, the Barolong have lived in dispersed settlements for nearly a century. Living in the heart of typically Tswana country, they have resisted all attempts at villagization, preferring a dispersed settlement pattern. Thus they have maintained an almost typically Nguni settlement pattern. According to the Sansom model, productivity among the Barolong should have long shown a progressive decline, but on the contrary the Barolong farmers have prospered to such an extent that this area is regarded as the granary of Botswana. Comaroff has shown that the farmers' settlement close to their fields has been a significant factor in increased productivity in this area.

The Defence Explanation

According to Monica Wilson, a more plausible, but equally inadequate, explanation for nucleated settlements among the Tswana is that defence required concentration. Many authorities on the Tswana have commented on the fact that many settlements were on hill-tops, which offered protection against enemy raiders (e.g. Schapera, 1953: 36). Secondly, in case of attach it was relatively easier to organise people, for both defence and
shelter, in a grouped than in a dispersed settlement. A missionary working among the Ngwato at Shoshong has recounted how the chief and his sons galvanised their populations in the face of one Ndebele attack.

The defence explanation, however, suffers from serious shortcomings. For example, the cattle, which were the most valuable property of the Tswana, were not kept in the towns but at the vulnerable distant cattle posts. If defence was the main consideration, logic would have dictated that they be kept at or near the settlements. In the olden days, looting livestock was one of the aims of wars, as was amply demonstrated during the long and intermittent wars between the Bakwena and Bakgatla. Writing from Molepolole at the time of the war, the missionary wife, Mrs Price, described how the Bakgatla carried away large herds of Bakwena cattle (Long, 1956).

While defence against the Ndebele raids may have been an important factor in the growth of Tswana villages in the nineteenth century, it cannot be argued convincingly that the defence factor remained operative until 1966. Indeed, if defence was the main factor behind nucleation, the settlements would have disintegrated after the imposition of Pax Britannica. The fact that they survived when defence was no longer a necessary factor suggests that there must have been other factors affecting their existence.

Thus the ecological and defence arguments do not adequately explain the existence of nucleated settlements among the Tswana. A more adequate explanation must be sought in the social organization of the Tswana – in particular the role played by the chief in the spatial organization of the people.

Chieftainship and Tribal Government among the Tswana

Although this is not an essay on Tswana political institutions and how they have been modified or adapted to changing conditions, it is important
to start by outlining the place of the Tswana chief in the social structure.  

In a traditional Tswana society, the chief occupies a central position; he is the foundation and the pillar of the tribe. In Chief Khama III's own words:

"The position of Chief is that of father over the tribe, who is expected to have enough of this world's goods to supply the needs of his children, as it is his duty to support the tribe as a whole or individuals in times of exigencies or distress occasioned by famine or otherwise."

(Quoted in Parsons, 1972: 4)

Monica Wilson (1971) considered the wealth and generosity of the chief to be among the main factors causing concentration of population. Thus where the chief, among other things, was poor and stingy, the population tended to scatter (Wilson, 1971: 71). However, as Kooijman has noted, the chief did not create any wealth, his wealth depended on the tribute from his people (Kooijman, 1978: 63).

As father over the tribe the chief played many roles:

"He is the head of the government and the official representative and spokesman of his people; he laid down and administered the law, adjudicating over all serious crimes and civil disputes and hearing appeals from the verdicts of the lesser courts; he regulated the distributions of land and controlled many other economic activities ..."

(Schapera, 1943: 27)

In exchange for these duties and functions, the chief enjoyed a number

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For changes that have taken place in the chiefly institutions and how it has been incorporated into modern institutions see A. Kuper & S. Gillett, "Aspects of Administration in Western Botswana" African Studies vol. 29, No. 3, 1970; Vengroff, Local-Central Linkages and Political Development in Botswana (unpublished, PhD Thesis, University of Syracuse, 1972); Lord Halley, Native Administration in the British African Territories Part V (London, HMSO 1953).
of privileges; he was always treated with tremendous respect to the extent that an offence against him was punished more severely than a similar offence against an ordinary person, and disloyalty or revolt against him was a capital crime; his marriage and installation were occasions of great festivity while his death was universally mourned; he received tribute in labour and kind from his people; he and members of his family were leaders of age-regiments, and took precedence in matters of ritual; nothing of any importance could be done without his knowledge or authority.

In performing his everyday duties, the chief relied (and was expected to rely) for advice upon trusted relatives and other influential men, whom he consulted privately and informally whenever he wished. In addition, any member of the tribe could approach him in the kgotla, where he spent most of his time.

Every person belonged to a ward, which was also the main administrative and social unit. Each ward was under the authority of an hereditary headman, who was (almost) to the ward what the chief was to the tribe. The headman as the chief's representative had to see that his people carried out the commands of the chief.

The chiefs also ensured that their authority was equally felt in outlying villages, including those occupied by immigrant or subject tribes. These villages were governed either through an appointed headman or through their own chiefs. In addition, among the largest tribes, e.g. the Ngwato and Kwena, there were chief's representatives, usually headmen based in the capital, who were in charge of the outlying villages. Such a headman visited his charges periodically to keep in touch with them and their affairs, collect tribute from them for the chief, and try cases brought to him by the lesser rulers. When this system proved inadequate for controlling the outlying populations, the chiefs instituted a more direct system, appointing their personal representatives who lived in the districts permanently. The main duties of these district governors included communicating the chief's orders and messages to the inhabitants and undertaking other routine administrative tasks.
The apparently wide powers of the chief and of his headmen or representatives were, however, circumscribed. Among the Tswana, as indeed among most of the Sotho-speaking peoples, "Kgosi ke kgosi kabatho" - A chief is a chief by the grace of his tribe". Thus the chief was not above the law. If the chief abused his authority, or was inefficient, corrupt or autocratic, his advisers would warn him. If he persisted then they would attack him publicly. Especially at the tribal assemblies (dipitso) he faced the danger of being attacked even by ordinary people.

One important check against chiefly despotism was the ever-present possibility of a coup by other contending members of the royal family group (the chief's brothers, uncles and cousins). Competition for office from within the royal family was a permanent feature of tribal politics among the Tswana (Comaroff, 1974). Thus succession disputes were common; in almost every case they were between members of the chief's family. An unpopular ruler risked being deposed or even being assassinated, as happened with the Kweny Chief Motswasele II. Sometimes the incumbent was able to stand his ground and suppress his opponents, who were forced to flee with their supporters.

Chiefs always tried to defuse any possible opposition by entering into some sort of relationship with their potential rivals. The most common relationship was through marriage and since most of the potential rivals were the patrilineal kinsmen of the chief, the Tswana royals often showed a preference for marrying paternal cousins. Another form of relationship was patronage in the form of cattle, the kgamelo cattle for example.

Thus in their traditional setting, the chiefs were generally responsive to the wishes of their people. They tried to rule by consensus and carry their people with them in whatever they did.

The Chiefs and the Colonial Regime

The system of tribal government sketched above survived almost intact through the colonial period. While the imposition of colonial rule in most of Southern
Africa led to the destruction of tribal politics, in Botswana it had the opposite effect. The chiefs were incorporated into the colonial administration of Indirect Rule. The colonial administration was reluctant to spend much money administering a possession that was regarded as "a desert without water or coal". Bechuanaland was valued only as a passage to higher priced British possessions in the interior. And so it was recognised very early that:

"the tribal system may not be an ideal means of control in itself, but I take it that so long as the Government had no sufficient Police, Magistrates, etc, to take over the individual supervision of natives, it is not expendable or desirable to (do) otherwise than support the Chief, and maintain his rule."

(As quoted in Parsons, 1972: 22)

In any case the Tswana had not been conquered in battle; they had "voluntarily surrendered themselves into our hands" and so there was no need to humiliate their chiefs to the same extent as had been done among the Zulu (TruscHEL, 1974: 73).

The Order in Council of 9 May 1891, which created the Bechuanaland Protectorate Administration, was framed in such a way as to give the chiefs as much autonomy as possible. It gave to the High Commissioner authority to legislate by Proclamation, subject to the condition that these Proclamations must:

"respect any Native Laws or customs by which the civil relations of any Native Chiefs, tribes or populations under Her Majesty's power and jurisdiction are now regulated, except so far as the same may be incompatible with the due exercise of Her Majesty's power and jurisdiction."

(Quoted from Lord Hailey, 1953: 202)

The chiefs became salaried agents of colonial administration, an involvement which transformed them from being "kgotla" chiefs to "office" chiefs. They were responsible to the Administration for the maintenance of law and order, and the collection of hut and other taxes and levies. Alongside the District Commissioners, they were responsible for the social and economic development of their people. The workings of this system of government,
running down through the chief to the ward headmen and the chief's representa-
tives, have been described in detail for the Kweneng by Lord Hailey
(1953: 250-54). The system of Indirect Rule operated everywhere except
where there were no strong chiefs as in the Ghanzi and Kgalagadi Districts;
in these areas colonial rule was relatively more direct (Kuper and Gillett,
1970: 175).

The relationship between the colonial regime and the chiefs was a symbiotic
one. At the height of the scramble in Southern Africa, the chiefs needed
British protection to preserve their power and territories as much against
their traditional (African) external enemies as against their new ones —
the Boers, the Germans and the British South Africa Company. The chiefs
also exploited British protection in order to crush their internal enemies.
Truschel has described how Khama III used the colonial administration to
bring his rebel son, Sekgoma, to his knees. Chirenje (1971) has shown how
Chief Sekgoma II of the Tswana, like Khama III, exploited the British in
order to out-maneouvre his rivals, particularly Mathiba, for the chiefship.
But his relationship with the British later deteriorated and the British
switched their support to Mathiba, whom they later installed, while they
detained Sekgoma in the Gaberones prison.

Colonial support thus in time tended to become the main source of chiefly
legitimacy: the chiefs could get away with anything as long as it could be
justified as being in the interests of administration (Schapera, 1943: 109).
The major impact of colonial rule on the institution of chiefship was to
make the chief's less accountable to their people than was the case before.
Thus, Schapera, among others, has noted that:

"The imposition of European rule deprived the people of the principal
remedies they formerly possessed against oppression and abuse. The
Administration has intervened more and more in local disputes, and
tried to adjust peaceably troubles which would formerly have culminated
in bloodshed. But since official policy was to rule as much as possible
through the Chief, the Administration tended in most cases to uphold
his authority, without inquiring too closely into the merits of the
trouble. Freed in consequence from fear of the sanction formerly
restraining him, he became more arbitrary in action and jealous of
any challenge."

(Schapera, 1940: 80-81)
A number of examples can be given to substantiate the above, but the following should suffice. Chief Kgari Sechele (Kwena Chief, 1931-1942) had a dispute with the Gabane people over the appointment of a headman. The matter finally reached the Administration and the Assistant Resident Magistrate went with the Chief to hear the complaint of the people. In the heated debate that ensued, the people protested against the Chief's decision to appoint a man that to them was not a rightful heir. But the Chief refused to be swayed:

"He told them he would not alter his decision, that this country belonged to him and that if he has any more nonsense he would deal with them in a way that they would not like ..........

Later the Gabane people had to clear the aerodrome at Molepolole as punishment for daring to challenge the Chief's decision and for bringing the matter to the knowledge of the Administration.

Whenever possible or necessary, the Resident Commissioner himself attended the kgotla meetings to rally support for the chiefs and to intimidate any dissenters. In 1933 he came in person to support Chief Bathoen of the Bangwaketse against one of his headmen and another private citizen who had been sentenced to banishment in a remote part of the Reserve. He supported the Chief's decision and warned the people sternly against insubordination to the Chief. When he returned to Mafeking he wrote:

"It was obvious to me that unless the authority of the Chief and the Administration was to be hopelessly compromised, immediate and drastic action was necessary."

This system made it possible for some incapable and unpopular men to stay on as chiefs. An example was Chief Sebele II of the Bakwena (Chief, 1918-31), a very irresponsible and temperamental man. His 13 years of ignominious rule were characterized by, among other things, embezzlement of tribal funds,

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5 B.N.A. S. 159/4.
failure to consult with his councillors, and harassment of his subjects. In spite of persistent complaints against him by his people, the Protectorate Administration did nothing until 1931, when they exiled him to Ghanzi (Vengroff, 1975: 45-6).

By 1930 the Administration had come to realise that their policies were creating monsters out of chiefs. According to Schapera, instances of drunkenness and irresponsibility, neglect of duty, misappropriation of hut tax and other tribal funds by chiefs had multiplied. Given this situation and partly as a result of the Pim Economic Commission, the Administration tried to reform and modernize the tribal administration.

The main instrument of modernization was the Native Administration Proclamation (No. 74 of 1934). The Proclamation specified the rights, powers and duties of the chief and his subordinates. It spelt out for the first time that succession to and tenure of the chieftainship was subject to the approval of the Administration, which reserved the power to pass over an unsuitable heir or suspend an incompetent or otherwise unsatisfactory chief. It also provided machinery whereby the tribe could depose a chief, but it also made conspiracy against the chief a statutory offence. Finally, it also established a formal Tribal Council to assist the chief in executing his duties.

These reforms were challenged vehemently by the chiefs, notably Chiefs Tshekeddi and Bathoen of the Bamangwato and Bangwaketse respectively, the two leading chiefs, who took the Administration to court on the grounds that the High Commissioner was incompetent to issue the Proclamation in view of the terms of Section 4 of the Order in Council of the 9th May 1931, and that the Proclamation was ultra vires. Although the Chiefs lost their case, they continued to resist the reforms which they considered a serious incursion into tribal custom and usage. The Administration compromised and instead implemented less drastic reforms in 1943. These reforms maintained the status quo.

The next attempt at reforming and democratizing the institution of chiefship, but which did not materially affect the authority of the chief as "Sole Native Authority", came in the form of the African Administration Proclamation
of 1956. The Proclamation sought to institute tribal councils to serve as advisory bodies for chiefs and to establish broadly representative district councils, chaired by headmen, outside the tribal capitals (Vosloo et al, 1974: 137-38). But as Gillett has noted, these reforms were never really fully implemented because they were soon overtaken by political and constitutional developments that culminated in independence in 1966. Thus "... the whole 80 years of British rule up to 1965 can therefore be regarded as a period of Chiefly autocracy intensified and corrupted by British overrule" (Gillett, 1975: 104).

Gillett has argued that it was the spectre of incorporation into the Union of South Africa, which the chiefs fought successfully, and the opposition to what white rule had wrought for the Africans in South Africa that made even the most enlightened of their subjects allow the chiefs to get away with so much. Kooijman, not a defender of chiefly autocracy and corruption, has, however, noted that most chiefs were motivated in their actions not so much by factors of personal power and gain, but by the interest and welfare of their people (Kooijman, 1978: 34-35).

**Chiefs and Spatial Organization**

The preservation and enhancement of the powers of the chiefs by the colonial government manifested themselves in the chiefs' control over their people's movements. Chiefly control of movements of people, and of spatial organization generally is, of course, embedded in Tswana culture. Thus there could never be substantial changes in the spatial organization of society as long as chiefs and their colonial underwriters held sway.

The main factor in the chief's control of spatial organization was his control of productive resources, notably of land. He did not own the land but held it in trust for the tribe. It was a unique position, in which he could act as referee in the "national" interest and in the process safeguard his own interests. As Wehrner has noted:

"The span of a tribal ruler's authority was relative. It increased the more he was able to provide and allocate the resources which his people needed to meet extreme hazards in production, in raising of their crops, and in the herding of their livestock ...... A paramount chief
has to control such productive resources as would allow him a major concentration of his subjects in a great village, and make him secure against its dispersal ......... There was a systematic relation between paramount rank, settlement in a concentrated, centrally sited village and a specialized mode of production in zones set aside for pasture and, separately, for cultivation."

(Werbner, 1971: 34)

Werbner has described in considerable detail how one of these chiefs tried to get for his people as much land as he could from the Tati Company, which had "acquired" his people's land, and how when this failed he migrated back to the Ngwato Reserve, where he and his people were able to practise their traditional economy.

From this standpoint, the chief controlled the movement not only of the whole tribe but also of the individuals composing it. The chief was responsible for the choice and change of village sites. Once he, in consultation with private advisers, had decided that a move should take place, he merely summoned his people and informed them of the impending move (Schapera, 1943: 66). It was the chief who created the wards and it was he alone who could reshuffle people to make wards. In Kanye in 1911, as a result of over-crowding on the Hill, the chief moved the Tsopye and other groups, who were occupying nearby low-lying land, further out and on the land they vacated, placed seven wards from the Hill (Schapera, 1943: 74).

The chief's control over his people, as already mentioned, penetrated to the individual. According to Tswana law (and the law is emphatic on this point), "no man may build a home wherever he pleases. All members of the same ward of family-group are expected to live together in one settlement" (Schapera, 1943: 59). No man could change his residence without the knowledge or consent of the chief. Schapera details numerous cases of people being refused permission to change wards because the chiefs did not recognise as valid their reasons for wanting to change their residences (Schapera, 1943: 98-9).

The chief could (and did) expel people from their homes, especially those who persistently disobeyed him or who had in other ways shown themselves to be his enemies. During colonial times such people were usually banished to remote parts of the Reserves, "to which they must confine themselves at his
pleasure" (Schapera, 1943: 104). If the offender lived in a village outside
the capital, he was moved to the capital, where he would be under the
direct control of the chief.

In practice every family was expected to have a main home in the village
and to live there during the dry season, renovating their huts and engaging
themselves in various tribal ceremonies and festivities. As soon as the
agricultural season started, they were expected to go to their lands, but
not before the chief had given the signal. The cycle of agricultural
activities was tightly controlled by the chief. No planting, weeding, reaping,
threshing or allowing the cattle into the fields to eat stubble, could be
done until his word had been given. This strict control was to ensure that
"operations would be performed at a time which the experienced elders of
the tribe knew to be most favourable" (Schapera, 1943: 185).

The seasonal movement of the population was enforced by the chiefs in the
course of the colonial period on the grounds that "it prevents people from
deserting the towns and villages during the months when they should be at
home" (Schapera, 1943: 185). As Chief Bathoen II put it:

"It is the desire of the Chief and tribe to have permanent villages
where people can make good homes and improve their individual dwellings
and the surroundings of the whole village. It is not permissible for
any man to let his home fall to pieces while he lives out at his lands
or cattle posts. Everybody is allowed and expected to go out to plough,
weed and reap his lands, just as he is expected to attend to his
cattle, but he should never neglect his home."

(Schapera, 1943: 270-71)

Permission to go to the lands, in general, was not given immediately after
the first rains. Sometimes there was a delay of several weeks or even
months! This prompted the D.C. at Molepolole in 1936 to complain:

"The pernicious custom of waiting for an order of the Chief before going
out to plough must be abolished ....... The early and copious rains
which fell in October prepared the ground for early ploughing, but
owing to delay on the part of the Chief, no ploughing took place in
October. In November, when the order was eventually given, rains failed,
and very little ploughing was done during November and December."

(Schapera, 1943: 186)
Whatever its disadvantages, the chiefs were not prepared to relax or abandon a system that made it easy for them to control their people. Anyone who stayed at his lands after the harvest was treated as a rebel and was dealt with in the severest manner possible. The usual punishment was to burn down the huts at the lands. "When such measures were adopted, men sent to carry out the Chief's orders sometimes showed little respect for the property or even persons of those whom they were evicting" (Schapera, 1943: 112).

As the chiefs saw it, administration, even under modern conditions, was easier with the tribal population concentrated in nucleated settlements. As Chief Bathoen summed it up:

"I have found the system of people living in big main villages advantageous in all respects, for the sake of administration and the people themselves. From my own experience, people who leave the main villages and live at their lands or cattle posts soon become lawless; they have not pride of home, and they lose interest in tribal and political matters ....... The Batswana have now definitely advanced, and they cannot be expected to break up their villages and live singly as families or in very small groups outside, beside their lands and cattle. I as Chief greatly discourage this idea among my people. It is easier for me to call them together to a big Kgotla meeting to discuss all tribal matters, and to convey to them Government regulations, laws and intentions, including anything of interest from the Medical, Veterinary, and Agricultural Departments. I would like to see Kanye grow in size and beauty .......

(Schapera, 1943: 271-72)

It is also interesting to note that during the colonial period the chiefs defended their policy of forcing people to live in large settlements on the grounds that the existence of such settlements facilitated the provision of social and other services. Chief Tshekedi argued:

"The primary object of establishing these villages is not to live round the tribal Chief, but we find that concentration of villages is a custom which has been in practice for ages by the Bechuana tribes. The custom has successfully and conveniently adapted itself to the progress of a tribe. There are obvious advantages to be gained by it. People living together form a better basis for the development of social life, and the provision of education and medical facilities is made easier. In this country of an area of 40,000 square miles (Ngwato Reserve) and a population of 75,000 people, we have one medical officer, and his task would be made the more difficult if the people were scattered all over the country. Likewise there are 29 schools in the Bamangwato country, and these have been established in 28 villages. Inadequate
but useful as this provision is, the task would have been rendered more difficult if it were not for the creation of villages. An absence of villages means also an absence of centres from which industrial and commercial developments can be organised. It appears that the path of economic progress would lie along the creation of villages and concentration of people within."

(Schapera, 1943: 270)

It follows from the argument that has been presented so far that the existence of nucleated settlements in Botswana owed much to the influence of the chiefs and the power which they exercised in ensuring their continued existence. Where and when the chiefs were weak or ineffective, people tended to disperse to settle near their fields or at their cattle posts. The best example of this is the Tawana case.

The Tawana are an offshoot of the Ngwato, having seceded from the latter around 1800 over a succession dispute. Their Chief, Tawana, settled in Ngamiland and set up a Tswana-type state there. A succession dispute between Sekgoma and Mathiba in which the Administration supported each at different times, has already been mentioned. Although he tried to assert himself, Mathiba was a weak Chief. In the course of his weak and ineffective rule people dispersed from Maun to settle at their cattle posts. Ashton has described graphically the consequences with regard to settlement patterns of the weakness of this Chief:

"During these long years of inefficiency and misrule, practically all development work came to a standstill and tribal life generally sank to a low ebb. In the political sphere this was felt most in the gradual dispersion of the leading tribesmen and in the neglect of certain customs. Instead of being kept at the tribal capital, Maun, the people, in order to get away from the tsetsefly and to enjoy the freedom of their cattle posts, gradually drifted out into the districts, where they began to lead a life of their own, indifferent of their tribal obligations."

(Ashton, 1937: 67-70)

In the process the population of Maun was reduced to a "paltry 600" compared to 950 in 1931 and "many of the Makgotla have dwindled to practically nothing ......." (op. cit. 75).
With the accession to the chieftainship in 1937 of Moremi III, this trend was reversed. He forced people to return to Maun and to rebuild their homes. He achieved some success in this policy because the population of Maun was estimated at over 1,000 in 1943 (Schapera, 1943: 106-7).

The fact that the power of a chief is crucial to the existence of nucleated settlements is also illustrated by the South African Tswana experience. Many accounts of travellers through the Tswana country in what is today the Northern Transvaal and the Northern Cape speak of large settlements on the scale of Botswana villages (Wilson, 1969: 153). But today "the majority of the population, however, lives in areas in which the homesteads are scattered according to no particular pattern" (Pauw, 1960: 52).

The Tswana chiefdoms in South Africa lost all their autonomy with the onset of colonial rule, which here was direct and harsher. It soon led to the destruction of the social structure which, as Pauw has shown, was very similar to the Botswana one that has been described above.

With the imposition of colonial rule in South Africa, the chiefdoms lost most of their land to the whites and this made their people less dependent upon their chiefs. The chiefs also lost their power and glory and were reduced to petty headmen as the District Commissioner took over most of the administration. Without any command over the utilization of resources and stripped of their political power, the chiefs lost control of the movements of their people. In due course people started to scatter and whole chiefdoms were reduced to minor "headmandoms" (see Chapter 9). Attempts to arrest the process were unsuccessful. One of the chiefs complained that "his people are not afraid to tell him that he is no longer able to do what he likes as the white people are now masters" (Dachs, 1975: 16). The result was that the nucleated settlements started to crumble as "the men have formed the habit of living at their farms, which needed attention; the large town being thus more or less deserted" (op. cit 14). There is now no trace of the large villages that the nineteenth century European travellers described so vividly.
The New Administrative Institutions

It has been asserted above that it was the curbing of the powers of the chiefs by the independent government of Botswana that provided a framework within which migration from the villages to the lands could take place. This last part of the chapter is devoted to a brief discussion of some of the measures that have left the chiefs almost powerless. Although chieftaincy is still a force and is widely respected (Gillett, 1975), its heyday is over.

The first major piece of legislation which subjected the chieftaincy to the government was the Chiefship Law of 1955, which empowered Her Majesty's Commissioner (after Independence, the President), on receiving complaints from tribesmen and after these had been considered by a judicial commission, to remove a chief and appoint a successor. Gillett has, however, noted that the involvement of a judicial commission meant that the government did not really exercise direct control over chiefs. More direct control was made possible by the Chieftainship (Amendment) Act of 1970. This permits the President to remove a chief on his own responsibility without waiting for complaints from his tribe and furthermore without reference to a judicial commission. An administrative enquiry is mandatory but its recommendations need not be followed. Thus although the chiefs in practice are still selected from among royals, their appointment and removal from office are just as much at the Government's discretion as the appointment and removal of ordinary civil servants.

Next the chiefs were to lose their legislative and administrative functions under the District Councils Law, which came into effect in 1966. Their power to regulate the social and economic life of the tribe, including the right to levy regimental labour was swept away by this piece of legislation. Each of the districts is now controlled by a District Council. Except for those who are nominated by the Government, most councillors are elected by popular vote. The elections, which take place at the same time as the general elections, are conducted on party political lines.

The District Councils are responsible for the overall running and development of their districts. They are responsible for such matters as primary education; the provision of health facilities, particularly the clinics; the
construction and maintenance of ungazetted roads, i.e. roads which are not maintained by the Central Government; the provision of water supplies; community development, the welfare of children and relief work for destitute persons; some categories of trading licences, etc. The functions of District Councils are really all-embracing. They are expected to bring to the surface the needs of the area, to investigate and evaluate these needs and to take policy decisions (Republic of Botswana, 1974: 9).

Although District Councils suffer from a lack of adequate financial resources to carry out the tasks devolved to them and from inadequately trained and inexperienced staff, they have shown themselves to have muscle. They are dominated by what Kuper and Gillett have called "the new men". These men are "comparatively educated, commercially enterprising, and often with long experience in fairly responsible jobs in the more highly developed neighbouring states" (Kuper and Gillett, 1970: 179). Most of them are drawn from outside the chief's immediate circle. They are men concerned with wider issues that go beyond the confines of their wards: they are well aware of the state of play in the capital, the party, the District Council as well as the village or ward. Through their efforts (and of course as part of nursing their constituencies), they have been instrumental in identifying local needs and getting Council support for projects.

While the District Council Law took away the administrative and legislative functions of the chief, the Tribal Land Acts of 1968-1970 withdrew all his power over the control and allocation of land. These powers are now vested in the Land Boards, of which the chiefs are members. Membership of the Land Boards is dominated by the representatives of the District Councils and by appointees of the Minister of Local Government and Lands.

The Tribal Land Act (1968), inter alia, spells out the functions of Land Boards. With respect to customary tenure, Section 13 reads:

"All the powers vested in a Chief under customary law in relation to land, including a) the granting of rights to use any land; b) the cancellation of the grant of any rights to use any land including a grant made prior to the coming into operation of this Act; c) hearing of appeals from, confirming or setting aside any decision of any subordinate land authority; d) the Imposition of Restrictions on the use of tribal land; Shall be vested in and performed by a land board acting in accordance with the provisions of this Act."
These extensive powers of the land boards took away from the chiefs the main pivot of their control of people's movements.

Finally, according to Gillett, the biggest blow was the chiefs' loss of their right to levy taxes. The right to levy taxes was vested in them as Chairmen of Tribal Treasuries. This right was swept away by the Local Government Tax Law of 1966 which transferred this right to the District Councils. In this context it was logical that the power to handle and dispose of stray cattle, traditionally one of the preserves of the chiefs, should be turned over to the District Councils. This was made possible by the Matimela Act of 1968.

The chiefs have naturally found these changes too radical to accept easily. Resistance has taken many forms ranging from open resistance, resignations to grudging compliance. Vengroff has described one of these episodes in the Kweneng District following the passing of the Tribal Land Act. Chief Nkale opposed this law very violently and went to the extent of touring the District telling people that "the Land Board was only to settle disputes and that he personally still had full authority over the distribution of the land" (Vengroff, 1975: 48). The District Councillor touring with him would then stand up and correct him, which was all very puzzling and embarrassing to their listeners.

The fight between the chiefs and the central government is still not finally resolved as a few chiefs still try desperately to flex the few muscles they have left. In a recent tough speech, Chief Linchwe of the Bakgatla warned that if the government continued to make chiefs its "football, we will leave Chieftainship and form our own political parties to defend ourselves against insults" (Botswana Daily News (Gaborone), June 30, 1978, p.1).

Some Concluding Remarks

Although diminished in power and status, the chief remains a symbol of tribal identity; and chieftainship remains a cultural heritage that Botswana seems determined to preserve in whatever form. The Government (and opposition parties) are caught up in some contradictions. The preservation of the chiefly institution contradicts moves to cultivate a national outlook, and yet to destroy it is to do away with one of the central institutions which is considered to be at the centre of Tswana culture.
A rather uncomfortable accommodation has therefore been worked out. The chief's functions are now mainly concerned with judicial matters (Kuper and Gillett, 1970: 174; Vengroff, 1975: 49-51). But he has also been incorporated into the new local government. The chief is one of the communication links between central government and the people, and this function takes nearly half of the kgotla time (Kuper and Gillett, 1970: 174; Vengroff, 1975: 51-54). But even in the kgotla, which is his traditional sphere of influence, he no longer has a free and uncontested ride (Kooljman, 1978: 41). As Kuper and Gillett have noted:

"In most villages the District Councillor now divides with the headmen the latter's erstwhile functions ...... The District Councillor dominates the village council when it discusses matters on which authoritative decisions are taken in the District Council or the party, and he often chairs council meetings when issues of this type are under discussion. He is better placed than was the headman to push the council into making decisions because he is better informed, has real external power bases in the District Council and Party, and is usually more or less detached from the intricate structure of kin-based factions."

(Kuper and Gillett, 1970: 179)

The days of chiefly autocracy and control are thus over. The chiefs have been reduced by modern legislation to almost nothing. Whatever influence they still exercise derives only from whatever veneration the old generation still has for their institution. But they have lost control over resources and with it the power to order the use of space. In these changed circumstances permanent migration to the lands can and does take place.
CHAPTER FIVE

Reasons for Permanent Migration to the Lands

In Chapter Four it was argued that the removal of the chiefly authority has set the stage for people to behave in a way which they consider rational. In this chapter we examine, among other things, the evidence for this assertion in the light of recent research findings (see also Appendix). The first part of the chapter will outline the theoretical framework in which the argument is to be cast. The second part will describe the old system of farming in Botswana and the changes that led to the system of seasonal migrations. The third part will analyse the disadvantages of the seasonal migration system in the light of the main reasons given for permanent settlement at the lands. The fourth part will examine other reasons given for permanent migration to the lands. The last part of the chapter will examine the characteristics of the households that are still engaged in seasonal migrations between the lands and villages.

The Theoretical Framework

We are interested here in the relationship between settlement and (agricultural) land use. In relating settlement to land use, many studies have shown that there is a systematic relationship between the two. These studies, including the pioneering work of Chisholm on which most of this chapter is based, owe their inspiration to the work of Johann Heinrich von Thunen. Studies on agriculture around a variety of urban areas have shown the relevance of the von Thunen model even to Third World situations (Horvath, 1969; Griffin, 1973). Although the von Thunen model was developed primarily to explain agricultural land use where agriculture is commercialised, it has been applied to situations of subsistence agriculture.

There is no agreement on the relevance of von Thunen's analysis to explaining land use patterns in subsistence economies. After a very extensive review of literature on settlement and land use in tropical Africa, Jackson has concluded:

"a) cultivation zones of concentric rings are uncommon in Africa, b) where they do exist they are often far from the exemplars of Chisholm based on von Thunen's method of analysis."

(Jackson, 1972: 261)
Although Jackson rejects the von Thunen analysis for analysing land uses in subsistence economies, he nevertheless concedes that:

"land use systems of tropical Africa are nonetheless rational to a considerable degree in a strictly economic sense."

(Jackson, 1972: 261)

'Rational' is the operative word here. The assumption is that in conducting his farming, the farmer tries to avoid expending unnecessary costs or effort. In particular he tries to minimize the effects of distance between his homestead and his holdings. It may be objected that human beings are not rational, but as Chisholm has argued:

"neither are they fools nor do they choose to do more work than is necessary"

(Chisholm, 1968: 45)

The relationship between distances and production revolves around the costs of transporting inputs from villages or homesteads to the farms or fields, and of consigning the produce from the farm to the village or homestead for consumption there or for onward shipment to the market.

We can work out the cost of movement in terms of human time taken to cover a certain distance. It is also possible to convert the cost in time to money costs by assigning the going hourly rate of pay to each hour used for travelling. Chisholm has argued that if the farmer behaves in a rational manner, we would expect him to conduct his holding in such a way that the last quantity of labour bestowed equals the value of the additional produce which will result from it. If, on the other hand, the cost of the last (or marginal) amount of labour exceeds the marginal return, then he will tend to curtail his operations. Thus, the total time involved in cultivating a field for an additional hour rises the further removed it is, since the time consumed in travelling must be added to total production costs. The return to labour on such a field for a given crop must therefore be greater than the return on the field near the homestead to compensate for the costs incurred in travelling.
A number of studies on the relationship between distance and production costs have been done in Europe and Asia and have been summarised in Chisholm (1968: 49-53).

Among the studies quoted by Chisholm is that carried out by Wiiala on a Parish in Finland. Wiiala's findings indicated that at an average distance of the first one kilometre from the settlement the gross return per hectare had dropped by 44%; at 2 kilometres the net return per hectare was insignificant (Chisholm, 1968: 52). A survey in the Punjab (Pakistan) showed that the costs of ploughing increased by 5.3% for every additional \( \frac{1}{2} \) kilometre, while the costs of transporting manure and crops increased by 10-25% and 15-32% respectively for the same distance (op. cit: 52).

Farmers adjust to this influence of distance in one of the following ways. Either they cultivate the fields near the homestead more intensively, the intensity declining as distance from the homestead increases; or they plant their crops in such a way that the most demanding crops are placed near the homestead and the less demanding ones are placed further away (Chisholm, 1968: 54-66). These strategies are illustrated below from the case studies from Africa.

**Settlement and Land Use in Africa**

Geographers and anthropologists working in Africa have paid some attention to this subject. Among the early works was that of Prothero (1957). Prothero identified four zones of cultivation in Northern Nigeria. The first zone comprised the vegetable 'gardens' within the village walls. The 'gardens' required frequent visits and were heavily manured to ensure permanent cultivation. The second zone extended from the village wall to a distance of 0.8 – 1.2 kilometres. These fields were also manured. The third zone, varying in width from 0.8 to 1.6 kilometres, comprised the land that was cultivated under rotation, being cultivated for 3 to 4 years and then left fallow for another 5 years. The last zone was heavy bush with isolated clearings.

A similar zonation in Eastern Nigeria has been described by Lagemann (1977). Lagemann identified three zones, viz: the compounds, the near fields and the distant fields (op. cit: 27-49).
In his studies in Northern Ghana, Hunter found that each house sat in the middle of its homefarm, which was cultivated continuously (Hunter, 1967: 341). Fertility was maintained by applications of manure, radiating outward from the walls of the house, so that a sharp fertility gradient developed, the farm often taking a circular shape especially where population density was low. Although farmers might own other fields, especially in the uncleared bush, the homefarm was the most important field accounting for 80-90% of the agricultural output. Farmers in Northern Ghana tried to maximise production on the relatively limited area of manured land around their houses where they could protect the crops against depredation by birds and rodents. Hunter also found that weeding was also concentrated primarily at the homefarm.

"Yields on the unmanured and unprotected bush-farms are often abysmally low. Total failure is a common occurrence."

(Hunter, 1967: 342)

Middleton found a similar situation among the Lugbara of Uganda. He recognised three types of land use. The first were the "fields at home", which were intensively cultivated, fertilised with ashes and manure, and were used for the more demanding crops, such as white sorghum. After the homefields came the large unfertilised fields, which were used for the staples exclusively, and which were fallowed at regular intervals. The last type were plots along the river banks (Silberfein, 1973: 13).

Less qualitative and much more quantitative is Hirst's study of Tanzanian farms. The results of one survey showed that over 50% of the households cultivated a shamba within four kilometres - or within an hour's walking distance (Hirst, 1970: 258). In another survey, the greatest number of shambas were found between 1.6 and 2.4 kilometres from the village. Hirst concluded:

"Tanzanian cultivators have clearly recognised the advantages of living close to their shambas and thus reducing the time taken to reach the household plot."

(Hirst, 1970: 259)
This detailed description of how agricultural land use generally relates to settlement is useful for the reader not familiar with the literature. It also shows the contrast between the traditional system of land use in Botswana and what one would normally expect to happen (see next section). However, our interest in the distance models is not to explain land use patterns around Botswana villages. Rather our interest is to use these models to explain permanent migration to the lands.

The traditional system of land use in Botswana has resulted in the increasing separation of settlement and supporting economic activities. What are the costs entailed in movement between the village and the lands? Can we explain the tendency to settle permanently at the lands on this basis? These questions are answered fully below.

Settlement and Land Use in Pre-Colonial Botswana

For modern Batswana, accustomed to long distances from the villages to the lands and concomitant seasonal migration, the patterns described above appear very foreign. Yet a brief look into the history of the Batswana suggests that this is really not so. A number of authorities have argued that the distances separating the lands from the villages were much smaller in the olden days and that people therefore farmed from the village, thus moving between the village and the fields every day. Writing about Bakwena agriculture in the 19th century, Okihiro has noted, among other things, that:

"Throughout this period, the various Bakwena settlements were situated on the summits of rocky, defensible hills, and the agricultural fields lay in the plains below. The selection of a field site was based on several criteria, among which were distance, vegetation, and soil. It was desirable that the field be within easy walking distance from one's home to enable the person to keep an eye on the garden while at home and on the home while in the field. Thus in most cases, one's field was just beyond one's home, producing the familiar Batswana settlement of arable lands encircling the Motse (village)."

(Okihiro, 1975: 68-9)

This picture of Tswana settlement and land use is supported by evidence from the writings of the 19th century travellers and missionaries. The
Rev. J. D. Hepburn, writing in 1844 about Shoshong, for instance observed:

"They (the Ngwato) have such hard days in the gardens that the people will not come in (i.e. to the village) till after supper."

(Quoted in Kooijman, 1978: 89)

This implies that the fields were close to the village where the people lived permanently.

During this period of hoe technology it took a long time before most of the land near the village got exhausted. According to Gaseitsewe the typical land use pattern around the Tswana village (in some cases right up to 40-50 years ago), was as follows. The area around the village was reserved for grazing the few milk cows, and later also for draft oxen and horses (the last for riding). The milk cows were kraaled in the village every day; even today the remnants of some pens can be seen in some villages (Pahl, 1976: 53). The keeping of milk cows in the vicinity of the village (for a society whose diet was dominated by milk and related products) would be understandable. The next zone was occupied by crops. Further out and extending for tens of kilometres were cattle posts. (See Fig 5.1.) It does appear that as crop agriculture became more and more important, it tended to displace the inner grazing zone.

When discussing distances between the villages and the lands it also has to be borne in mind that population sizes were relatively small. In addition, the Tswana groups were susceptible to occasional fissions, which further reduced the numbers of individual groups. One school of thought sees the main function of these splits as balancing population with available resources.

The increased distances to the lands as a result of the depletion of the soils near the settlement were a frequent cause of the migration of the whole

---

1 Personal Communication
Diagramatic Representation of Settlement & Land Use in Botswana to early 20th Century

- Village
- 1 Zone of grazing for milk cows
- 2 Zone of cultivation
- 3 Outer zone - grazing, cattle posts

Source: Based on information supplied by Gaseitsewe, Gaborone, 18 May, 1976.
community. Writing in 1880 from Molepolole, Mrs Lees Price remarked:

"Bechwana (sic) town never has a name of its own - it is moveable and goes by the name of its population, not of its place, which may change every few years."

(Long, 1956: 400)

The first part of Mrs Price's statement is obviously an exaggeration, but the second part is true. Settlements did move and one of the main reasons was ecological - the depletion of soil and firewood resources in the vicinity. Among the Bakwena, settlement changes in the 19th century are well documented (Okihiro, 1975: 65; Smith, 1957: 157-59). How long it took for the surrounding area to become exhausted is difficult to know, and, of course, this must have varied according to the fertility of the soil. It is, however, generally agreed that it took ten years for the immediate area to become exhausted (Pahl, 1976: 53). Some of the changes of site were of course dictated by the security situation (Okihiro, 1975: 190-91; Smith, 1957: 160-61). Among other reasons for changes in village sites were shortage of water, outbreak of disease and fear of sorcery (Schapera, 1943: 59). Frequent change of sites were easy because

"the capital investment in the village consisted only of bush products - poles, grass, and clay - and when in any case the buildings required renewal at frequent intervals"

(Fosbrooke, 1972: 42)

Thus the Bakwena moved their capital no fewer than ten times between 1830 and 1864 when they finally settled at Molepolole (Schapera, 1943: 60).

To summarise, the Batswana in the past used to live near their lands like other African groups. Fosbrooke has asserted that the necessity to spend a considerable portion of the year on the lands is a comparatively recent feature of Botswana life (Fosbrooke, 1972: 42).

Increased Distance to the Lands and its Contribution to Permanent Migration to the Lands

It is important to start by looking at the causes of the increasing separation of the lands and villages. The first factor is the permanence of
village sites since the onset of colonial times. It is no longer easy to move villages frequently because of the large amounts of capital that are invested in services - hospitals, post offices, schools, shops - and even in private homes. As far as the last is concerned, Batswana have, in the course of this century, adopted the use of brick and corrugated iron. Writing in 1943, Schapera noted that more huts and houses were being built with imported doors, windows and galvanised roofs (Schapera, 1943: 61).

The adoption of new building materials was accompanied by a growth in the average size of the huts. The increase in size was partly a consequence of the adoption of European furniture. Schapera also noted that the courtyard surrounding the huts was also tending to be larger (Schapera, 1943: 83). These developments obviously had implications for the size of a village.

In the course of time, with population growth, the size of villages increased. With the imposition of colonial rule, the fissiparous tendencies of the Tswana were checked (Schapera, 1943: 157). Thus it was no longer possible to ease population pressure on existing resources by part of the group moving away.

The colonial government itself was against the practice of moving villages "unnecessarily" for the simple reason that they could not afford to be putting up new buildings all the time. So when the Tswana wanted to move from Maun, the colonial government agreed to it on one condition - that the tribe pay all the costs of erecting new government buildings. This the Tswana were not able to do and so they remained at Maun (Schapera, 1943: 62). The movement of the Ngwato from Palapye to Serowe as early as 1902 was done only after the approval of the colonial government had been received (op. cit: 62).

Moyo (1975) explains the increasing distances to the lands partly in terms of changing transport technology:

"Selection of cultivating land depended mainly on the availability of transport. In the past, before the coming of Europeans all loads were carried on people's heads. This would have been a difficult task if arable lands were located far away from people's homes. Accounts from hunters and travellers show that lands were always located next to the residential site. With changing times and acquisition of new transport
means such as tractors, lorries and donkey carts, the lands have been shifting further and further away from the town."

(Moyo, 1975: 28)

These factors on their own need not necessarily have resulted in the increase of distances to the lands if agriculture had responded to these changes by becoming more intensive. On the contrary, agriculture continued to be extensive - the shifting type. Thus, if the settlements could not move, then the fields had to do so, as the land near the village became exhausted. It is useful to note that the increased distances to the lands consequent upon the permanence of the villages was seen by some colonial officials as the main cause of declining agricultural productivity. There was consequently a movement that called for the dismantling of the villages:

".... stabilisation of the towns has created new problems owing to the exhaustion of the arable lands in the immediate vicinity. Medical officers and other officials also hold that the disintegration of the towns is the only real remedy against the malnutrition that is so evident among the Tswana."

(Schapera, 1943: 63)

The 'migration' of the lands can be illustrated by Axelsen's work on the ecology of the area around Tutume. Axelsen (1977) identified three ecological zones around the village of Tutume (see Fig 5.2). The innermost zone (2-4 km from the village) is is characterised by a low Mopane bush, usually 1-4 metres high, with scattered taller trees. Ground vegetation is almost totally absent on account of overgrazing by goats and trampling by cattle. Although there are now few small fields here, this area used to be the main zone of cultivation.

"Today these former lands can hardly be identified in the field, but their borders are visible from the air. Most of this inner zone has today bad soil....."

(Axelsen, 1977: 31)

The next zone is what Axelsen calls the transitional zone. It lies at a distance 3 - 10 km from the village and is dominated by abandoned fields. Thornbush savannah is the dominant vegetation.
Fig. 5.2: CHANGING LAND USE PATTERN IN TUTUME

Zone 1: Overgrazed area close to village
Zone 2: Area dominated by abandoned lands
Zone 3: Lands and savanna woodland

"The large frequency of abandoned fields in this area indicates that there has been a gradual movement of the cultivated area outwards as population has grown."

This zone comprises vegetation and is used for some grazing. The last zone comprises the lands. The fields are interspersed with natural vegetation. "This vegetation is thought to be the original type (ecological climax) of all three zones." (ibid)

Distances Involved

The concept of long distances to the lands is vague for the reader not familiar with Botswana. A good picture of the distances involved can be gained from Tables 5.1 and 5.2 and Fig 5.3 below. More than 60% of the Gabane households have their fields at distances beyond 11 kilometres. Only less than 13% of Molepolole households have their fields within 10 kilometres from the village. These figures compare favourably with Syson's findings in Shoshong (Syson, 1972: 12).

A further analysis of Tables 5.1 and 5.2 suggests that the distances to the lands is a function of both the age and size of the village. Thus the distances to the Gabane lands (Gabane being both smaller and relatively younger than Molepolole) are relatively shorter than distances to the Molepolole lands.

It is clear therefore that distances to the lands are generally large and that we are dealing here with an unusual situation. At these distances farming from the village would be extremely expensive. So a second base, the so-called temporary home at the lands, has to be established. But this does not completely eliminate the costs imposed by long distances; it merely reduces them. However, in order to appreciate the question of these costs it is necessary to start by differentiating between kinds of farmers.
<table>
<thead>
<tr>
<th>Distance from village (km)</th>
<th>No. of Fields Found</th>
<th>% Total No. of Fields</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>22</td>
<td>9.30</td>
<td></td>
</tr>
<tr>
<td>6-10</td>
<td>57</td>
<td>24.20</td>
<td>33.50</td>
</tr>
<tr>
<td>11-15</td>
<td>52</td>
<td>22.20</td>
<td>55.70</td>
</tr>
<tr>
<td>16-20</td>
<td>38</td>
<td>16.20</td>
<td>71.90</td>
</tr>
<tr>
<td>20+</td>
<td>66</td>
<td>28.10</td>
<td>100.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>235</strong></td>
<td><strong>100.00</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author's Fieldwork

**TABLE 5.2**  
Distances to Molepolole Lands

<table>
<thead>
<tr>
<th>Distances (km)</th>
<th>No. of Fields</th>
<th>Percentage</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>5</td>
<td>2.85</td>
<td></td>
</tr>
<tr>
<td>6-10</td>
<td>17</td>
<td>9.71</td>
<td>12.56</td>
</tr>
<tr>
<td>11-15</td>
<td>23</td>
<td>13.14</td>
<td>25.70</td>
</tr>
<tr>
<td>16-20</td>
<td>22</td>
<td>12.57</td>
<td>38.27</td>
</tr>
<tr>
<td>21-25</td>
<td>12</td>
<td>6.87</td>
<td>45.14</td>
</tr>
<tr>
<td>26-30</td>
<td>14</td>
<td>8.00</td>
<td>53.14</td>
</tr>
<tr>
<td>31-35</td>
<td>11</td>
<td>6.29</td>
<td>50.43</td>
</tr>
<tr>
<td>36-40</td>
<td>17</td>
<td>9.71</td>
<td>69.14</td>
</tr>
<tr>
<td>41+</td>
<td>54</td>
<td>30.86</td>
<td>100.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>175</strong></td>
<td><strong>100.00</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author's Fieldwork
Fig. 5.3

DISTANCES TO MOLEPOLOLE LANDS

Source: Based on table 5.2
Types of Farmers

The Ministry of Agriculture's Extension Division introduced the Pupil Farmer Scheme in the early 1960s (Republic of Botswana, n.d. 23-25). Farmers were encouraged to adopt in stages more enlightened and intensive methods of cultivation. A pupil farmer, for example, was expected to adopt very elementary methods, e.g. to destump a half of his fields. The next stage was an Improved Farmer. Such a farmer was expected, among other things, to own a harrow and to apply kraal manure to part of his field. Beyond this, he proceeded to the stage of Progressive Farmer. At this level he was expected, inter alia, to plant his crops in rows and to "have sound practical working knowledge of all implements, seed bed preparation, optimum planting conditions, plant espacement, weed control and dryland crop production" (Rep. of Botswana, n.d. 24). The final level was that of a fully-fledged farmer, the Master Farmer. In addition to the standards of farming expected of lesser farmers below him, plus other standards, the master Farmer was expected to winter plough and/or plough with the first rains; to have his fields separated by contour banks and to fence his lands. Like the Improved and Progressive Farmers, he was expected to reside permanently at his lands throughout the crop season, or employ a permanent responsible manager.

There was a parallel scheme for livestock agriculture. The farmer progressed from a Pupil Stockman through a Progressive Stockman to a Master Stockman. (op. cit: 18-19)

For the purpose of the research surveys the above classification was simplified and reduced to two types - traditional and progressive farmers. A progressive arable farmer was defined as one using some or all of the following methods: planting in rows, using a harrow or planter, applying fertilizers or manure, using insecticides and improved seeds, and winter fallowing. The traditional farmer on the other hand not only used none of the above methods but also planted seeds broadcast. For the progressive farmer the most critical practices that make staying at the lands mandatory after harvest time are the application of manure and winter fallowing.

The research findings with regard to arable agriculture confirmed what is already known. An overwhelming majority of households still farm in the
traditional way. Of the 283 lands households, 200 (or 71%) did not use any of the progressive methods. Among those using progressive methods none was using all the above methods. The methods and users were distributed as shown on Table 5.3 below.

<table>
<thead>
<tr>
<th>Method</th>
<th>No. using</th>
<th>Medie (95)</th>
<th>D (88)</th>
<th>Mm (100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fertilizers</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Manure</td>
<td>22</td>
<td>6</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Insecticides</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Improved seed</td>
<td>17</td>
<td>15</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Winter fallowing</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Planting in rows</td>
<td>55</td>
<td>34</td>
<td>13</td>
<td>8</td>
</tr>
</tbody>
</table>

(95) total number of farmers interviewed
(D) Ditshukudu
(Mm) Mmamarobre

Source: Author's Fieldwork

When the three lands are compared, Medie appears to have relatively more progressive farmers. This is rather unexpected. Since Medie was the last to be 'colonised', one would expect it to be the least progressive. It may be that the Medie soils are poorer. Alternatively it may be that Medie farmers, being the most distant, feel the impact of distance more. So in order to recover the transport costs to the market in the village or along the railway they have to produce on a relatively larger scale.

Another interesting discovery, which apparently has implications for permanent migration to the lands, is the fact that most farmers also keep their livestock at the lands. 68% of the households reported holding cattle. Of these, 97% reported that they kept their livestock at the lands. Only a mere 3% reported keeping their cattle at the cattle-posts.

---

1 See appendix for the explanation on the sampling of these lands.
This discovery modifies our notion of Batswana as people with three homes—one at the village, the second at the lands and the third at the cattle post (Schapera, 1953). There are a number of possible explanations for this development. The tendency to keep cattle at the lands may be a result of the shortage of labour consequent upon labour migration and attendance at school by would-be herd-boys. Livestock is cared for mainly by men. Caring for livestock takes 70% of the working time of men aged 15-59 (Lipton, 1978: 15). School attendance by boys is, however, still relatively low as many of them are still used as herd-boys (Smith, 1977). A second possible explanation may be lack of capital. For the small owners of livestock lacking capital to invest in boreholes, the cattle-post system may be too expensive.

Main Reasons for Settling Permanently at the Lands

In the light of the above discussion, we are now in a position to discuss the reasons which were given by respondents for settling permanently at the lands. The reasons are given below (Table 5.4 and Fig 5.4).

The most important reason was clearly to be able to manage livestock better. This is understandable in the light of what has already been said above. The third most significant reason, i.e. to improve farming, also supports the argument that the cost of distances is a factor in migration to the lands. Although the majority of the farmers are traditional in outlook, they seem to realise the advantages – being able to plough on time and generally to improve yields – of living close to their lands. The low yields cannot be attributed solely to the conservatism of the farmers; there are other factors, as explained in Chapter One, such as absence of credit and marketing facilities. Moreover, where such small quantities are produced, the costs of transport can be prohibitive.

An attempt was made to check the consistency of answers in Table 5.4 by inserting two questions: "What do you consider to be the advantage of living at the lands?" and "What do you consider to be the disadvantages of living in the village?" The answers are given in Tables 5.5 and 5.6 below.
### TABLE 5.4  Main Reasons Given for Settling Permanently at the Lands

<table>
<thead>
<tr>
<th>Reason</th>
<th>No. giving the reason</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To look after our livestock</td>
<td>146</td>
<td>51.6</td>
</tr>
<tr>
<td>2. No home in the village/limited space in the village</td>
<td>97</td>
<td>33.2</td>
</tr>
<tr>
<td>3. To be able to plough in time</td>
<td>43</td>
<td>15.2</td>
</tr>
<tr>
<td>4. To improve my farming/dependent on farming for a living</td>
<td>50</td>
<td>18.7</td>
</tr>
<tr>
<td>5. No transport to move up and down/ cannot afford to maintain two homes</td>
<td>44</td>
<td>15.0</td>
</tr>
<tr>
<td>6. Good pastures/previous land not good enough</td>
<td>9</td>
<td>3.2</td>
</tr>
<tr>
<td>7. Because water is available at this land during the dry season</td>
<td>6</td>
<td>2.1</td>
</tr>
<tr>
<td>8. Because of availability of milk and firewood</td>
<td>6</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Source: Author's Fieldwork

### TABLE 5.5  Advantages of Living at the Lands

<table>
<thead>
<tr>
<th>Reason</th>
<th>No. giving Advantages</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To look after our livestock</td>
<td>169</td>
<td>59.7</td>
</tr>
<tr>
<td>2. To plough early/to be able to produce our food</td>
<td>157</td>
<td>55.5</td>
</tr>
<tr>
<td>3. To prepare fields and improve farming</td>
<td>67</td>
<td>23.7</td>
</tr>
<tr>
<td>4. Plenty of firewood and milk</td>
<td>39</td>
<td>13.8</td>
</tr>
<tr>
<td>5. Less costly to build a house at the lands and to have one home</td>
<td>12</td>
<td>4.2</td>
</tr>
<tr>
<td>6. Can derive income from selling thatching grass, firewood, milk and wild berries to villagers</td>
<td>10</td>
<td>3.5</td>
</tr>
<tr>
<td>7. There is a lot of fresh air at the lands</td>
<td>8</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Source: Author's Fieldwork
Main reasons given for settling permanently at the lands

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percent giving reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>To look after livestock</td>
<td>51.6%</td>
</tr>
<tr>
<td>No home in the village/limited space at the village</td>
<td>33.2%</td>
</tr>
<tr>
<td>To be able to plough in time</td>
<td>15.2%</td>
</tr>
<tr>
<td>To improve my farming/dependent on farming for a living</td>
<td>18.7%</td>
</tr>
<tr>
<td>No transport to move up and down/can not afford to maintain two homes</td>
<td>15.6%</td>
</tr>
<tr>
<td>Good pastures/previous land not good enough</td>
<td>3.2%</td>
</tr>
<tr>
<td>Because water is available at the lands during dry season</td>
<td>2.1%</td>
</tr>
<tr>
<td>Because of availability of milk and firewood</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

Source: Based on Table 5.4
TABLE 5.6  Disadvantages of Living at the Village

<table>
<thead>
<tr>
<th>Disadvantages</th>
<th>No. Giving Disadvantage</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Unable to look after cattle</td>
<td>89</td>
<td>31.5</td>
</tr>
<tr>
<td>2. Cost of living very high</td>
<td>65</td>
<td>23.0</td>
</tr>
<tr>
<td>3. Cannot plough in good time</td>
<td>36</td>
<td>12.7</td>
</tr>
<tr>
<td>4. No space for ploughing at the village</td>
<td>28</td>
<td>9.9</td>
</tr>
<tr>
<td>5. Time wasted in kgotla meetings and beer parties</td>
<td>28</td>
<td>9.9</td>
</tr>
<tr>
<td>6. No space for keeping livestock</td>
<td>23</td>
<td>8.1</td>
</tr>
<tr>
<td>7. Cannot improve farming</td>
<td>10</td>
<td>3.5</td>
</tr>
<tr>
<td>8. Expensive to maintain two homes</td>
<td>9</td>
<td>3.2</td>
</tr>
</tbody>
</table>

Source: Author's Fieldwork

There is tremendous consistency in the answers. The farming considerations - to look after livestock, plough on time, improve farming, etc - loom very large in the answers. They account for not less than 60% of the responses. It is clear, therefore, that the farmers themselves perceive the long distances between the village and their lands as a major inconvenience in terms of both the direct and indirect costs involved in overcoming them.

The Costs of Managing Agriculture from a Village Base

We can appreciate the significance of the main reasons given for migrating to the lands by examining the costs involved in managing agriculture from Molepolole. According to Table 5.2, 87% of the Molepolole households have their fields beyond 10 kilometres from the village. Batswana have reacted to this kind of situation by having a sub-base at the lands (in view of the fact that the chiefs did not allow them to abandon their homes in the village). This minimizes the costs incurred on covering the distances between village and lands.
But all farmers operating from the village pay the costs of transporting their personal effects and agricultural inputs from the village to the lands at the start of the agricultural season. They also have to pay the cost of transporting these same personal effects and agricultural produce back to the village after harvest. Part of the produce is consumed at the village and any surplus is marketed there - at the shops or co-operatives.

The transport costs are not so obvious to the farmers if they are using their own transport. But the vast majority of farmers cannot afford even to hire the relatively cheaper means of transport - trucks and carts and wagons - in this order. The lands survey revealed that a very large majority of the households possess a bicycle or a sledge. The ownership of other means of transport was distributed as shown in Table 5.7 below.

<table>
<thead>
<tr>
<th>Type</th>
<th>No. Owning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truck</td>
<td>2</td>
</tr>
<tr>
<td>Tractor</td>
<td>2</td>
</tr>
<tr>
<td>Donkey cart</td>
<td>9</td>
</tr>
<tr>
<td>Ox cart/wagon</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>49</td>
</tr>
</tbody>
</table>

*Source: Author's Fieldwork*

Four owned more than one type of transport. Thus the remaining 238 households either had no means of transport of their own or had a sledge or bicycle. The sledge is adequate for carting goods over short distance, like carrying crops from the fields to the homestead at the lands. But for long distances it is very expensive.

The ownership of the various means of transport by the village group was almost similar to the lands one, as Table 5.8 shows.
TABLE 5.8 Ownership of Means of Transport (Village)

<table>
<thead>
<tr>
<th>Type</th>
<th>No. Owning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truck</td>
<td>2</td>
</tr>
<tr>
<td>Tractor</td>
<td>6</td>
</tr>
<tr>
<td>Donkey cart</td>
<td>1</td>
</tr>
<tr>
<td>Ox cart/wagon</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>38</td>
</tr>
</tbody>
</table>

Source: Author's Fieldwork

In the village group, the number owning sledges was negligible – less than 10. This finding seems to confirm that of the Rural Income Distribution Survey (RIDS) (Lucas, 1979: 28). The fact that only a few households possess trucks, tractors and carts is also confirmed by RIDS. According to the RIDS data, only about 1% of crop-producing households possess a tractor and approximately 11% a wagon or cart (op. cit: 33).

This finding has important implications for the way in which village people transport their crops and belongings to the village. One half of the households said that they used hired transport. The people who hire out transport are other farmers, as a part-time occupation. Reference is made in the appendix to a survey of transport operators carried out in Molepolole. Of great interest in the survey were the charges of the operators for transporting the various items – people, crops and household effects. The analysis of the charges can be seen in Table 5.9 below. No firm conclusions can be drawn from these figures because it is not possible to tell how representative these operators are of all the operators involved. However, the figures do provide a useful indication of transport charges in the rural areas. It is clear from the figures that the charges for transporting crops are relatively low. The charges for transporting household effects are rather high.
TABLE 5.9 Transport Charges in the Kweneng District (1977)

<table>
<thead>
<tr>
<th>Item</th>
<th>Distance (km)</th>
<th>Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person</td>
<td>25</td>
<td>60t</td>
</tr>
<tr>
<td>&quot;</td>
<td>50</td>
<td>70t</td>
</tr>
<tr>
<td>&quot;</td>
<td>75</td>
<td>P 2.00</td>
</tr>
<tr>
<td>90 kg bag of sorghum</td>
<td>25</td>
<td>P 1.00</td>
</tr>
<tr>
<td>&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;</td>
<td>50</td>
<td>P 2.00</td>
</tr>
<tr>
<td>&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;</td>
<td>75</td>
<td>P 3.00</td>
</tr>
<tr>
<td>Household effects</td>
<td>25</td>
<td>P15.00</td>
</tr>
<tr>
<td>&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;</td>
<td>50</td>
<td>P40.00</td>
</tr>
<tr>
<td>&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;&quot;</td>
<td>75</td>
<td>P50.00</td>
</tr>
</tbody>
</table>

a) Household effects include pots, pans and plates; blankets and (possibly) a bed; cans for carrying water, drums for making beer, etc. Also transported with household effects are fowls and pigs.

Source: Author's Fieldwork

These charges are prohibitive for the traditional farmers, who are invariably poor. According to the lands surveys, 172 households (or 61%) produce not more than five (90 kg) bags of sorghum (or 450 kg). This is less than half of what is required for the subsistence of a normal 5-6 member household (ALDEP, 1979c: 2).

By deciding to live at the lands, a farmer saves himself the money he would otherwise spend on transport between village and lands. For the poor farmers this money can be used to purchase the additional grain that is required to see the household through the rest of the year. The decision to reside permanently at the lands is, in this light, rational.

The effect of distance on farming goes beyond the costs of carting crops and household effects. Thomas has argued that the relatively high standard of farming among the Barolong farmers:

"can be attributed largely to the fact that farmers reside permanently on their holdings and are on the spot to take full advantage of any favourable weather conditions to carry out timely operations."

(ALDEP, 1979c: 1)
The Barolong farmers have resisted any attempts to put them in villages for fear that this would result in increased distances between their homesteads and fields - thus lowering their agricultural productivity (Comaroff, 1977: 14).

A farmer still involved in seasonal movements is less likely to plough on time. This is especially so if his lands are distant from the village. What normally happens is that it rains at the lands while the farmers are still in the village. When it rains in the village, they start moving to the lands, only to find that the soil has dried.

Alternatively it may rain first in the village so that the farmers pack their effects and head for the lands only to find when they arrive that it has not rained at the lands. Where there is a problem of drinking water at the lands, the farmers are then forced to return to the village.

In general, the village farmers do not plough with the first rains. Nearly 60% of the village farmers said that they normally start ploughing in December. On the other hand 65% of the lands farmers said that they normally start ploughing in November.

The first rains usually fall at the end of September or at the beginning of October. The Ministry of Agriculture always encourages farmers to start ploughing then. Results from experimental stations have indicated a significant decrease in yield caused by delayed planting (Rep. of Botswana, n.d. a: 17). There is thus a loss in production when planting is delayed. Thus one of the major reasons cited for settling at the lands was to be able to plough in time. Not being able to plough in time was cited as the second important disadvantage of living in the village.

A farmer who uses the village as his main base also incurs losses in production because of the regular trips that he has to make to the village. These trips fall into three categories, namely:

a) business trips to shop or fetch more supplies;
b) trips to check on the schoolchildren left behind;
c) trips to attend kgotla meetings.
It is possible that some of these trips are combined. A loss in production also assumes that the time lost in these trips has an opportunity cost, which may not be true especially in the case of traditional farmers. Nevertheless Lipton (1978: 4) argues that

"currently some 45% of potential labour-time (in Botswana) is wasted in idleness."  

Moreover given the division of labour, the absence of any member of the household, if it is properly timed, may not be detrimental to production. Lipton has observed that

"crops are mainly women's work. In Shoshong 50% of women's gainful work was with crops, but only 11% of men's. Men do most of the ploughing, but most of the cropwork is done by women. ...."

(op. cit: 14)

Lipton has, however, also shown that the agricultural season is the period of peak labour demand, demanding more than double the labour time expended during the slack season. There is thus little doubt that, for most farmers, at least during the agricultural season, there must be some loss of production due to the absence of any member of the household.

The agricultural season lasts for eight months. Depending upon when the farmer starts to plough, it may run either from the beginning of October to the end of June or from November to the end of July. During this period a household may theoretically lose at least 88 man days to trips between the lands and the village. The days are distributed as follows:

a) 64 days to attend kgotla meetings; assuming two days are lost per week;

2 45% appears to be too high. It makes one wonder how labour-time was defined. Secondly, it appears that Lipton has not taken into account the economic benefits that can result from social interactions. Thus some progressive ideas can be picked up in conversations at beer parties. Thirdly, a dangerous assumption is made that people would be more productive if they worked longer hours than they are doing now. This does not follow automatically. Indeed, labour-use is only one facet of the complex problem of agriculture.
b) 8 days to check on the children; assuming a trip once a month;
c) 16 days lost on business trips; assuming a trip once a fortnight.

The estimated time lost is, however, half as much because:

a) children come to the lands every weekend or whenever possible and they spend their school holidays at the lands;
b) children bring with them any needed supplies;
c) people do not attend all kgotla meetings; and
d) some of the trips are combined.

However, this much loss of time is still substantial especially in the case of the progressive farmer. The loss is even greater when we include the loss in productive time during the 3-4 months that are spent in the village.

The analysis will now examine the implications of these losses in productive time for a progressive farmer. For a farmer who has reached the level even of an Improved Farmer, operating from a village is a severe handicap. For the progressive farmer, farming should be a year-round activity.

Thus as soon as he has finished harvesting, the farmer is expected, among other things, to winter fallow, apply manure to his fields and to mend the fences. On winter ploughing, Purcell has noted that in the case of Gakgatla farmers in season 1972/73:

"if Gakgatla farmers had adopted winter ploughing and fallow, a practice now being encouraged by the Ministry, the 25 mm precipitation which fell in November may well have been adequate to provide link-up between residual moisture from the previous season and the new rains, possibly avoiding the complete loss of the year's grain production."

(Purcell, 1976: 14)

Indeed, the techniques that are being advocated in order to improve agricultural production and farmers' incomes would almost certainly require permanent residence at the lands (ALDEP, 1979 c; Lipton 1978: 1x).

The following case study of a progressive farmer should help drive the point home.
Mr Sechele (false name) farms in Medie, where he settled permanently in 1965. His motive for settling at Medie was to farm. Mr Sechele owns three fields, one of 150 acres just behind his home; another half a kilometre away is 50 acres, and the last is 10 kilometres away and is 150 acres. Altogether his lands are 350 acres, a far cry from a traditional farmer whose lands average not more than 5 acres.

Mr Sechele is a progressive farmer by our definition because:

a) he has destumped and fenced his fields;
b) he annually applies kraal manure and fertilizers to parts of his fields;
c) he plants in rows using a planter;
d) he uses new seeds every year;
e) he winter ploughs;
f) he weeds his fields using a cultivator.

Mr Sechele also owns a tractor and trailer. Altogether he has invested not less than P6 000 in his capital stock. He is worried that he is not getting a sufficient return on his capital.

At the scale at which he is operating, his family labour cannot possibly cope. In a good year he employs 10 people full time. During the weeding time he takes on an additional 15, while during the time of scaring birds (February-May) he takes on an additional 9. Harvesting (June-August) is his busiest time and during this time he employs 30 people - 10 regular and 20 on temporary basis. In addition he also organises work parties. Mr Sechele's agricultural calendar is as follows:

1. end of September - mid November = planting,
2. November - February = weeding and picking of beans,
3. February - May = scaring birds,
4. June - August = harvesting and some winter ploughing (fallowing),
5. September = mending fences, etc. Also a lot of time is spent on stock during the period June-August. (see below)

In a good year, Mr Sechele produces not less than 500 bags of sorghum. His productivity per hectare is, however, low and this is the source of his
worry. He is not an exception in this regard. The RIDS data suggest:

"output is disproportionately high for 1 'acre' households, and low for those with more than 100 'acres'."

(Lucas, 1979: 47)

It therefore follows from the foregoing description that, at least for a progressive farmer, the regular trips to the village do constitute a loss in productive time. In this context a decision to live permanently at the lands is rational. At the lands, settlement and land use resemble the examples quoted above (see Fig 5.5). The fields are generally near the homestead as Table 5.10 below shows.

TABLE 5.10 Distances Between Homestead and Fields (Lands)

<table>
<thead>
<tr>
<th>Distance (km)</th>
<th>No. of Households Owning Fields</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 1</td>
<td>175</td>
</tr>
<tr>
<td>1 - 2</td>
<td>63</td>
</tr>
<tr>
<td>3 - 4</td>
<td>9</td>
</tr>
<tr>
<td>5 - 6</td>
<td>4</td>
</tr>
<tr>
<td>not stated</td>
<td>11</td>
</tr>
</tbody>
</table>

Source: Author's Fieldwork

By concentrating everything at the lands, and given the distances separating the various land uses, the farmer saves a lot of travelling time. This is made all the more possible if his children can attend school at the lands.

The discussion so far has concentrated on crop agriculture. However, as we have already noted, a very substantial majority of the farmers keep their cattle at the lands. Whatever the reason for the keeping of cattle at the lands, it has some serious implications for decisions to settle permanently at the lands. This is because cattle management, unlike crop husbandry, is not a seasonal activity. The labour time spent on livestock is almost constant throughout the year as Table 5.11 (below) on labour use by boys aged 9 - 13, shows. There are various tasks that need doing at different
Fig. 5.5

Settlement and Land Use at the Lands

Cattle Pen

Field 1/2 Acres

75 Yds

Field 1/2 Acres

50 Yds

Sheep & Goats Pen

1. Hut
2. Big house
3. Threshing ground

Source: Field Data
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td>5.80</td>
<td>27.54</td>
<td>1.11</td>
<td>2.37</td>
<td>6.19</td>
<td>2.71</td>
<td>3.20</td>
<td>8.80</td>
<td></td>
<td>42.26</td>
</tr>
<tr>
<td>July</td>
<td>2.32</td>
<td>21.41</td>
<td>0.75</td>
<td>1.96</td>
<td>5.22</td>
<td>2.68</td>
<td>2.42</td>
<td>20.91</td>
<td></td>
<td>42.33</td>
</tr>
<tr>
<td>September</td>
<td>0.74</td>
<td>20.71</td>
<td>0.10</td>
<td>1.82</td>
<td>5.38</td>
<td>3.35</td>
<td>2.10</td>
<td>15.08</td>
<td></td>
<td>50.71</td>
</tr>
<tr>
<td>November</td>
<td>0.55</td>
<td>15.29</td>
<td>0.39</td>
<td>1.39</td>
<td>5.07</td>
<td>3.12</td>
<td>1.81</td>
<td>26.34</td>
<td></td>
<td>46.04</td>
</tr>
<tr>
<td>January</td>
<td>1.80</td>
<td>30.31</td>
<td>0.87</td>
<td>1.71</td>
<td>6.00</td>
<td>2.79</td>
<td>1.62</td>
<td>6.53</td>
<td></td>
<td>48.37</td>
</tr>
<tr>
<td>All months</td>
<td>2.29</td>
<td>23.01</td>
<td>0.66</td>
<td>1.86</td>
<td>5.57</td>
<td>2.92</td>
<td>2.24</td>
<td>15.71</td>
<td></td>
<td>45.74</td>
</tr>
</tbody>
</table>

Source: D. Chernichovsky and C. Smith, 1979: 38
times of the year. During the crop season, much more herding is necessary in order to prevent livestock from straying into the fields. During the dry season livestock has to be directed to areas with sufficient grazing and/or given supplementary feeds; and constant watering at the boreholes or dams is mandatory. Throughout the year livestock has to be protected against predators and needs constant checking for diseases. The farmers were generally more progressive compared to their practices in arable agriculture. Of the 180 households who reported holding livestock only 25% reported not using any progressive methods. The use of the progressive methods was distributed as shown in Table 5.12.

TABLE 5.12 Use of Progressive Methods in Livestock Management

<table>
<thead>
<tr>
<th>Method</th>
<th>No. Using</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeding bonemeal and salt</td>
<td>68</td>
</tr>
<tr>
<td>Dehorning cattle</td>
<td>71</td>
</tr>
<tr>
<td>Deticking</td>
<td>37</td>
</tr>
<tr>
<td>Deworming</td>
<td>13</td>
</tr>
<tr>
<td>Using improved bull</td>
<td>16</td>
</tr>
<tr>
<td>Artificial insemination</td>
<td>12</td>
</tr>
<tr>
<td>Weaning calves</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Author's Fieldwork

Other Factors in Permanent Migration to the Lands

The argument presented so far is that farmers have settled permanently at the lands because they want to be near their livestock and fields. This may be true for most of the farmers, but how far is it true for everybody? Even in the case of those for whom it is true, is it the whole story?

If we look back at Table 5.4 we find that the second most important reason for settling at the lands is the lack of a home in the village. This was unexpected. It goes against the popularly held view that there is plenty of land in Botswana, even at the villages, and that everyone entitled to it gets it. It appears that a number of permanent lands residents are people who previously either were not farming or did not have their own homesteads.
in the village. This was confirmed by the answers to the questions "Why did you leave at this particular time and not before?" (See Table 5.13 below.)

<table>
<thead>
<tr>
<th>Reasons</th>
<th>No. giving the reason</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Still living with the parents or relatives</td>
<td>88</td>
<td>31.1</td>
</tr>
<tr>
<td>2. Had not married</td>
<td>67</td>
<td>23.7</td>
</tr>
<tr>
<td>3. Still ploughing at other lands</td>
<td>53</td>
<td>18.7</td>
</tr>
<tr>
<td>4. Not interested in farming before</td>
<td>12</td>
<td>4.2</td>
</tr>
<tr>
<td>5. There was someone to look after livestock</td>
<td>9</td>
<td>3.2</td>
</tr>
<tr>
<td>6. There was no water, the land was dry</td>
<td>12</td>
<td>4.2</td>
</tr>
<tr>
<td>7. The area was still a cattle post</td>
<td>8</td>
<td>2.8</td>
</tr>
<tr>
<td>8. We were ploughing near the village</td>
<td>5</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Source: Author's Fieldwork

Space for building homes in the village, especially at the centre, used to get short as a result of population growth. In that case, as noted in Chapter Four, the Chief used to relocate the wards. However, now that the people are free from the chief's control, they can and do choose between building at the edge of the village and building close to their fields at the lands. Shortage of space in the village must be seen in this light. There is no absolute shortage of building land at the edge of the village.

The other reason for living permanently at the lands is that the cost of living here is lower than in the village. The advantages of living at the lands that have direct bearing on the cost of living are:

a) access to milk, wild fruits and firewood;
b) availability of building materials; and
c) possibility of deriving income from selling the above items.
Before we can appreciate what is entailed in the cost of living, it is necessary to start by looking at the kind of relationship which exists between the village (or homestead) and the resources that sustain it. According to Chisholm, the most essential resources are arable land, grazing land, water, fuel and building materials (Chisholm, 1968: 102-110). So far our analysis has dealt with the first two. Water, because it is needed more regularly, is clearly the most essential. (Water is dealt with in Chapter Six). Chisholm has argued that village locations reflect the interplay of all the five factors and, other things being equal, will represent what in Weberian parlance is a least cost location.

In the paragraphs that follow, the discussion will be limited to fuel and building materials. We start with the latter. It has already been said that in the course of time Batswana have increasingly abandoned the use of local materials such as poles and thatch in favour of imported timber and corrugated iron. Indeed, walking around the villages one cannot help being impressed by some of the big houses with corrugated iron roofs and cement brick walls. One would therefore assume that the availability of local building materials would not have much effect on the location of villages.

It should, however, be noted that the use of improved or imported raw materials is restricted, by and large, to the rich few. The majority of Batswana still build their huts from the locally available materials - poles, clay and grass, etc. Although such building materials are not required all that often, it can be very expensive to procure them, given the distances of the places where they are exploited and the costs of transport. The distances where building materials, particularly poles and grass, are exploited have increased as the area around the villages has been depleted over the years. At the lands, in contrast, these resources tend to be available in relative abundance and one does not have to go far to get them. This explains why some lands residents feel it is cheaper to build a house at the lands. Indeed, some of them even sell the surplus thatch grass gathered to the residents of villages. The magnitude of income derived from gathering is shown in Table 5.14 and as can be seen is higher in the smaller villages (mainly lands settlements) than in the main villages. In addition, one can argue that the time saved through not looking for firewood is, in the case of progressive farmers, devoted to agricultural pursuits.
<table>
<thead>
<tr>
<th>Locality</th>
<th>Collection of firewood (R,000)</th>
<th>Wild food (R,000)</th>
<th>Building Material (R,000)</th>
<th>Total Income Gathering (R,000)</th>
<th>No. of HHs with income from gathering (thousands)</th>
<th>Main income per HH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small villages</td>
<td>2 313</td>
<td>982</td>
<td>213</td>
<td>3 508</td>
<td>72</td>
<td>R40</td>
</tr>
<tr>
<td>Large villages</td>
<td>367</td>
<td>33</td>
<td>38</td>
<td>438</td>
<td>12</td>
<td>R36</td>
</tr>
<tr>
<td>All Households</td>
<td>2 680</td>
<td>1 015</td>
<td>251</td>
<td>3 946</td>
<td>84</td>
<td>R47</td>
</tr>
</tbody>
</table>

Source: Republic of Botswana, 1976: 66
The savings derived from living at the lands are very much greater in fuel. The Rural Income Distribution Survey found that almost all the rural households gathered their firewood, with the exception of residents of villages "where the distances to available firewood were considerable" (Rep. of Botswana, 1976: 65). This was found to be certainly the case in Molepolole as Table 5.15 illustrates for the 77 households that reported gathering their own firewood. The Table shows that more than 50% of the households gather their firewood more than 10 km from the village.

The rest of the households (58%) reported that they depended on purchased firewood. The price of firewood was estimated, by RIDS, at 10 thebe per headload (one headload weighing approximately 10 kg) (Rep. of Botswana, 1976: 65). However, our own survey of firewood dealers suggests that the price is in fact double that. It is estimated that an average household consumes at least 75% of one headload of firewood a day.

**TABLE 5.15  Distances where Firewood is Gathered (Village Residents)**

<table>
<thead>
<tr>
<th>Distances (km)</th>
<th>No. Gathering Firewood</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 5</td>
<td>12</td>
</tr>
<tr>
<td>6 - 10</td>
<td>28</td>
</tr>
<tr>
<td>11 - 15</td>
<td>12</td>
</tr>
<tr>
<td>16 - 20</td>
<td>6</td>
</tr>
<tr>
<td>21 - 25</td>
<td>2</td>
</tr>
<tr>
<td>26 - 30</td>
<td>4</td>
</tr>
<tr>
<td>31 - 35</td>
<td>4</td>
</tr>
<tr>
<td>36+</td>
<td>9</td>
</tr>
</tbody>
</table>

*Source: Author's Fieldwork*

At this rate, especially during the dry season, a household is spending not less than P2.50 a month on firewood alone. In the poor rural economy, where incomes are as low as they are in Botswana, the opportunity cost of this money is great. It could, for example, almost pay a whole year's fees for a primary pupil in a Council school. At the lands, in contrast, all the households said they gathered firewood for themselves. The distances to where firewood was gathered were short, as Table 5.16 below shows for the Mmamarobole and Medie lands.
TABLE 5.16 Distance to Where Firewood is Collected (Lands)

<table>
<thead>
<tr>
<th>Distance (km)</th>
<th>No. of Households Collecting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 1</td>
<td>87</td>
</tr>
<tr>
<td>1 - 2</td>
<td>91</td>
</tr>
<tr>
<td>3 - 4</td>
<td>7</td>
</tr>
<tr>
<td>5 - 10</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: Author's Fieldwork

The other source of income mentioned are wild fruits and milk. With respect to the latter, it has always been noted that the traditional system of land use, involving, as it does, the separation of arable and livestock agriculture, discourages the consumption of milk, especially of fresh milk (Schapera, 1953). One of the advantages of living at the lands, especially when cattle are kept there, is that people have unlimited access to milk. With regard to wild fruits, the level of income derived from gathering them is indicated in Table 5.14. It is nearly 30 times higher than in the villages.

It should be noted, however, that some of these gains are counter-balanced by some losses. For example, some items are more expensive at the lands than in the village (see Chapter Eight). Secondly, lands residents have to make long trips to the village shops to purchase some items which they cannot get at the lands retail outlets (see Chapter Eight). However, some of these losses are either discounted or are not regarded as losses.

To conclude this section, it is noted that the main reason for permanently migrating to the lands is the desire on the part of the people to be near their fields and livestock. The large majority of them see the distances separating their lands and their previous village as a major obstacle to improving their farming. For some the cost of transporting crops and household effects is just prohibitive. Thirdly, living at the lands is viewed as being cheaper than living in the village.
Who are the Villagers?

We have noted above the reasons given for migrating from villages to the lands. But not everybody is abandoning the villages. In order to put migration to the lands in perspective it is necessary to examine briefly the characteristics of the people who are still engaged in seasonal movements. It has been noted above that people living in the villages have in some instances similar characteristics to those who are now living at the lands. For example, their agricultural production and productivity are just as low; the majority of them do not own any means of transport and about the same percentage keep their cattle at the lands. Indeed, they too recognise the advantage of living at the lands in the same way as their lands counterparts. This is clearly shown in Table 5.17 which is based on answers given by Gabane people to the question "Why do you think people are staying permanently at the lands?" If they recognise the advantages of living at the lands, what makes them maintain the traditional way? They should, after all, be affected equally by distance.

Part of the answer lies in the reasons given by the Molepolole people for coming back to the village (see Table 5.18 and Fig 5.6). For one fifth of the households, the reason for returning to the village after harvest was lack of water at the lands (see also Chapter Six).

Coming back to the village to maintain homes accounted for nearly half the responses. It does appear that quite a number of village-based households have invested relatively heavily in housing. In general, we can say there are proportionately more of Henderson's Type Three to Type Five houses in the village than at the lands (see Henderson, 1974: 228-30).³

³ Type One: "single untidy hut thatched in the traditional style. Frequently unfenced but not necessarily so: door nothing more than a collection of twigs".
Type Two: "two rondavels of average size thatched in traditional style".
Type Three: "two rondavels of modern thatch and construction. Rondavel size larger than in type two".
Type Four: "fully developed compound consisting of three, four or five rondavels usually modern thatched plus a kitchen area".
Type Five: "fully developed compound with one or two square buildings of modern thatch. May also be of tin roofing......."
Why other people return to the village after harvesting

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percent giving Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>To improve and maintain their homes</td>
<td>28.4%</td>
</tr>
<tr>
<td>Lack of water at the lands</td>
<td>20.0%</td>
</tr>
<tr>
<td>To attend funerals and other ceremonies</td>
<td>14.3%</td>
</tr>
<tr>
<td>Have homes in the village/like the village</td>
<td>9.4%</td>
</tr>
<tr>
<td>To attend kgotla meetings</td>
<td>8.5%</td>
</tr>
<tr>
<td>To live with school going children</td>
<td>4.9%</td>
</tr>
<tr>
<td>To brew and sell beer</td>
<td>3.6%</td>
</tr>
<tr>
<td>To be near hospitals, schools and shops</td>
<td>3.0%</td>
</tr>
<tr>
<td>Have other people to look after cattle</td>
<td>2.8%</td>
</tr>
<tr>
<td>Traditional to return to village after harvest</td>
<td>2.6%</td>
</tr>
<tr>
<td>Have means of transport</td>
<td>1.7%</td>
</tr>
<tr>
<td>To sell their produce</td>
<td>0.93%</td>
</tr>
</tbody>
</table>

Source: Field Data
TABLE 5.17 Reasons Given in Gabane why People have Settled at the Lands

<table>
<thead>
<tr>
<th>Reasons</th>
<th>No. Giving</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To attend to their fields &amp; livestock</td>
<td>82</td>
<td>35.7</td>
</tr>
<tr>
<td>2. No place in village</td>
<td>37</td>
<td>16.1</td>
</tr>
<tr>
<td>3. Village life expensive</td>
<td>16</td>
<td>7.0</td>
</tr>
<tr>
<td>4. Are either witches or have been bewitched</td>
<td>16</td>
<td>7.0</td>
</tr>
<tr>
<td>5. Have schools at their lands areas</td>
<td>15</td>
<td>6.5</td>
</tr>
<tr>
<td>6. Expensive to move up and down/</td>
<td>25</td>
<td>10.8</td>
</tr>
<tr>
<td>can't maintain two homes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. To enjoy freedom of the lands/</td>
<td>21</td>
<td>9.1</td>
</tr>
<tr>
<td>do not want to be controlled by chief</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Have water and shops at their lands</td>
<td>12</td>
<td>5.2</td>
</tr>
<tr>
<td>9. Other reasons</td>
<td>6</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>230</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Author's Fieldwork

The extra care taken to maintain the homes in the village has caused Kooijman to remark:

"There seems to be an apparent contradiction in the fact that so much more care is taken of the little used village-home than the farm dwelling, but traditional beliefs and practices die slowly and it is still considered extremely important to be buried from the house in the village."

(Kooijman, 1978: 84)
TABLE 5.18 Reasons Why People Still Return to the Village After Harvest

<table>
<thead>
<tr>
<th>Reasons</th>
<th>No. Giving Reasons</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Maintain home at the village</td>
<td>81</td>
<td>44.42</td>
</tr>
<tr>
<td>2. Lack of water at the lands</td>
<td>60</td>
<td>32.61</td>
</tr>
<tr>
<td>3. Village convenient for social facilities/</td>
<td>10</td>
<td>5.43</td>
</tr>
<tr>
<td>have children at school in village</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Attend ceremonial occasions including</td>
<td>13</td>
<td>7.07</td>
</tr>
<tr>
<td>kgotla meetings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Other reasons</td>
<td>10</td>
<td>5.43</td>
</tr>
</tbody>
</table>

Source: Author's Fieldwork

Therefore having earlier invested in relatively expensive homes in the village, people stand to lose if they abandon their homes. This, incidentally, is one of the reasons why some of the most progressive farmers are still engaged in seasonal migrations. But they also own the best houses in the lands.

From the interviews it did emerge that a substantial number of permanent lands households previously had poor homes in the village - none of them beyond Type Two. Their present homes, the converted mekgoro (temporary homes at the lands), belong to the same class as their previous homes in the village.

Maintaining a home in the village may also be taken as an index of traditionalism. In this context it is also interesting to note that one of the reasons given for returning to the village after harvest was to attend ceremonial and other tribal occasions. A number do not countenance the idea of being buried at the lands.

The main attractions of the villages, however, are the social and other services that they provide. At the village, the services (right up to the highest order) are accessible. This point will be dealt with in detail in later chapters.
Conclusions

The main reason for settling permanently at the lands is clearly economic: to be near fields and livestock. Settling permanently at the lands makes it possible to save on time and on transport costs involved in travelling between lands and villages.

For the traditional farmer, whose production is below subsistence level, savings on transport costs are an important consideration. Savings on transport costs as well as time are also crucial for a progressive farmer.

The second main reason why people are leaving the villages is lack of land to build their houses. This was not expected and suggests an area for further investigation. However, there is an indication that most of the people now settled at the lands previously had no homes of their own in the village. The third reason is the relatively lower cost of living at the lands. This derives from better access to milk and wild fruits and building materials and the possibility of obtaining income from the sale of these products to the people in the village.

Settlement at the lands, however desirable from an economic point of view, is not easy, nor indeed possible, if water for both human and livestock consumption is absent. In the next chapter we examine current government policies towards the provision of water and social services at the lands.
CHAPTER SIX

Permanent Settlements at the Lands: The Role of Government Policies

In Chapter Five lack of water at the lands was given as one of the prime reasons for returning to the village after harvest. During this century other necessities that have increased the pull of the villages are the schools, hospitals and shops located there. Since independence, the policy of concentrating development in the villages has changed. In this Chapter we examine some of the rural development policies of the Botswana Government and note how they have had a direct effect on population movements, and on migration to the lands in particular. The policies reviewed are those regarding the provision of social (education and health) services and of water.

While we shall be examining those policies that have a direct effect on migration to the lands, it is important to realise that there are other policies that have had indirect positive effects on migration. An example of these policies are the new licensing laws (see Chapter Seven). The effect of extension policies has been noted in Chapter Five.

Studies on the relation between migration and government policies (other than the resettlement policies considered in Chapter Three) in developing countries are almost non-existent. The effect of government policies on migration is, however, implicit in the studies of rural urban migration, which generally attribute this phenomenon to urban-biased development policies.

The Colonial Background

As already argued, when Botswana achieved independence in 1966 after nearly 80 years of British colonial rule, it inherited "a backlog of poverty". The British had not done very much to develop the country, which was considered to be a desert without water or coal.
Up to 1933 the objectives of the British Government with regard to Bechuanaland were two fold.

"Its principal aim was to prevent, at minimal cost to it, the achievement of control over Bechuanaland by any other foreign power or government, and thereby to preserve the Territory as a link between the Cape Colony and areas of potential British interest in central Africa."

(Hermans, 1974: 9)

The second aim was to prepare the Protectorate for incorporation into South Africa as soon as it was practicable. As a result of these attitudes, the Administration did not interest itself in the economic and social development of the country. Thus well over half of the budget was spent on the police and negligible amounts were spent in the educational and medical fields as Table 6.1 illustrates. For the year 1929, for example, Spence has noted that £60 921 (or 79% of all expenditure) was spent on administration, leaving only £32 337 for social and economic improvements, including health and education (Spence, 1964).

The general development of the country was left on the shoulders of the Batswana themselves, with some assistance from the Government and the church missions. The latter were particularly active in the development of health services. Thus by 1930, they had established hospitals at Kanye (Seventh Day Adventist), Mochudi (Dutch Reformed Church) and Molepolole (Free Church of Scotland). The Government started only in 1930 to allocate small amounts under Public Works (Extraordinary) for these purposes (Hermans, 1974: 103). Once health facilities were consolidated in the main villages, the missions extended them to the other villages in the reserves. Thus in the Kweneng, Dr Sheppard started in 1937 making weekly visits to Thamaga after the harvest period when people were in the village. In 1955, Dr Merriweather initiated a mobile clinic system to the outlying villages in the north and west - Lephephe, Sojwe, Letlhakeng, Ditshegwane, Takatokwane and Tsetseng, etc.¹

¹ Dr A D Merriweather, interview, Molepolole, 11.5.1978.
### Table 6.1: Bechuanaland Government: Recurrent Expenditure 1899/1900 - 1960/1961 (P'000)

<table>
<thead>
<tr>
<th>Financial Year</th>
<th>Police</th>
<th>Medical</th>
<th>Education</th>
<th>Public Works Ext.</th>
<th>Vet. &amp; Agric.</th>
<th>Misc.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899/90</td>
<td>68.6</td>
<td>0.6</td>
<td>-</td>
<td>1.9</td>
<td>-</td>
<td>20.0&lt;sup&gt;a&lt;/sup&gt;</td>
<td>120.8</td>
</tr>
<tr>
<td>1919/20</td>
<td>80.6</td>
<td>4.5</td>
<td>4.1</td>
<td>2.1</td>
<td>23.9</td>
<td>-</td>
<td>183.2</td>
</tr>
<tr>
<td>1940/41</td>
<td>56.5</td>
<td>46.7</td>
<td>25.4</td>
<td>18.3</td>
<td>70.5</td>
<td>-</td>
<td>448.8</td>
</tr>
<tr>
<td>1960/61</td>
<td>425.5</td>
<td>407.9</td>
<td>227.0</td>
<td>110.5</td>
<td>82.3</td>
<td>-</td>
<td>4541.2</td>
</tr>
</tbody>
</table>

<sup>a</sup> Railway Subsidy payments for carriage of mail to Palapye

Source: Hermans, 1974: 114
In the field of education again early initiatives came from missionaries. The first school was set up among the Bakwena at Kolobeng in 1853 by Livingstone (Pim, 1933: 77). This was soon followed by others, e.g. the Ramoutswa school opened by the Lutheran Mission in 1876. The role of the Dutch Reformed Church among the Bakgatla is sketched by Schiele (1972). However, the development and expansion of educational facilities were undertaken by the tribes themselves. The Protectorate Government regarded the provision of educational services as being primarily a tribal responsibility. In 1954, for example, an inventory of physical facilities in the schools in the Southern reserves (Bakwena, Bakgatla, Bamaletse and Bangwaketse) was undertaken. Shortages were identified and meetings of the chiefs and their people were called by officials of the Department of Education.

"The solution was left to the people and in every case the reaction was very satisfactory. Definite proposals for improvement were put forward and comprehensive plans to wipe out shortages within three or five years were drawn up in each reserve by tribal administrations acting in consultation with the Department."

(Bechuanaland Protectorate, n.d.: 17)

Until 1924 the annual expenditure on education never exceeded £2 000. It was devoted solely to contributing towards the costs of a school inspector, whose services were shared with Basutoland and Swaziland, and to small grants to mission and private schools. It was not until 1930 that the total annual expenditure on education first surpassed the amount spent by the Police on horse rations and transport maintenance! That the Government involvement in education was minimal can also be illustrated by the growth of the Education Department establishment. In 1940, only 14 out of a total of 817 established posts in the Protectorate Government were in the Education Department; in 1950 the Department had an establishment of 33 out of a total of 1 248; and the figure had increased only to 134 in 1960 but out of a total establishment of 2 451. "A high proportion of the staff of the Education Department was, moreover, employed on administrative or regulatory functions." (Hermans, 1974: 104).

The funding of educational services was thus left in the hands of tribes to carry out to the best of their ability. The main source of funds for this
purpose was the Native Tax, a tax imposed in addition to the Hut Tax by
Proclamation No. 47 of 1919. This Proclamation prescribed that each adult
African should pay at a rate of three shillings (later increased to five
shillings) a year. Part of the funds were devoted to medical work and
the eradication of cattle diseases (Pim, 1933: 98-99).

The funds raised through the Native Tax were insufficient to meet the
educational demands, minimal though they were, of the Batswana. In most
cases recourse had to be made to tribal levies, whereby tribesmen were
asked by the chief to contribute either in cash or kind for a specific
cause. Such levies might either be for one single specific purpose, or they
might be annual payments designed to meet annual expenditure, usually
expenditure on education.

There are various examples of the use of tribal levies for both capital and
recurrent expenditures:

"Despite his severity, Chief Isang [of the Bakgatla of Mochudi] among
the progressive things took a deep interest in education ...... it may
be said that his views on this important aspect were effected by the
establishment of a big modern school known as the Bakgatla National
School ...... The funds for the erection of this laudable project were
raised from a special levy of £5 per head upon the members of his
regiment (Machechele) and £4 per head upon the members of the Magatshwana
regiment for the building of the Principal's quarters. For equipment,
desks and benches every woman in the tribe was charged two shillings."

(Gabatshwane, 1957: 60)

Examples of standing levies to meet recurrent educational expenses among the
Bamangwato, the Barolong and the Bangwaketse are given by Sir Alan Pim in
his report (Pim, 1933: 103).

In 1938 tribal finances were reorganized, after the creation of Tribal
Treasuries. The essence of this innovation was that all taxes paid by
Africans until 1966 went into this fund. Educational expenses were among the
main responsibilities of Tribal Treasuries, taking in each case not less than
35% of the funds (Hermans, 1974: 104). It was a burden that the tribal
administrations were not adequately prepared, financially, to shoulder. The
1953 report of the Department of Education observed:

"Practically the whole of the recurrent expenditure is spent on payment of teachers' salaries, and some tribal authorities find difficulty in meeting the annual increased burden resulting from incremental salary scales."

(Bechuanaland Protectorate, n.d. (a): 15)

As a result the tribal administrations were unable to improve the physical conditions in their schools. The schools were characterized by, among other things, acute shortages of desks and classrooms, the latter necessitating the holding of some classes under trees or double shift systems or both.

The education in each reserve was controlled by a school Committee composed of the chief and his official(s), the local missionary and representatives of the Administration. This system arose as a result of dissatisfaction with what the tribes saw as missionary interference in a system which the tribes felt was wholly funded by themselves (Pim, 1933: 78-79; Schapera, 1970: 247-48).

In conclusion, it should be noted that, although towards the end of the colonial era the Protectorate Government took an increasing interest in the social development of the Bechuanaland Protectorate, educational and health facilities were poorly developed at independence. Indeed with an illiteracy rate of 68% at independence, Botswana was among the most backward countries at independence. The country faced a serious problem of shortage of skilled manpower, even in the field of primary education. The colonial educational system was an extremely wasteful one. Looking at it at this point in time, it strikes one as having been an extremely costly system, making one wonder whether all that expenditure for such low returns was really justified. For example, an analysis of the enrolment figures for the years 1950-1953 shows that of about 6 000 pupils starting in the first year of primary school, only about 350 reached the last year of the primary course. Of those who reached the final year, less than half were successful. The greatest wastage was at the end of the first year, at which point nearly half the pupils dropped out. The 1953 Report concluded:

"It is evident from these figures that far too few pupils get through
the bottleneck at the end of their first year at school. As physical conditions in schools improve and as the number of trained teachers increases there should be an improvement but this problem is likely to remain for some time."

(Bechuanaland Protectorate, n.d. a 15. Emphasis author's.)

Education was seen at independence as one of the keys to the development of the country and indeed as a fundamental freedom. Even though funds were still limited, the Government was committed to improving the educational standards of the mass of the population as will be shown below.

Up to independence the chiefs, who dominated the tribal government, had done the best possible under the circumstances. Indeed, in developing the educational system to the level they did, they had shown an innovative ability which was paralleled by few societies in Southern Africa. The domination of the educational system by the chiefs had a spatial implication, which is one of our main interests here. As long as the chiefs directed the affairs of their tribes the location of schools was automatically restricted to the villages (Schapera, 1970: 42-43). This was consistent with their desire to maintain villages and to ensure that they grew in size and prosperity (see Chapter Four).

Health facilities, which were less subject to chiefly influence on account of outside funding and, in later years, annual grants from the Government, were also concentrated in the villages. According to the wisdom of the time, this was where the population was concentrated; and indeed at the height of chiefly power very few people, as argued in Chapter Four, lived at the lands. In any case the missions could hardly afford to spread health facilities to the lands areas even during the agricultural season. No wonder Dr Merriweather always advised the women, "When you are in your last month of pregnancy do not stay far away at the lands, rather come home and stay near the hospital" (Merriweather, 1968: 44).

Attention can now be directed to the development of water resources. It is, however, not easy to isolate this discussion from the general discussion of the development of agriculture, to which it is closely linked. It has to be realised that the Protectorate Government, right from the outset, appreciated the potential role of agriculture, in particular, livestock
agriculture (Pim, 1933: 88). Hermans has noted in passing that: "The economy of Bechuanaland, to say nothing of the revenues to the Administration, was highly sensitive to the outbreak of disease among cattle" (Hermans, 1974: 104)

In accordance with the logic of strengthening the sector that was already emerging as the backbone of the economy, and apparently under pressure from the South Africans (Falconer, 1971), the colonial government established the Veterinary Department in 1905. It was the first professional service department to be created:

"Its primary function, from the outset, was to prevent the spread of, if not eradicate, the livestock diseases which periodically ravaged the livestock industry. It is not surprising under the circumstances that the needs of the Veterinary Department were given priority over health and education ......"

(Hermans, 1974)

The Department of Agriculture was created in 1936 and had a very small budget. The annual expenditure by the Department exceeded £50 000 for the first time in 1955, "and averaged less than 2% of annual recurrent expenditure over the whole period" (op. cit: 105). Consequently, little effort was made to assist farmers to increase yields or to improve standards of livestock management until towards the end of the colonial period. Thus at independence, very little progress had been achieved in this sector.

The colonial government, however, did put relatively greater effort into the development of certain aspects of the livestock industry. The Veterinary Department was by and large successful in eradicating stock diseases by the time of independence. Another area which was given some attention because of its close association with the livestock industry was water development. In a semi-desert country like Botswana, the development of water resources was seen as a sine qua non of any development, particularly in the development of the key livestock industry (Roe, 1979: 15-16). Sir Alan Pim summed it up this way:

"At every stage of our enquiries, whether they related to agriculture, to cattle or to human health and amenities, we realised that the absolutely essential condition to any progress was the improvement of the existing water supplies and the provision of new supplies. It
is no empty form that the tribal greeting at the end of any ceremonial proceedings is in the words 'Pula', 'Pula' - 'Rain', 'Rain'."

(Pim, 1933: 110)

Until early this century, the main sources of water were wells, springs, pans and flowing streams. The advent of colonial rule brought with it new technology - dam construction and borehole drilling. As with social services, during the early years of the Protectorate, i.e. before 1930, water development for humans (village) and livestock (cattle posts) was primarily the responsibility of the Batswana themselves. The position has been summed up by Schapera as follows, with an example from the Kgatleng:

"At first practically all water development in the Reserves was undertaken and paid for directly by the Tswana themselves. The Administration's share was limited almost entirely to sinking wells along a few of the principal routes by which cattle for export were trekked to the railhead. In 1919, however, a special Native Fund was created [and the Fund's] omission of specific reference to the provision of water supplies indicated the relative unimportance in which they were held at the time ..... Nevertheless, the Native Fund had contributed in a modest way to the most notable effort made by any tribe to improve its water position. In 1927 Isang, while Acting Chief of the Kgatleng, carried out an elaborate programme of boring for water in his Reserve. A grant of £500 from the Fund proving inadequate, he imposed a levy of £6.10s upon every taxpayer in the tribe. He raised about £4,000 altogether; £1,500 was spent on boring, with a drill and expert labour hired from the Union Government, and the balance paid for installing pumps and reservoirs."

(Schapera, 1942: 241-42
Emphasis added)

After 1930, particularly after 1933 when the Pim Report was published, the Protectorate Government took a growing interest in the development of water resources (Table 6.2), mainly for the livestock industry. It is estimated that by 1940, some 120 boreholes had been drilled by government, opening up communal grazing for at least 70,000 head of cattle or about 10% of the national herd for that year (Roe, 1979: 3). During the period 1946-56, it is estimated that the government drilled 414 boreholes (220 successful ones), with an additional 395 boreholes being drilled for private use by drilling contractors (op. cit: 14). The most intensive government drilling programme was during the period 1955-1960. Roe summed it up as follows:
"Funded by the largest Commonwealth Development and Welfare grant for over £400,000, explicitly for the purpose of increasing the cattle population, government-sponsored borehole drilling expanded from 73 boreholes in 1955 to 152 in 1958. Just in 1958 alone, as many successful boreholes were drilled in the Kgalagadi tribal area as had been drilled there up to 1941."

(ibid)

<table>
<thead>
<tr>
<th>Year</th>
<th>Underground Water Supplies (Boreholes) (£)</th>
<th>Surface Water Supplies (Dams) (£)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1935-37</td>
<td>25 300</td>
<td>-</td>
<td>25 300</td>
</tr>
<tr>
<td>1937-46</td>
<td>127 312</td>
<td>-</td>
<td>127 312</td>
</tr>
<tr>
<td>1946-55</td>
<td>243 127</td>
<td>104 930</td>
<td>348 057</td>
</tr>
<tr>
<td>1955-60</td>
<td>411 628</td>
<td>88 396</td>
<td>500 024</td>
</tr>
<tr>
<td>1960-65</td>
<td>42 650</td>
<td>-</td>
<td>42 650</td>
</tr>
<tr>
<td>Total</td>
<td>850 017</td>
<td>193 326</td>
<td>1 043 343</td>
</tr>
</tbody>
</table>

Source: Roe, 1979: Table 4

The government water development programme slowed down after 1960, and would perhaps have ground to a halt if it had not been for the drought. Between 1963 and 1966 the drilling of boreholes for private cattle owners on a repayment basis was among the priorities of the Department of Agriculture (Republic of Botswana, n.d.). Between 1964-66 approximately 1 100 private boreholes were sunk, many of which were in sandveld areas towards the Kgalagadi (Roe, 1979: 15).

To summarise, at the time of independence, the British had considerably developed the water resources of Botswana relative to other developments. Most of the attention was directed to developing water for the livestock industry, which was the backbone of the economy. This was predictable for a colonial power which was not prepared to subsidize the costs of administering and developing this poor dependency.
The consequence of concentrating on water provision for livestock was the neglect of water development at the lands areas. Only a negligible number of government boreholes were sunk at the lands areas. "Of the some 20 boreholes operating in the Kgalala tribal area in 1941, only 1 was located in an arable lands area, while 14 were located in specific grazing areas" (Roe, 1979: 16). A few dams had been constructed at the lands areas (op. cit: 12), a move that had the sympathy of some chiefs (Schapera, 1970: 42). It is indeed true that the chiefs did not discourage their people from developing their own watering points at the lands. The chiefs saw the development of water resources at the lands as a means of relieving the suffering of people as a result of shortage of water (especially during the occasional dry spells) during the agricultural season. And so a number of private boreholes and wells were sunk during the period under review.

However, in spite of some progress in providing water at the lands, the situation at independence (and in some lands to the present) is that water was relatively scarce at the lands, particularly during the dry season; which is why some of the people still living in the village mentioned lack of water as their main reason for returning to the village after harvest. The main sources of water were (and still are in some lands) pools left by the summer rains. As the dry season set in, the pools dried up and people were forced either to walk very long distances to fetch water or to return to the main village. One of the early households at Medie used to fetch water 14 miles away from their homestead; an activity that often claimed two days a week. Eding and Sekgoma found that sufficiency of water varied from 14.4% in some lands to 58.5% in others (Eding and Sekgoma, n.d.: 29). Because of poor provision of water at the lands, people there have been known, in general, to travel longer distances to sources of water than the village people (Syson, 1973: 32).

**Independent Botswana: Policies and Migration**

As already explained above, the policies that will be reviewed in this section are those dealing with the provision of water and social services. They have been isolated as being the most crucial in the understanding of the possible effect of government policies on decisions to settle permanently at the lands. It is important for the reader to appreciate from the outset that these are not necessarily the only rural development policies followed
by the Botswana Government. Indeed it is essential for the reader not to
take the policies discussed here out of their context. It should be borne in
mind all the time that these policies are part of a larger package. Before
we can discuss them, it is, however, necessary to explain the national
text, the determinants, the constraints, etc, within which they are
formulated. In the process, we shall also be able to trace the evolution of
those policies affecting rural-rural migration.

The Background

The practice of national planning in Botswana has its roots in the last years
of colonial rule. The first development plan for independent Botswana was
the Transitional Plan for Social and Economic Development, published on the
day of independence, 30th September 1966. A very modest document, it represen-
ted a first attempt at stock-taking and from this to project the develop-
ment of various sectors of the economy with the aim of improving the quality
of life of Batswana. The Plan was formulated at the time when Botswana was
in the middle of a most devastating drought. Consequently, Botswana was not
able to meet its recurrent expenditure from its own domestic revenues until
1972. The main source of grant-in-aid to meet budgetary deficits was the UK,
which provided Rand 6.1 million (or nearly one third of the total recurrent
expenditure) in 1969 (Republic of Botswana, 1970: 148). This situation
obviously put the Government in a dilemma:

"The Government was thus faced with two alternatives: either to seek
from donor countries budgetary aid not only to enable existing services
to be maintained, but also to meet the recurrent costs generated by
the implementation of development projects, or to reconcile itself to
the prospect of prolonged stagnation at subsistence level."

(ibid)

Hence,

"a development plan, if it is to be practicable, must be formulated
within the limits of available resources, human, physical and financial.
Since Botswana is almost entirely dependent on donor countries for
finance for the Plan, the size of the development programme proposed
cannot be determined simply by consideration of the availability of
funds."

(ibid)
Given these financial limitations, the Government tended to follow immediately after independence a "conservative" policy in the area of social provision. The policy aimed at consolidating and improving the existing facilities rather than attempting their dramatic expansion. (Any new additions, e.g. the expansion of secondary school facilities, were exceptional and highly selective.) In the field of primary education, the Government argued that in view of limited funds the central government should direct its efforts towards the "upgrading of standards rather than to increasing the quantity of education" (Rep. of Botswana, 1970: 99). In health provision, "priority has been given to the staged development of existing 'core' medical institutions in the main population centres" (Rep. of Botswana, 1968: 60). Hence, "it is intended during the five year period to renovate and expand all five district hospitals" (op. cit: 61).

In contrast to this "conservatism", the Ministry of Agriculture, as will be shown shortly, was able, as early as 1966, to enunciate and implement new policies that marked a somewhat radical departure from the existing ones.

By 1972, with burgeoning domestic revenues as a result of (a) a revision of the Customs Union agreement in 1969, (b) the exploitation of diamonds at Orapa, and (c) a succession of good rainy seasons, the situation had changed drastically. "Expansionist" policies, especially in providing services, began to manifest themselves. For the first time, rural development became a focus of national planning. In that year the Government published a white paper on the subject and appointed a consultancy on how best rural development could be planned and implemented (Rep. of Botswana, 1972; Rep. of Botswana, 1973a; Rep. of Botswana, 1973b).

The key economic policy under these changed circumstances became one of:

"(a) securing rapid and large returns to the nation from intensive capital investment in mining and other viable modern industries mainly aimed at export markets; and (b) re-investing the revenue from these investments in (i) education and training, (ii) the promoting of agriculture and labour-intensive manufacturing activities, and (iii) the improvement of services in the rural areas."

(Rep. of Botswana, n.d. c: 37)
This was the policy underlying the aims of Government's rural development as outlined in the 1972 white paper (Rep. of Botswana, 1972: 3).

Since about 1972 the policy of providing social services to areas outside the villages has been pursued both by the central government and by some local authorities. Before then some councils had provided a few services on an ad hoc basis under pressure from the local and national politicians keen to curry favour with their constituents.

Agriculture and Water Policies

The system of separating the three land uses (residential, arable and livestock) has long been recognised to have some distinct disadvantages. These disadvantages include the consequent inaccessibility of milk to the majority of the population and the difficulty, if not impossibility, of carting manure to the fields. In essence Batswana operate two systems of farming which are not related.

Since independence the traditional system has come under increasing criticism. It is being seen as an impediment to the improvement of arable agricultural productivity. In an eloquent speech opening the Ngwaketse Agricultural Show in 1970, the President of Botswana urged the people to abandon their villages and settle permanently at their lands:

"We cannot hold blindly to all the old ways and expect to survive. One change that must gradually come about is a move away from our large traditional villages. Many of the reasons which brought our people to live in such large villages no longer apply. We do not need to defend ourselves from enemies as we did in the past. Most of the inhabitants of our large villages depend for their livelihood on farming .... to farm properly people must live on or near their farms so they can work at farming all the year round."

(Sir Seretse Khama, 1970: 5)

Indeed the problem of how to combine the three land uses harmoniously together prompted Dr Fosbrooke, the Rural Sociologist in the Ministry of Agriculture, to propose the "hamletisation" of the countryside. The plan essentially envisaged the creation of small villages, each with its own livestock and lands close by (Fosbrooke, 1971). Fosbrooke's prescriptions will be treated at greater length in the next chapter.
The problem of harmonising the rural land uses had in fact exercised the mind of Government from the time of internal self-government in 1965. The key to the achievement of what the Government called integrated agriculture, which is really mixed farming, was seen as the provision of water at the lands areas. In 1966, the Government established a mechanised dam building unit at a cost of R360 000, provided by the UK Freedom from Hunger Campaign. The unit had a capability of building 30 dams a year. The dams were to be built at the lands areas and the reasons for these dams were given as follows:

"Storage dams located in arable farming areas would enable cattle and work oxen to be kept at the arable lands in early winter. The farmer could then practise winter ploughing - an essential technique for any dry land agriculture - and he could feed crop residues to his stock. The farmer would also have a better supply of natural manure to apply to his arable lands. Permanent water supplies at the arable lands would enable the farmer to live at his "lands" all the year round and practise an integrated arable and livestock system. With the farmer permanently resident at his arable lands, with his stock in the vicinity, there would be better contact with the field extension staff and other services."

(Rep. of Botswana, 1966: 18)

Under the mechanised dam building unit, a number of small dams were constructed at the lands areas. However, by 1972, apparently due to shortage of funds, the project had collapsed. The idea of building small dams was revived in 1973 by Chambers and Feldman (Rep. of Botswana, 1973a). Chambers and Feldman noted in their report in connection with boreholes that:

"Past developments and these present trends have major implications for the distribution of rural wealth and incomes. The disposal of boreholes which were formerly public property to syndicates and individuals has in the past few years radically reduced the potential availability of grazing land to other users. In Kweneng, for instance, about three quarters of the Council boreholes have been sold off to syndicates and individuals. There and elsewhere, the emergency boreholes installed during the drought have been similarly acquired. The CD and W boreholes in Central District, despite central government pressure to the contrary were disposed of to individuals and syndicates .... the net effect has been to provide cheaper water to fewer, better off people, while squeezing out some of those with smaller herds."

(op. cit: 117)
To alleviate the suffering of households with small herds, Chambers and Feldman argued that priority should be given to providing water supplies to "mixed farming areas". The aim would be "to encourage more permanent settlement, and to reduce time and energy spent fetching water, to facilitate more timely agricultural operations, ploughing and grazing instead of trekking to and from water," (op. cit: 174). Chambers and Feldman further argued that, in view of the fact that the people who live in smaller villages and at the lands are not capitalised, they should be provided with water supplies at highly subsidised rates, if not for free.

Chambers and Feldman recommended "the setting up of a special Rural Water Supplies Unit to provide extension advice, materials and where necessary direct assistance with installation for water supplies in smaller villages and in mixed farming areas" (op. cit: 175). This recommendation was accepted by the Government and out of it arose the Small Dam Building Unit (Rep. Botswana, 1973b: 11). The Small Dam Building Unit (SDBU) was set up in 1973 within the Ministry of Agriculture. The Ministry views the dams constructed under this programme as being "primarily for stock watering" (Ministry of Agriculture, 1974: 1). The main aim remains that of reaching the smaller farmers:

"The groups which are to be subsidized have been fairly generally defined. They should consist of perhaps 15 members, with an average herd size of not more than twenty head. This will allow for expansion. In order to ensure that benefits designed for the group are not gained by a single person, no one should water more than fifty head at the dams."

(ibtid)

The SDBU has a building capacity of 20-30 dams per year. It has constructed 80 dams in the period 1974/78, at an average cost of R8 000 per dam (ALDEP, 1979: 1). Once the dam is completed it is handed over to the District Council, which either administers the use of the dam itself or hands over complete responsibility for maintenance to established groups of farmers using the dam.

It is perhaps too early to assess the impact of the present and earlier dam construction programmes. The general impression is that the dams which were
built earlier and which have had the opportunity of filling up are heavily used for watering both livestock and humans. ALDEP claims that the SDBU has made a significant contribution to the provision of water supplies in the lands areas (ibid). The majority of the lands population, however, still depends upon water from boreholes.

**Education Policies**

It has already been noted that the policy at independence and for some years immediately afterwards was to concentrate on improving facilities at the existing schools, i.e. schools in the villages. Nor had the educational administrative structure changed radically. The District Councils, heirs to Tribal Administrations, are responsible for the capital and recurrent costs (other than the teachers' salaries) of primary education; the costs which account for more than 50% of their recurrent expenditure. The central government, through the Ministry of Education, however, pays councils grants and also covers the recurrent deficits. The Ministry of Education is also responsible for professional matters, inspection, standards, registration of schools, teacher training and curriculum development.

The period from just before independence has been one of educational upsurge. For the first time education seemed accessible to the majority, which saw it as a passport to the good things of life for their children. Thus primary school enrolment doubled from 62,839 in 1964 to 124,265 in 1976 (Rep. of Botswana, n.d.c.: 101; 1977: 108). The upsurge in primary school education has caused havoc to the policy of improving facilities in the established schools. The result is that to date (1979) the country has barely coped with the improvement of physical facilities and teachers (Rep. of Botswana, 1977: 109-112).

The increased demand for education manifested itself in the sprouting of new schools at the lands, started by the people themselves. A report by the Ministry of Education has noted:

"The upsurge in Primary School enrolments in the 1960s was accompanied by the growth of unregistered schools. They were partly to cater for those who could not afford the fees, reasonable though they were at R6.00 a year; but probably more frequently to provide schooling for
the isolated communities into which the District Councils had been financially unable to expand. In the majority of cases these schools were started with the best of intentions; regrettably most operated in such poor physical conditions and with lack of professional expertise that they could not meet the requirements for registration in terms of the Education Law. On the other hand, because they were at least attempting to give a service, Councils and Government have been loathe to take legal action to close them. Where the situation has been most serious Councils have tried to find extra funds to gradually take over some of them."

(Rep. of Botswanas, r.d.d.: 12
Emphasis author's)

The initial policy was therefore one of giving unwilling encouragement to the development of schools at the lands areas. It would have been impolitic for either the Council or the Government to close down the schools at the lands, poorly constructed though they might be. As already explained, the schools are started by the parents and sometimes do not have even a single building, pupils being taught under a tree. Once the school has come into existence the District Council comes under pressure from the people themselves and the local politicians to take it over. While noting that there was no rational spatial planning in the Central District, Dixey described the process this way:

"Firstly if a community makes its demand for a school known to the Council (usually through motions presented by the Councillor), then the Education Department of the Council will investigate and assess that Community's need. For example Councillor White brought a motion that a new school be built at Mokobo Village, at the Central District Education Committee meeting 8.3.78. The village was visited on 5.10.78. It was found that the nearest school is 19 km away, and there are 300 children of school going age. .... The community had raised P215.80 and thus it was recommended that 6 classrooms be built at Mokobo. Secondly the Council tends to give aid to those communities which embark on self-help enterprise, it seems more likely that communities which are seen to be helping themselves will in turn be helped!"

(Dixey, 1979: 3)

Faced with a populace hungry for education, the politicians have not been able to dampen their appetites. Indeed, championing the cause of their constituents in this field has become one of the cornerstones of their support. Even cabinet ministers, who are worried about the costs of such schools once they are back in Gaborone (see Chapter Seven) have not been able to stem the tide; rather they have swum with it:
"Minister of --- has asked villagers at Mmakanke and Sasakwe in the Kweneng District to register their private schools so that they may be recognised by both the Council and the Government. The existence of the schools was disclosed to the Minister by the residents of the area during his recent tour of villages in the district. The two schools were opened at the beginning of this year. Sasakwe has 69 pupils and is run by a staff of three teachers while Mmakarke has 29 pupils."

(Toise, 1974)

The development of schools from the grassroots is happening all the time. Recently in one of the lands areas, again in the Kweneng District, the people asked their Member of Parliament, another cabinet minister, to officially open their private school, and this is part of what he had to say:

"The Minister said the initiative taken by the residents was in compliance with Botswana's four national principles of Unity, Self-reliance, Development and Democracy. .... He remarked that Diagane residents have taken a lead in demonstrating the spirit of self-reliance. He suggested that the Kweneng District Council take over the administration of the school to relieve the residents of the big burden."

(Matschediso, 1979: 2)

The main result of these grassroots actions has been the proliferation of schools at the lands areas (Fig 6.1). In the Southern District there were 22 private schools in 1974 and "many more are cropping up all over" (Pilane, 1974). Concerned about this undirected development, the Government recently laid down policy guidelines for the siting or locating of new primary schools:

"(a) New schools were not to be less than 5 km from an existing school;
(b) a population of 1,000 or more would justify a school with an annual intake of Standard I; one with 500-1,000 people would justify an intake into Standard I every other year and one with less than 500 people would need a one/two teacher school;
(c) before establishing a new school information regarding future development of the proposed area, i.e. land use plans, water, road development and other facilities needed by schools should be collected and evaluated;
(d) Councils are requested to keep a close check on future development of new private schools by insisting that all private schools be registered, and also to discourage sponsors from siting schools too close together."

(ALDEP, 1979a: 2)
Fig. 6.1

EASTERN KWENENG - DISTRIBUTION
OF SCHOOLS AT THE LANDS

PX  Private Schools
X  School at the 'Lands' (Council)
1972  Indicates the date when the school was taken over by Council.

Source: Based on information supplied by the Education Office, Molepolole.
In summary, we have traced the evolution of policy regarding the location of schools at the lands. It is a policy that has been arrived at through pressure from the people themselves. The Government has accepted that the people at the lands are entitled to educational facilities as are the people at the villages. What may be asked is whether, given the sparse population at the lands, the radius of 5 km is wide enough to prevent the proliferation of uneconomic schools. These issues will be discussed in Chapter Seven.

Health Policies

The concentration of health facilities on established centres which has been noted above was reinforced by the existing administrative machinery. The Government later conceded that "when the Local Council Law was promulgated in 1966, Councils were accorded ill-defined responsibilities for the provision of health services" (Rep. of Botswana, n.d.c.: 285). In the course of 1972 a new administrative structure was set up with a view to improving health care delivery in the rural areas. An agreement between the Government, through the Ministry of Health, and the District Councils was reached whereby the executive responsibility for health services at the level of clinics and below was to be borne by the District Councils. The Councils were also to be responsible for the construction and maintenance of clinics and other facilities below clinics and for providing drugs to these Council-run facilities. The Government was going to be responsible for health facilities, notably hospitals, above the level of clinics and for the professional supervision of Council staff and facilities.

Concern over the populations outside the large centres had been voiced in 1971, when the Ministry of Health, for the first time, encouraged its staff to regard hospitals where they worked not as "the sole venue of their work" but also as a base from which to provide health services to surrounding rural areas: "They have been encouraged to undertake frequent tours of the surrounding rural areas, and to become involved in the preventive aspects of medicine." (ibid). These initial forays provided the background to the policy shift in 1973:

"There needs to be a radical departure from the past policy of expanding the hospitals, especially when it is at the cost of diverting either
capital or recurrent resources from the rural areas. The major consideration in the next five years will be to ensure that rural health services are improved and increased. That will require the construction of clinics and health posts in all settled communities of over 500 persons, and in many communities of fewer persons."

( ibid )

The implementation of this health policy has necessitated the creation of hierarchical health structures to serve the varying population levels in the rural areas. These structures are concerned with various aspects of health - preventive health work, family planning, treatment of diseases, follow-up of discharged patients, elementary laboratory examinations, collection of statistics, etc. The functions become many and more sophisticated as one moves up the hierarchy (Ministry of Health, 1978: Appendix 2).

At the bottom of the health facilities hierarchy is the mobile clinic. The mobile clinic serves areas with populations of less than 500. The mobile clinic, normally a one-ton truck, is staffed by two nurses and operates from the nearest clinic. Communities are visited once a month, sometimes twice a month, and consultations and treatments are performed at the school or hut provided by the community. The mobile clinic is complemented in its work by the Family Welfare Educator (FWE). The FWE is normally a member of the community who has been given some rudimentary training in health. Her work involving mainly health motivation and education, is mainly in preventive health. She may also treat simple ailments like headaches but refers the more complicated cases to the clinic in the nearby village or to the mobile clinic. (It should be noted that there are FWEs at higher levels as well.)

The next level is that of a health post. The health post is supposed to serve a population of 500 - 1 000 or a population within a radius of 15 km. It consists of three rooms - for consultation, treatment and storage. It is not manned full-time but is visited by the mobile clinic staff on a regular basis. Again there is a FWE attached to it (Rep. of Botswana, n.d.c.: 287; 1977: 239-41; Ministry of Health, 1978: Appendix 2).

Above the health post is the clinic. The clinic is permanently staffed, by at least two nurses, and consists of rooms for consultancy/treatment, and a dispensary/laboratory and a store-room. It may also have observation and
maternity beds. The clinic is also provided with a vehicle to enable the staff to visit health posts in the surrounding rural areas. The main criterion for the establishment of a clinic is a population of 5 000 - 10 000 within a radius of 30 km (Min. of Health, 1978: Appendix 2; Rep. of Botswana, 1977: 239-41).

In addition to the above facilities, which are already in existence, it is envisaged that there will be the creation of another level, called the health centre. This will be a level immediately above that of the clinic. The health centre will be a mini-hospital with up to 30 beds for maternity and general cases, in addition to the outpatient department. As a hospital, it is expected that it will have support facilities such as a kitchen, laundry, laboratory, store-rooms, incinerator, mortuary, generator and administrative offices.

At the apex of the district health facility hierarchy is a regional hospital. The hospital is directly under the Ministry of Health. At the head of the hospital is the Regional Medical Officer, who together with his staff comprise the Regional Health Team, that, among other things, supervises the Council staff who man the health services from the health centre downwards.

Once the decision on the policy had been decided, implementation was swift. As with schools, the Government was under pressure from the politicians and their constituents to spread the "fruits of independence". For example, one Member of Parliament "suggested to the Minister [of Health] that instead of building a fourth clinic in Serowe where there is a hospital he should have placed it outside the village where there are no medical services" (Botswana Daily News, March 30, 1977, p.2).

The health project, like the primary school one described above, no doubt received a major fillip from the Accelerated Rural Development Programme (ARDP) of 1973-76 (Chambers, 1977: 13-18). ARDP represented an attempt by the Government to achieve, in the field of rural infrastructure, the rural development goals set by the Third National Development Plan 1973-78. The developments had to be accelerated mainly because of the approaching
1974 elections. The impact of ARDP can be gauged by the fact that of the 177 health posts that had been completed by 1976, 42 (or nearly one quarter) had been constructed under this programme (Rep. of Botswana, 1977: 239; Chambers, 1977: 13). Chambers concluded:

"The larger village programme both forced and enabled District Councils to work in smaller and less accessible villages: forced them through the instruction that they should cease all building activities in the larger villages, which were left to the big contractors; and enabled them because they were assured that the needs of the larger villages were being met and because vital resources (especially transport) were provided for Councils. The outcome was an extension of construction work outwards from the centre. The spread of health posts, in particular, was steady and extensive."

(Chambers, 1977: 31 Emphasis added.)

The adoption of these new health policies has had some immediate impact. In 1973, 52% of new outpatients were seen in hospitals; in 1975 this had fallen to 43% and by the end of 1978 had fallen further to below 40%. In April 1976, 78% of the total population lived within a radius of 15 km of a health facility; the percentage was expected to have increased to 85% by the end of 1978 (Rep. of Botswana, 1977: 239; Ministry of Health, 1979: 2). The Ministry of Health appears to be determined to improve this situation further during the 1979-84 plan period:

"The Ministry of Health plans on introducing measures to encourage this trend to continue. However, certain rural areas are still relatively underserved, depending for the most part on irregular visits by mobile teams. Also, there is general agreement that 15 km is too far to expect people to walk to a health facility."

(Min. of Health, 1979: 2 Emphasis added.)

---

2 "A sense of opportunity and urgency was enhanced by a general awareness that the Government had not yet been able to achieve dramatic, tangible results in most of the rural areas where the great majority of the people lived and by the steady approach of the date of October 1974 when the electorate would pass their verdict on the Government's performance. The ARDP, resulting from a Cabinet decision in November 1973, was the logical outcome". (Chambers, 1977: xi) A total of P21 million was spent altogether, mainly on health, education and road projects. Just over one half of the funds came from domestic sources. The main outside donors were the Norwegian and Swedish Governments. Small grants for specific projects were received from UNICEF, UNHCR and WFP etc.
It is obvious, therefore, from the foregoing, that the health facilities, hitherto concentrated and limited to the villages, have suddenly diffused to the peripheral areas, mainly the lands and cattle-posts (Fig 6.2). If the Ministry of Health achieves its aims, the people at the lands will in the future be within less than 15 km of the nearest health facility. As with water and education provision, the implications of these policies for permanent settlements at the lands are clear.

Kweneng District - A Case Study

We conclude this chapter by examining these policies within the context of the Kweneng. A number of references have been made to this District and therefore this section will of necessity be brief.

The provision of sufficient and reliable water supplies to the small villages and lands areas is among the priorities of the Kweneng District Council (Kweneng District Council, n.d.: 27-28). According to the surveys, water is still relatively scarce at the lands areas and consequently people travel longer distances to the sources of water at the lands than they do at the villages.

The lands surveys showed that by far the greatest source of water, supplying over 60% of the households, were boreholes (Fig 6.3). The second most important source of water were wells accounting for 21% of households. The small dams were the third most important source, supplying 11% of the households.

The boreholes used are both privately (including syndicate) owned and Council owned. For private boreholes, watering arrangements and charges vary. Some borehole owners demand their payment in livestock, usually goats, while others require it in cash. The rates also vary. For example, a borehole owner at Medie was charging the same rates as those charged by the District Council. The Council borehole users normally pay a small fee and the Council is responsible for borehole maintenance and for paying the pumper. The Council owns 111 boreholes in the District (op. cit: 27) and plans to drill more, especially in the lands areas:
Fig. 6.2

EASTERN KWENENG - DISTRIBUTION
OF HEALTH SERVICES

Source: Based on information supplied by the Kweneng District Council Secretary and the Mobile Clinic.
Sources of water for lands population

Fig. 6.3

- BOREHOLE 60.90%
- PAN 0.69%
- SPRING 6.92%
- WELL 20.76%
- SMALL DAM 10.73%

Source: Field Data
"The provision of a reliable and clean source of water is a necessary first step for the development of rural areas. In the course of the plan period, efforts will be made to provide boreholes to all those villages and lands areas presently without any water."

(op. cit: 28)

Efforts are also being focussed on the development of surface water supplies through the activities of the SDBU. The SDBU has been operating in the Kweneng since late 1975. They have constructed more than ten dams, mainly in northern lands areas:

"These dams are constructed for District Council but in all cases syndicates have formed to operate and maintain these dams. The dams are for stock-watering purposes and are intended to even out the heavy grazing in the potentially communal area. To date the work of this unit has been very successful."

(op. cit: 30
Emphasis author's)

The extension division of the Ministry of Agriculture has been particularly active in selling the idea of small dams as illustrated by the example below:

"Residents of Mahetlwe village in Kweneng North last week experienced a critical shortage of water. Their only source of water was a well, which is privately owned, but adults feared that their children might fall into it while trying to fetch water. They have appealed to the Kweneng District Council to install an engine at the well but no action has been taken despite Council's promise. Agricultural Demonstrator in the village --- said that a Dam Committee would be formed, which will request the Agricultural Dam Unit to construct a dam in the village. He said that after a site has been found and tested, the dam unit could be asked to take the Mahetlwe project as a priority."

(Botswana Daily News, August 20, 1976)

In the field of primary education, the Kweneng has followed the national pattern. The new lands schools are shown in Fig 6.1. The process of taking over the private schools is as has been described above. In some instances the decision to take over schools has been forced on the unwilling Council staff, who see them as being uneconomical.

The first school to be taken over was Medie School in 1975, this reflects in part the influence of the local Member of Parliament, who was a Cabinet
Minister at the time, and is himself living at Medie. Since then the Council has taken over one or two private schools a year. The provision of education at the lands is now one of the official policies of the District Council:

"In the financial years 1975/76 and 1976/77 a total of P570,000 has been spent upon primary school infrastructure. The strategy has been to concentrate upon the smaller and remoter villages in supplying basic facilities. .... There exist 5 private schools of importance in the district. .... The schools have a total enrolment of approximately 285 students. The quality of education at these schools is undoubtedly very low. .... In the plan period it is proposed that Council take over some, if not all, of these schools."

(Kweneng District Council, n.d.: 57)

In the survey area, only Medie has a Council school. There 49 households reported that they had children going to Medie school. The schools in the other two lands are still private, and have just come into existence. As a result in both Mmamarobole and Ditshukudu there was a significant number of households that still had children going to school in Molepolole.

In the area of health, the national trend of decentralization is equally evident. A number of health posts have been constructed (Fig 6.2). Of these 5 are in the lands areas, while the ones at Mmopane and Kumakwane are in small villages that are surrounded by a number of lands. All the clinics have been put up since 1975, using ARDP funds (Kweneng District, n.d.: 17). Large parts of the Eastern Kweneng are, however, served by the mobile clinic teams. There are two such teams, based in Molepolole (Fig 6.2) and Thamaga. The mobile clinic, staffed by two nurses and a driver, visits lands areas regularly, at least once a month.

Concluding Remarks

This chapter has reviewed the Government policies that have encouraged (or have the potential for encouraging) permanent settlements at the lands. It is clear that times have changed; there now exist in Molepolole and Gaborone elected assemblies that derive their power and authority from the people. So people's desire to have social services and water where they are has forced the Government and the Councils to adopt the policy of decentralizing these provisions. By providing these services at the lands, the Council and the
Government are making life in these areas more tolerable and are thus encouraging permanent settlements. The permanent settlements at the lands, in terms of the provision of these facilities, have other policy implications, which will be dealt with in the next chapter.
This section of the study examines the implications and consequences of permanent settlements at the lands. Chapter Seven examines (a) the economic implications of the provision of social services and (b) the problems that the new settlements have created in terms of manpower to man the expanded services. Chapter Eight examines the consequences of the recent settlement changes for trading. It looks at the new trading institutions at the lands and their relationship with the well-established institutions in the village. Chapter Nine looks at the social and political consequences of these permanent migrations. In particular it examines the effect on the traditional political system and the relationship with the new local government system.
CHAPTER SEVEN

Permanent Settlements at the Lands and Social Provision:
Some Policy Issues and Problems

In Chapter Six we noted the new policies that had (and are still having) the
effect of decentralizing the provision of social services from the villages
to the lands areas. The adoption of these policies has had not only spatial,
but also other implications, e.g. the cost of providing the services.
Another implication has been to make the services accessible to as many
people as possible in line with the national principle of social justice:

"Social Justice - Development should benefit all sections of the
population and all areas of the country. Specific implications that
are relevant to rural development are:

--- All Batswana, wherever they live and whatever their social back-
ground, should have equal access to services that the Government
provides - such as education, health and water supplies.

--- Services available to different groups and in different areas
should be comparable in quality as well as mere availability."

(Rep. of Botswana, 1977: 67)

Policies aimed at reaching out to the majority of the population are commen-
dable. The situation in many developing countries is that services are
restricted in their location to urban areas and developed regions; and even
within these areas are enjoyed by the privileged classes (De Kadt, 1973;
Sharpston, 1971/72). In the case of Ghana Sharpston found a concentration
of doctors in the urban areas of Accra/Tema, Kumasi and Sekondi/Takoradi.
These urban centres had only 15% of Ghana's population and yet they boasted
62% of the country's doctors (Sharpston, 1971/72: 213).

In the field of health, for example, it has been shown that hospitals have
an extremely limited geographical range (King, 1967). And yet Governments
continue to pour money into large hospitals and devote very little or
nothing to small facilities such as health posts, which have a potential for
reaching larger numbers of people (Bryant, 1969). Sharpston's conclusion in
the case of Ghana was that attention should be directed towards "the estab-
lishment of rural health posts, which offer out-patient medical care, and
which are run by lower level medical staff under the general guidance and
instruction of a visiting doctor" (Sharpston, 1971/72: 217).

A health delivery system such as the one Sharpston advocates tends to be more preventive than curative. Such a system has been in existence in China for some time (Rifkin and Kaplinsky, 1972/73). The main advantage of such a system is that not only does it reach greater numbers but also it makes the provision of health services much cheaper in the long run. The new health delivery system in Botswana, which is highly dependent upon nurses, is slanted towards preventive medicine, as Table 7.1 below illustrates.

TABLE 7.1 Cases Treated by the Mobile Clinic June 1979

<table>
<thead>
<tr>
<th>AREA</th>
<th>Cases (Nos)</th>
<th>Purely Preventive as % of Total (approx)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Child Welfare Clinic</td>
<td>Family Planning</td>
</tr>
<tr>
<td>Hatsalatladi</td>
<td>41</td>
<td>1</td>
</tr>
<tr>
<td>Kotolaname</td>
<td>11</td>
<td>-</td>
</tr>
<tr>
<td>Mmamoagi</td>
<td>32</td>
<td>-</td>
</tr>
<tr>
<td>Maologane</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>Chaoka</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Gagatla</td>
<td>12</td>
<td>-</td>
</tr>
<tr>
<td>Gamudubu</td>
<td>55</td>
<td>-</td>
</tr>
<tr>
<td>Gakuto</td>
<td>55</td>
<td>2</td>
</tr>
<tr>
<td>Ngware</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td>Mmamonageng</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td>Moselele</td>
<td>14</td>
<td>-</td>
</tr>
<tr>
<td>Mmasebele</td>
<td>50</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>310</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: Molepolole Mobile Clinic

These policies can thus be justified on the grounds of reaching the neediest portions of the population. All the literature on social provision points to the fact that people outside the villages, people at the lands and cattle posts and in remote areas towards the Kgalagadi, are the most disadvantaged. The best served, of course, are the urban areas. They are followed by the large villages. A study of the spatial distribution of educational facilities revealed that rural areas outside the main villages fared worst in terms of trained teachers. Campbell and Abbott found that less than 50%
of the teachers in lands and similar areas were trained as against about 75% of such teachers at the schools in the large villages (Campbell and Abbott, 1976: 4). Medie School is a good example of this. In his Annual Report for the year October 1973 - October 1974, the head teacher noted: "The School has been poorly staffed. Its staff is composed of untrained teachers. Some of these untrained teachers were forced by circumstances to combine some classes."¹ A year later, the situation had not changed much. In a letter dated 23rd July 1975 the headmaster (the only trained teacher) complained: "The quality of staffing in this school leaves much to be desired if the required standard of children's education should be maintained." The main result of this is that the results are poorest in the lands areas - as Table 7.2 shows.

<table>
<thead>
<tr>
<th>TABLE 7.2</th>
<th>Success Ratios of Boys and Girls by Location (Percentages)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
</tr>
<tr>
<td>Large villages</td>
<td>62</td>
</tr>
<tr>
<td>Small villages</td>
<td>53</td>
</tr>
<tr>
<td>Lands, Cattle-posts</td>
<td>29</td>
</tr>
</tbody>
</table>

Source: Chernichovsky and Smith, 1979: 42.

Chernichovsky and Smith have also noted that proportionately more children with primary school education come from families based in the large villages and have concluded: "This relationship between schooling patterns and location is consistent with the relative scarcity of school facilities outside the big villages and high costs of access to school" (Chernichovsky and Smith, 1979: 24). These findings together with those of Campbell and Abbott confirm the findings of the Rural Income Distribution Survey (Rep. of Botswana: 1976: 121-23).

¹ Information on schools was obtained from the Kweneng Education Office. The author would like to express gratitude to the Education Secretary for his co-operation in this regard.
Problems of Wider Geographical Coverage of Social Provision

a) Manpower

It has already been noted in Chapter Six that the upsurge in enrolments over the last decade made it impossible for the Government and Councils to cope with the provision of classrooms and desks and trained teachers in the village schools. The expansion of services to lands areas has put further strains on available manpower. The problem is partly one of quality: there are not enough trained teachers and nurses to go round. Plans are already afoot and the expansion of existing training facilities is already taking place to increase the number of teachers and nurses. The Ministry of Health, for example, expects to increase the number of registered nurses produced by the National Health Institute from 60 to 75 and of enrolled nurses from 120 to 160 a year in 1984 (ALDEP, 1979: 4). But these are long-term programmes.

The manpower problem also has a spatial dimension; the reluctance of teachers and nurses to serve in remote areas outside the villages. Areas away from the main villages are characterised, among other things, by irregular mail, lack of facilities for recreation, problems over the supply of water, and lack of shopping facilities. These inconveniences act as major disincentives to working outside the main villages.

There are many examples of complaints about remoteness. The head teacher of Gagatla School, for example, in a letter dated 9.2.1978 to the Education Secretary complained: "It is very hard to come to your office regularly for post due to lack of transport." Sometimes even when transport is available, communities are cut off because of bad roads. The Council Assistant Education Officer had difficulty reaching Medie School in April 1974 because of impassable roads:

"My visits at the schools around Lentsweletau was at the time when heavy rain had just fallen and roads were in very bad conditions. However on the Fourth I managed to reach Medie School after having failed the previous day due to bad roads."

(Education Officer, Molepolole)
In some of the lands areas, the only occasional transport passing by is Government vehicles. The Council therefore has to provide transport for teachers at the beginning and end of term. Sometimes even this is not provided as evidenced by one of the complaints of some head teachers.

The Council may provide transport for teachers at the beginning and end of terms but what happens during the three months when the school is in session? It is then that the teachers feel the pinch of remoteness - a deep sense of being in the middle of nowhere. In a letter to the Education Secretary dated 13th February 1972, the head teacher of Medie School, for example, complained, among other things, about the lack of health facilities, lack of transport, poor postal service and total absence of shopping facilities. The problem of housing has been solved through ARDP and other programmes; in any case, housing is not seen as a major problem (Chambers, 1977: 32-3).

In the interim, various measures are being taken to solve the manpower problem. They include the employment of expatriate staff in the remote areas (op. cit: 33). The Kweneng District Council gives priority to staffing schools in the remote areas. This policy has already had some immediate effect on some schools. For example, of the total current staff of five at Kgope School, four are trained teachers. It is relatively easy to move teachers round and to post them to remote areas because there is a single national body, the Unified Teaching Service, that is responsible for hiring them. The Ministry of Health is also considering forming a Unified Nursing Service to be responsible for employing and posting nursing staff and to remove the current competition for staff between Government and Councils (ALDEP, 1979: 4).

The Government is also considering other measures to attract staff to remote areas. Special inducement measures e.g. special allowances are being considered by the Ministries of Local Government and Health in the case of nurses. The idea of alleviating the problem through a form of national service, wherein each person will be required early in his career to serve in one of the remotest areas, has been canvassed (Chambers, 1977: 33) but has yet to be taken seriously.
b) The Costs

The most vexing problem for the Government and Councils is how to meet the costs of the expanded services; i.e. how to provide these services at a cost the nation can afford:

"It would not be economically viable to provide community services to 'ghost' villages .... [The Minister] was specifically reacting to the Nshakashogwe home owner's request for a reliable domestic water source. [The Minister] retorted that Nshakashogwe villagers stay at the fields in a scattered bush settlement and efforts to bring services to them are bound to be very expensive"

(Mpaphadzi, 1979: 1
Emphasis added.)

The provision of school facilities at the lands has to be justified in social and political terms. Once this is done, then there is no problem. However, funds are not over-abundant even in diamond-rich Botswana and therefore an assessment of priorities is constantly being made. It is clear from the utterances of Government ministers and other contradictory policies, e.g. the Regrouping Policy in the North East District, that the Government has not resolved the contradiction between what is socially and politically desirable and what is economically possible.

We start by looking at the costs of providing health services in the lands areas. It costs P10 000 (1979 prices) to put up a health post building at the lands areas. The costs are increased by remoteness. Even where distances from the village are not so large, the areas are not easily accessible because of poor roads. Secondly, there may be difficulty in obtaining water, which may have to be fetched from the nearest village, 20 or more kilometres away. Indeed there is virtually nothing in the way of infrastructure to make life easier for a contractor. These considerations apply in the case of building schools as well.

Then there are recurrent costs. Health provision would be very expensive if each community were provided with its own clinic. The idea of a mobile clinic that visits the health posts and other places on the way is an admission of this fact. The mobile clinic, like the mobile trader, by moving
from one area to another is able to accumulate sufficient 'custom' to reduce the cost of providing health services per head of population. Indeed the average monthly figure of about 900 patients treated at the mobile clinic may compare favourably with clinics in small villages. However, it is less than half the number treated in the Molepolole clinic. It has been estimated that it costs at least twice as much per head to provide health services at the lands compared to the village. The high expense of providing services is inherent in those systems whose main criterion is wide geographical coverage of dispersed populations:

Sandford has noted:

"Where mobile services are provided the transport costs involved are high both when expressed per kilometre travelled and, more particularly, per person served. With both static and more especially with mobile facilities, supervision and supply of necessities (staff-salaries, drugs, books) tend to be expensive and difficult"

(Sandford, 1978: 78)

This is very much true of the Kweneng mobile clinic, whose maintenance costs increase the cost of providing a health service. Breakdowns of the truck are fairly common, and it sometimes takes a long time before it is on the road again. When this happens the staff are either redeployed (and may thus be under-employed) or given time off.

With respect to the provision of educational services, a different strategy has been adopted; i.e. fixed as against mobile facilities as noted in Chapter Six. Again the capital costs are higher than in the village; it costs (1979 prices) about P6 000 to put up a 45-pupil classroom in the village compared to P8 500 at the lands.

The recurrent costs per pupil are also relatively high. They are consequent partly upon low teacher-pupil ratios (Table 7.3 below). The District Council

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2 Dr A M Merriweather, interview, Molepolole, 11th May 1978
3 Information supplied by Planning Officer, Kweneng District Council
considers an economic class to be one of 45 pupils. This ideal average class size is nearly met by most schools in the villages, while the average class size at the lands is about 30. The only school with a high enrolment is Metsemotlhaba. The average class size in villages is about 40 pupils.

### TABLE 7.3 Kweneng Lands Schools: Teacher-Pupil Ratios 1979

<table>
<thead>
<tr>
<th>School</th>
<th>No. of Pupils</th>
<th>No. of Teachers</th>
<th>Teacher-Pupil Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moshaweng</td>
<td>158</td>
<td>5</td>
<td>32</td>
</tr>
<tr>
<td>Kubung</td>
<td>231</td>
<td>8</td>
<td>29</td>
</tr>
<tr>
<td>Kgope</td>
<td>144</td>
<td>6</td>
<td>24</td>
</tr>
<tr>
<td>Medie</td>
<td>168</td>
<td>7</td>
<td>24</td>
</tr>
<tr>
<td>Mahetlwe</td>
<td>172</td>
<td>6</td>
<td>29</td>
</tr>
<tr>
<td>Metsemotlhaba</td>
<td>621</td>
<td>19</td>
<td>33</td>
</tr>
<tr>
<td>Gakudubu</td>
<td>235</td>
<td>7</td>
<td>34</td>
</tr>
<tr>
<td>Gakgatla</td>
<td>155</td>
<td>5</td>
<td>31</td>
</tr>
</tbody>
</table>

Source: Education Secretary (Kweneng District)

The costs escalate when one includes the costs of supervision and inspection. These costs, when expressed in aggregate terms, may, however, be the same as for schools in small villages, outside Molepolole. But, when they are expressed per head, i.e. pupil, the story may be different. The additional cost in some lands schools is that of providing water during the dry season. Kgope, Medie and Moshaweng, for example, suffer from a shortage of water during the dry season. There are no reliable sources of water nearby. During the wet season the schools depend partly upon water tanks that tap water from the classroom roofs. During the dry season, when the water from the tanks has been exhausted, the Council has to supply the schools with water fetched from the nearest reliable supply. In the case of Kgope and Medie Schools, the water is fetched from Lentsweletau. Each school is supplied

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4 The rationale for this figure is not clear. It seems to be inherited from the past where class sizes of 65 were fairly common. However, in these days a class of 45 is considered too big for a teacher to cope with efficiently. From this point of view it would be uneconomic. Some officials in the Ministry of Education argue that the ideal class size, from the point of view of teaching, is 35 or under.
twice a month by a seven-ton lorry carrying 44 gallon drums of water. What the shortage of water means for these schools can be seen from the following example of Medie. It is a recurring theme in the correspondence between the Council Education Secretary and the head teachers. In July 1977, for example, the head teacher gave the Council an ultimatum: "Supply the School with water or Discontinue the school." In June 1973 the situation got so bad that the "teachers are now having to buy water at a high rate". It is understandable therefore that teachers and nurses should resist being posted to areas outside the villages. The water problem illustrates the lack, until recently, of adequate planning in the location of schools. One would expect that in these remote areas, the availability of water would be one of the prime considerations in the siting of schools.

Concern over the problem of meeting the costs of providing educational services at the lands and other areas of low population density prompted the Government to hire the services of a consultant at the beginning of 1978. The main terms of reference of the consultant were "to review the current procedures and policies in school location planning" (Gould, 1978: 1). The Government guidelines (Chapter Six) were a result of this consultancy.

Gould noted that for a primary school with a minimum enrolment of 315 (45 pupils in seven grades), a threshold population of 1,422 people (assuming school age population is 22.15%) was necessary. This population, within a radius of 5 km from a potential location point could not be reached anywhere outside the large nucleated villages. The relatively long distances that children have to walk to school rules out double shifts. "It is evident that special arrangements need to be made to provide access to the education system for those homes in the remotest areas" (Gould, 1978: 4).

Gould suggested a number of possible solutions to the problem of low enrolments. They included multigrade teaching, biennial intakes into Standard I, provision of boarding facilities and provision of transport to school children (Gould, 1978: 4). He recommended biennial intakes, "in which there is a Standard I entry every second year instead of every year. Thus a full primary school will require only four classrooms and a threshold of only 711 to support a full school" (ibid). This recommendation has been accepted by the Ministry of Education (vide Chapter Six). The dilemma of the Government
is clear; how to balance the political and social goals of social justice with the limited resources at its disposal. It would be relatively cheap to provide the services to a nucleated settlement like a village. But nucleated settlements on the scale of some of the villages in Botswana are seen as being inimical to the improvement of agricultural productivity. The dilemma the Government finds itself in is manifested by the contradictory settlement policies it is following.

**Dispersal Versus Nucleation Policies**

It has been demonstrated in the last Chapter that some of the Government policies are encouraging permanent migration to the lands; i.e. the dispersal of population from the nucleated settlements. In the African setting, this is unusual; it goes against the conventional wisdom of forcing dispersed populations into nucleated settlements. Elsewhere these villagization policies in Nigeria, Ghana and Tanzania have been reviewed (Silitshtena, 1978b: 11-13). The argument behind these policies is that rural development, seen mainly in terms of the provision of social services, will not be easy to achieve until people live together in nucleated settlements.

Botswana has not been an exception in this; there have been (and still are) attempts at villagization in areas of the country where the distribution pattern is a dispersed one. The most notable one is the Regrouping Policy in the North East District (NED). In the NED, as already noted, the settlement pattern is traditionally of scattered homesteads. Each homestead is either surrounded by its fields or has its fields not far away: nowhere are the fields more than 5 km away. The cattle are grazed in the vicinity and are penned at night. A village in the context of the NED is a collection of homesteads and their adjacent fields and may cover an area of 10-30 km². The primary school is usually taken to be the centre of a village, and shops and the kgotla will also be found nearby.

Various explanations have been offered for the existence of dispersed settlement patterns among the Kalanga, who form the large majority of the people of the NED. They range from cultural, through ecological to economic explanations (Silitshtena, 1978b). In 1971/72 the North East District Council (NEDC)
identified dispersed settlement pattern as being the main impediment to rural transformation and to the development of the area. The result of this was the formulation of the Regrouping Policy (now a Government policy), which has sought to create large villages so that social services will thereby be accessible to a larger number of people and will also be cheaper for the Council to provide.

The Government is caught in a dilemma. If the provision of social services were the only consideration, then it could probably disallow migration from the villages. But then an overwhelming majority of rural households are farmers and living in large villages is incompatible with improving their productivity.

Here we see the clash of interests between the Ministry of Agriculture on the one hand and the Ministries of Health, Education and Minerals and Water Affairs on the other. The Ministry of Agriculture has consistently been critical of large villages and of the idea of living in the villages generally. In the debate about the Regrouping Policy, this Ministry was very critical, noting: "in general it seemed from the point of view of agricultural productivity there were more serious disadvantages than advantages associated with village regrouping" (Silitshena, 1978b). The Ministry of Agriculture thus sees the long distances separating homesteads from their fields as being inimical to agricultural improvement.

This view is, however, in conflict with the real instincts of the other Ministries. For them the cost per unit of providing services is very much lower in concentrated nucleated villages. Indeed in such settlements, it is possible to ensure high accessibility to services so provided. The Gabane survey, for example, showed that no household was more than five minutes walk from the nearest water tap. In Molepolole less than 1% of the households were more than 5 km from the nearest health facility and no household was more than 6 km away.

The permanent settlement of people at the lands and cattle posts has forced the Government to abandon the idea of concentrating services in the villages and instead to follow the people. The people, who have transformed their
needs from "felt" to "expressed" by putting up facilities for themselves, have not given the Government a chance to do otherwise. Further, with the enunciation of social justice as one of the guiding principles of planning, it is socially and politically necessary to provide services to the dispersed settlements at the lands. The costs of doing so have been borne grudgingly. This can be illustrated by the contrasting views of two former Council Secretaries of the Kweneng District Council. One said that he was opposed to the policy of providing (uneconomic) educational services at the lands but since the politicians willed it, he felt he had no alternative. The other one flatly refused to discuss the economics of providing social facilities at the lands, asserting that education and health are basic freedoms and the people at the lands are as entitled to them as the people still living in the villages.

The pull between agriculture and social services in matters of settlement pattern is a recurring theme in any discussion of settlement change. In Eastern Nigeria, for example, Udo highlighted the "laudable but apparently contradictory objectives" of improving agriculture, which favoured a dispersed pattern of settlement, and of providing services to the rural areas, which would require "a close grouping of compounds into large nucleated settlements" (Udo, 1965: 67). The task for the future, he argued, was to reconcile the two.

An attempt at reconciling the desire to provide social services cheaply with that of improving agricultural productivity led Dr Fosbrooke, former Rural Sociologist in the Ministry of Agriculture, to propose what he called the "Hamlet Equation". He argued for a return to the original small Tswana village with its fields in the neighbourhood:

"The country, both the electorate and their chosen leaders, must abandon the idea of big villages getting bigger and bigger, and being given a disproportionate share of the available services, education, water, electricity and the like. Rather must such scarce resources be concentrated on opening up and developing new centres of population, large enough to provide minimal social services but small enough to enable the cultivator to remain within reasonable reach of his land and stock."

(Fosbrooke, 1971a: 189)
Fosbrooke's idea is for the country to be carved up into small settlements of about 1,200 people each; each with its own cultivated and grazing lands nearby and an assortment of services – a junior primary school, a health post, a store and postal agency (Fosbrooke, 1972). He has gone into meticulous detail on the layout of a typical settlement. The aims of the layout would be to ensure room for expansion and preservation of the range.

Fosbrooke's ideas have provoked some debate on the issue of large villages. Grant (1972) dismissed the whole plan as impracticable on grounds of cost, inadequate land and lack of detailed knowledge about individual villages. He ended his article by arguing that if investment in employment creation were increased, the villages could act as regional intermediate towns that catch migrants before they proceed to the main cities where they contribute to the development of slums (Grant, 1972: 270).

This view is in line with the current government policy of bolstering the villages so that they act as major central places in the rural areas:

"It is already apparent, however, that the large traditional villages are a major asset to the rural development effort. As centres of population, communications, purchasing power, production and services, they can serve as focal points for the development of their rural hinterland. The major villages will, therefore, be primary targets for the provision of social and economic infrastructure and the creation of income-earning opportunities."


Such a policy declaration is clearly in contradiction with what the Government has been saying and doing in the past few years. It is nevertheless symptomatic of the ambivalence of the Government's settlement policy. This ambivalence reflects the clash of interests between agriculture and services.

It is possible to reconcile the two. The Fosbrooke plan if taken seriously offers some scope for marrying the two. The way forward is not to start by demolishing the villages because this would be wasting the millions of Pulas worth of investments in shops, hospitals, schools, etc. The villages will continue for a long time (even without any investments from the Government) to act as major central places for the rural areas (see Chapter Eight).
The way forward is to plan the settlements at the lands as they develop to ensure that they satisfy the needs of both agriculture and social services. Thus as people move from the villages, they should be directed to these planned settlements. Such planning should be integrated. The main problem with the current settlements at the lands is that they are not planned at all. The main guiding principle in siting the homesteads has been the desire to be near the fields. Everything else has been secondary. This is understandable on the part of the farmers.

The Government departments involved in bringing services to the people appear to have been in such a hurry to spend their votes that they have not bothered to lay down any criteria for providing such services. The Ministry of Education has only done so recently. But worse still, there has been nothing in the way of co-ordinating policies in the rural areas. Thus how does a decision to site a school at a certain location accord with the plans of the Ministries of Health, Minerals and Water Affairs, Works and Communication and Agriculture for the area? Such co-ordination, or even attempted co-ordination, would have resulted in settlement plans that would try to reconcile all the needs of the people concerned.

Experience from other countries suggests that it is possible to have a settlement layout that satisfies the farmers' desire to be near their fields and at the same time be close to services. Hunter (1967: 348) has illustrated the layout of such a settlement in Israel. Briefly, the settlement is circular; the homesteads front the inside of the circle. Inside the circle are located the services - school, shops, clinic, etc. Each homestead has its own field behind it.

Conclusion

The dispersal of population to the lands areas has been a welcome development from the point of view of agriculture. The Ministry of Agriculture prefers that farmers live close to their fields so that they can concentrate their efforts on production instead of wasting some of their time on moving between their lands and distant villages. The Ministry of Agriculture, as has been shown in the last chapter, has since independence consistently pursued policies that ensured this goal.
The Ministries providing services, in line with the Government principle of social justice, have followed the people to the lands. The policy change from concentrating social provision in the village to diffusing it to outlying areas is commendable. It is ensuring that every Motswana, whatever his social status or geographical location, has access to the services provided by his Government.

In the short term such a phenomenal expansion of services has exacerbated manpower problems. The shortage of manpower to man the expanded services does not, however, appear to be a severe constraint. The quantity of manpower is expected to increase in the near future. What is worsening the manpower problems are the physical conditions - themselves inevitable consequences of remoteness - under which staff at the lands have to live and work. There is a clear need to improve these conditions if staff are to be induced to work at the lands areas and if the level of their morale is to be raised.

The most difficult problem for the Government and the Councils is the relatively high cost per capita of providing services to the people at the lands. The authorities want to maximise the social and political gains of providing services to these dispersed communities without readily accepting the economic price of doing so.

The result has been the enunciation of contradictory policies. One set of policies encourages dispersion while others try to counter this process. Thus on one hand the Government is encouraging people to abandon villages, and on the other is extolling the virtues of villages, while in areas where the population is dispersed, it is engaged in villagization programmes.

The above analysis shows that there has been a failure in reconciling the interests of the Ministry of Agriculture on the one hand and of the Ministries of Health, Education and Minerals and Water Affairs on the other. The problem has been made worse by the failure to co-ordinate policies. Each Ministry has been concerned with providing its share of services without regard to what the other Ministries are doing.
A co-ordinated approach to providing services would have resulted in settlement planning that would have tried to resolve the conflicts of the different Ministries. This is only beginning to take place through the Arable Lands Development Programme.
CHAPTER EIGHT

Permanent Settlement at the Lands and Trading

In Chapter Six we examined direct Government policies and their effect on the diffusion of services to the lands. In this chapter we examine the spread of retail services away from the villages to the lands. This development, consequent upon the growth of permanent settlements at the lands, has been made possible by the enactment of new laws, in particular the Trading Act of 1966. This law, among other things, has facilitated the growth and proliferation of hawkers (demaosu in Setswana). There are a number of hawkers trading in the lands and cattle post areas. A most recent development has been the sprouting of small general dealers' shops at some lands areas (Fig 8.1). We are therefore witnessing in the retail field, just as with social services, the decentralization of services from the village to the surrounding areas. However, partly because of the limited number of people at the individual lands settlements, the retail establishments are small and offer a very limited range of goods. The people at the lands thus still have to go to the villages for higher order goods. The growth of retail services at the lands has thus created low order services. In order to understand trading in present-day rural Botswana, it is important to have first a historical background.

Historical Background to the Growth of the Trading System in Botswana

The internal trading system in Botswana as in East Africa was introduced by aliens - in this case the European traders. Best (1970) has documented how European traders monopolised this activity and managed to keep both the Indians and Africans out of it until the 1930s. An extreme example of their abuse of their power is the case involving Chief Khama III and one European trader (Parsons, 1975).

General trading in the Kweneng dates back to sometime in the nineteenth century. By 1879 there were already four to five European traders operating in Molepolole (Long, 1956: 376). In 1882 a trader's wife was reported living in the "middle of the dirty, busy native town ... and surrounded and thronged by crowds of people with whom she transacts business all day long"
Fig. 8.1
EASTERN KWENENG — DISTRIBUTION
OF RETAIL SHOPS AT THE LANDS

- Retail Shop at the 'Lands';
1973 indicates the date that the shop started.

Source: Field Data
(op. cit: 496). A very wide variety of merchandise was sold ranging from sewing machines through clothing and shoes, china and cutlery, lamps and candles, buttons and beads, spears and axes, spirits to firearms (Long, 1956). Evidently the first major local customers were members of the chiefly household and the nobility; but through the process of hierarchical diffusion the newly acquired tastes gradually spread to the masses.

In exchange for European goods, the traders purchased local items like fur pelts, eland skins and ostrich feathers. Some of these items were obtained in the Kgalagadi by Bakwena traders, who acted as brokers in the trade between the Bakgalagadi and the Basarwa and the European traders based in Molepolole (Okihiro, 1976).

Some European traders were very influential with the local rulers and used this influence to their advantage. In 1895, for example, two European traders in Molepolole agreed to pay the chief a substantial protective rent when an Indian and two Jews attempted to establish businesses in the village (Best, 1970: 601). This monopoly started crumbling in the 1940s as Indians gradually penetrated into the south-east of the country. The Indians intensified their efforts so that by the 1960s they had taken over most of the European stores. A pattern of large capital-intensive general dealers' stores in the villages had been established.

Africans came into the retail business in the late forties. In 1947 the Protectorate Administration created a special restricted general dealer's licence, mainly for Africans. It permitted them to trade solely in African rural areas (reserves), but limited their sales turnovers and prevented the trading stands from being closer than five miles to a general dealer. This effectively excluded Africans from trading in the villages. Things have changed since independence and restrictions on trading in the villages have been removed. But some patterns had been established; viz the concentration of general dealers' licences in European (and later) Indian hands and of small general dealers' licences in the hands of Africans. Because of their late entry into trading, the Batswana traders are still characterised by impermanence, marginal profits, bankruptcy and dependence upon European and Indian wholesalers (Best, 1970: 606).
Trading Licences

This chapter will restrict itself to discussing trading licences relating to hardware goods and foodstuffs. It will exclude the more specialised licences like the chemist licence, the petrol licence and the butcher's licence.

In the rural areas the major outlets for the retail of hardware goods and foodstuffs are the general dealer's shops, restaurants and hawkers. These licences, like all the others, are regulated by the Trading Act of 1966.

The general dealer's licence allows the trader to deal in any goods other than those for which a chemist, fresh produce, petrol filling or restaurant licence is required. The licence fee is P100 p.a. and there is no ceiling to the amount of stock that can be held. A survey carried out by the author has shown the average stock at cost held by the general traders to be at least P60 000. There is a very wide range of goods sold varying from agricultural implements through building materials, clothing to grocery. This inventory policy is similar to that of other general dealers in other countries (Funnell, 1973: 81-82; 1974). The trader makes his profit on clothing and hardware goods which have a large gross margin. Mark up on these goods is anything from 3% to 400% while mark up on grocery goods is only 10% to 15% (Funnell, 1974: 3). Table 8.1 below shows the levels of mark up allowed by the law in Botswana.

<table>
<thead>
<tr>
<th>Item</th>
<th>Mark up allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foodstuffs</td>
<td>10 - 15%</td>
</tr>
<tr>
<td>Clothing</td>
<td>45%</td>
</tr>
<tr>
<td>Kitchen utensils</td>
<td>35%</td>
</tr>
<tr>
<td>Agricultural tools</td>
<td>25%</td>
</tr>
<tr>
<td>Building Materials</td>
<td>25%</td>
</tr>
</tbody>
</table>

Source: Ministry of Commerce and Industry
The small general dealer is allowed to carry the same range of stock as the general dealer, but his stock must not exceed P4 000. Most small general dealers sell grocery goods. The small general dealer's licence has been introduced to help the 'small man' enter the retailing industry. However, due to their inventory policy and poor management, it is doubtful if many are making headway. Most small general dealers are part-time; their shops merely providing supplementary cash income. A few shops at one point or another have to be supported by cattle sales.

The restaurant licence allows the trader to (a) sell meals or refreshment for consumption on or by the premises and (b) to sell reading matter, tobacco, matches, and smokers' requisites and foods, which may be used for human consumption without further preparation. A restaurant is in actual fact a modified small general dealer selling prepared food to supplement grocery sales. A survey carried out recently by the Central Statistics Office revealed that the average stock of grocery goods for sale (at cost) carried by the restaurants was P2 200.

The hawker's licence entitles the holder to sell the same range of goods as a general dealer but not at fixed premises. The licence allows the dealer to operate in the area or areas stated therein. As a rule the Licensing Board will avoid placing two or more traders in the same area(s). A hawker is allowed to trade only in a place where there is no permanent shop within a radius of 15 kilometres. His licence is likely to be withdrawn if someone puts up a shop in his area. The law expects him to be an itinerant trader and he is allowed to remain in one place for a maximum of seven days. He is allowed to maintain a store-room at each of the places where he operates but he is not allowed to sell from the store-room. He can only sell from his vehicle. In practice most hawkers sell from their store-rooms. The hawker's stock comprising mainly low order goods – bread flour, tea leaves, soap, matches and candles, sugar and sweets and cigarettes – averages P400. As can be expected the profit margins on these goods are very narrow and many hawkers appear to be doing badly. A very large number are not active. Hawkers and their problems are dealt with in detail below.
Trading in the Villages

It is essential for the reader not familiar with rural Botswana to understand how the trading institutions operate in the villages in order to appreciate what happens at the lands. This will also help the reader to understand how the new hierarchy is organised.

As already mentioned, the traditional retail outlets in the village are the general dealers' shops. The majority of general dealers' shops are owned by Indians and have a lot of capital sunk in them. An average building together with fittings is worth at least P30 000. Capital is raised from relatives already in business and in a few cases, through loans from the bank. As already mentioned, the general dealers' shops carry a large and varied stock. Most general dealers order their stock from wholesalers in Botswana. They have the advantage over small general dealers of buying in great bulk. Although the formal education of the dealers is low, the management of their businesses is efficient, more efficient than that of small general dealers, and various books of accounts are kept.

In addition to general dealers, there are small general dealers and restaurants. In addition to what has already been noted above, the small general dealers demonstrate other characteristics. Many of them order their stock from wholesalers in Botswana. The Government decision to encourage Metro Wholesalers to set up in Gaborone has been a welcome development. The capital is raised from sales of cattle and in many instances is very low. With very low formal educational levels and lack of business experience, it is not surprising that a number of them do not keep books of accounts and the management of the enterprises is far less efficient than that of general dealers. Many cannot tell whether they are making profits and, if so, how much. A number complained about a lack of customers, a problem which is overcome slightly by their opening longer hours than general dealers. For some small general dealers, the main benefit gained from their shops is the social prestige of owning a shop. Many small general dealers are thus part-time traders. These features are similar to the features of this type of petty trader in other parts of Africa (Funnell, 1976: Rotberg, 1962).
The restaurants, which indicate an increasing diversification and special-
ization of the village population consequent upon the growth of the cash
economy, share many of the attributes of the small general dealers.

The above description accords well with the situation in the eastern part of
the country along the line of rail and near the urban centres. In areas
further to the West and towards the Kgalagadi, the situation is different.
These areas are so distant and the roads are so bad that the costs of trans-
porting goods are astronomical. Here a small general dealer carrying a
limited stock has very little chance of surviving. Only a general dealer with
a very large stock has any chance. Hence the villages to the west, e.g.
Dutlwe, Salajwe and Sojwe in the Kweneng, are characterised by the general
dealers' shops and an absence of smaller enterprises. As their population
is small, they each have one general dealer; a situation that is unhealthy if
the trader goes broke or opens his shop in an erratic fashion or overcharges.

The feeling of the Kweneng Licensing Committee and traders is that some
villages in the east, especially Molepolole, are over-traded. The concen-
tration of shops in the village has ensured an easy access to these facilities
by the village residents. Very few households are beyond three kilometres
from the nearest shop. Ninety nine per cent of the villagers in Molepolole
purchased all their requirements from the village shops. Because of the
accessibility of the shops, shopping trips are more regular than at the lands
as Table 8.2 below illustrates.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Number of Households</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly or more often</td>
<td>78</td>
<td>65.55</td>
</tr>
<tr>
<td>Less frequently (or monthly)</td>
<td>14</td>
<td>11.76</td>
</tr>
<tr>
<td>Whenever necessary or possible</td>
<td>27</td>
<td>22.69</td>
</tr>
<tr>
<td>Total</td>
<td>119</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Author's field work
### TABLE 8.2 (b) Frequency of Purchase of Groceries at Molepolole Lands by Molepolole Residents

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Number of Households</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly or more often</td>
<td>40</td>
<td>36.70</td>
</tr>
<tr>
<td>Less frequently (or monthly)</td>
<td>18</td>
<td>16.51</td>
</tr>
<tr>
<td>Whenever necessary or possible</td>
<td>51</td>
<td>46.79</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>109</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

*Source: Author’s field work*

It is significant that an overwhelming majority of households when they are at the lands (for reasons that will be explained below) buy their grocery needs less frequently or whenever necessary or possible compared to when they are at the village.

As in other rural communities (Funnell, 1973) demand for goods at the villages varies seasonally, which in this case is exacerbated by the seasonal movement of the population between the lands and the villages. The peak season starts in early May when farmers begin to sell their beans and lasts until sometime in December when farmers return to the lands. The general dealers respond to increased demand by increasing their stock from about P40 000 (during the period of low demand) to at least P60 000. The monthly sales of general dealers total no less than P14 000 at this time.

From about late December to the end of April it is a season of low demand. The traders in the village are dependent mainly upon that part of the population, e.g. people in regular cash employment, who do not go to the lands and some people from nearby lands. Previously, before the hawkers started operating, the entire population at the lands was supplied from the village even during this season. But now people in some lands buy from the hawkers and small general dealers there and the traders in the village complain about loss of custom.
The reduction in demand is also a result of low incomes after the sales of crops have ended. People are buying only groceries, mainly because their food stocks are down in this part of the year. Outside a few sales of clothing such as uniforms for school children, over 80% of the trader's business is in grocery sales where margins are low. Consequently, this is the period of either low profit or just breaking even. Monthly total sales for general dealers are in the order of P6 000 to P7 000.

**Villages as Central Places**

An impression may have been created that shops in the villages exist solely for the village population. This is not true. Each of the villages acts as a central place for the surrounding lands and/or cattle post population. In some instances the hinterland population is more than double the population of the village.

In one of his studies Funnell has noted that the need to move long distances to higher order centres in some developing countries is obviated by 'the percolation of (high order) goods through the system to a much lower level than previously allowed within the formal structure of Christaller's central place theory' (Funnell, 1973: 87). Thus high order goods are available in low order centres. This is the essence of the general dealers' stores so characteristic of rural areas in East and Southern Africa. However, in spite of this some elements of the central place theory do apply to situations found in developing countries.

In another of his papers Funnell (1976) has summarised the findings of central place studies in Africa. The studies show that:

(a) the small service centres are organised on an hierarchical basis;

(b) specific centres have a distinctive range of functions and in many cases the detailed structure resembles that of the Christaller model; and

(c) some of the spatial patterns indicate distributional regularities based upon the level of functions provided.
Very little has been done in Botswana in this direction. The only notable study is that of Kahn (1974). Kahn has analysed sixty-two centres in Botswana in terms of the services they provide – administration, finance, industrial, wholesale, retail, transport and tourism, education, professional, physical services and social services. The analysis showed that the system could be divided into a hierarchy which possesses four orders of nodes. In the first order are Gaborone and Francistown; in the second order, Lobatse and Selebi Phikwe; in the third order, the large traditional villages; and in the fourth order, the small villages. The range of goods and services provided increases as one moves up from the lower order to higher order centres.

Kahn's study has two major flaws. In the first place, it includes too many attributes, e.g. manufacturing industry, which are not normally used in classifying centres according to the services they offer, except of course if one is using the Loschian classification. In any case, some of the functions, e.g. tourism and hotels, do not serve the local population. Secondly, the size of centres is based purely on their population and no account is taken of the fact that these centres provide some of their services, notably health, education and retailing to the population of surrounding areas as well.

Available evidence suggests that the majority of the village people when they are at the lands, and a sizeable proportion of the permanent lands population, go to the village shops not only for the higher order goods but also for the lower order grocery goods. Table 8.3 below shows where the Molepolole-based population get their grocery supplies during the agricultural season when they are at the lands.

<table>
<thead>
<tr>
<th>Where groceries are obtained</th>
<th>Number of people obtaining</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own village</td>
<td>80</td>
<td>45.45</td>
</tr>
<tr>
<td>Village near the lands</td>
<td>34</td>
<td>19.32</td>
</tr>
<tr>
<td>Hawker</td>
<td>62</td>
<td>35.23</td>
</tr>
<tr>
<td>Total</td>
<td>176</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Thus nearly half obtained their groceries at their own village. Purchases from the village are done during one of the following times:

a) journeys to the village for the purpose of shopping;
b) journeys to the village for visiting or going to church combined with a shopping trip;
c) shopping by the children going to school at the village.

Even those people who now live permanently at the lands still shop at their former villages, especially for higher order goods. The lands survey showed that one of the major reasons for visiting former villages was for the purpose of shopping. We can also expect that some shopping trips are combined with the other visits to the villages.

That the villages, especially the larger ones, are central places for the lands and cattle post populations is to be expected as it is here that general dealers' shops are found. One measure of the centrality of a village is the presence of a specialty shop - chemist, butcheries, filling station and bottle store. Molepolole, with eight such shops, is at the head followed by Mogoditshane (2), Gabane (1), Thamaga (1) and Lentsweletau (1).

On the basis of the field work at the Molepolole lands, the heirarchy of service centres appears to take the following form for distant lands:

hawker or small general dealer at the lands (for low order goods)
small village near the lands (for low and medium order goods)
Molepolole (for low, medium and higher order goods).1

Trading at the Lands

Until recently, there were no retail establishments at the lands areas. The lands population and the village people at the lands during the agricultural

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1 a) Low order goods: matches, sugar, meal mealie, tea leaves, soap, cigarettes, etc;
b) Medium order goods: saucepans, clothing, plates and dishes, paraffin lamps;
c) High order goods: ploughs, bicycles, grinding mills, petrol, radiograms.
season were supplied from the village in the manner explained above. In some lands and cattle post areas there still does not exist even a single retail outlet. In one area, in the Central District, the local people still travel 100 km to Serowe to buy their groceries (Botswana Daily News, 29 April 1977). Since independence there has grown a new form of trading, the hawker (or semaosu). The hawkers operate mainly in areas of low population density at the lands and the cattle posts.

The lands areas have a lot in common with other areas in rural Africa: dispersed population, low per capita income, long distances to the nearest service centres and poor means of transport. A question on distances travelled to the nearest retail facilities by Molepolole residents when they are at the lands yielded the following results (Table 8.4).

<table>
<thead>
<tr>
<th>Distance</th>
<th>No. going the distance</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 km</td>
<td>33</td>
<td>27.97</td>
</tr>
<tr>
<td>6-10</td>
<td>17</td>
<td>14.41</td>
</tr>
<tr>
<td>11-15</td>
<td>21</td>
<td>17.80</td>
</tr>
<tr>
<td>16-20</td>
<td>19</td>
<td>16.10</td>
</tr>
<tr>
<td>21-25</td>
<td>15</td>
<td>12.71</td>
</tr>
<tr>
<td>26-40</td>
<td>5</td>
<td>4.24</td>
</tr>
<tr>
<td>41+</td>
<td>8</td>
<td>6.78</td>
</tr>
<tr>
<td>Total</td>
<td>118</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Author's field work

Thus more than 50% of the households travel more than 10 kilometres to the nearest shop. These distances are much longer than comparable distances in other parts of Africa where the distribution of retailing functions reflects the dispersed population. Funnell's work for example showed that in one part of Uganda the mean distances from households to low, medium and high order centres were 3.2, 9.4 and 22.3 kilometres respectively (Funnell, 1976: 95). More than 50% of the households patronised the low and medium order centres. The long distances to the shops explains the tendency for shopping trips to be irregular as shown in Table 8.2 (b).
The conditions prevailing at the lands are ideal for mobile traders. In a now famous article Stine (1962) showed that when the minimum range of a good exceeds the maximum range, a trader selling that good must either be itinerant or go out of business. What this means is that in areas of low population density or low per capita income, for a given central good for which consumers are not prepared to travel long distances, the trader has to move round to collect sufficient custom. We would therefore expect the higher order goods for which the threshold is much higher to be itinerant, while low order goods are permanent. In parts of Uganda it was the low order goods which were itinerant while the high order goods were permanent (Funnell, 1973: 90).

The growth of mobile traders, or hawkers, in Botswana is a post independence development and reflects the Government's attempt both to extend the benefits of earning an income from trading to poor Batswana and also to enable people in remote areas to get the necessary requisites. Although engaged in periodic marketing, the hawker in Botswana does not operate in the same manner as hawkers in other third world countries. For example, there are no established market centres at strategic places which different hawkers visit on appointed market days. Indeed, there are no market rings that Hodder has shown to exist in West Africa. In Botswana, as already explained, each trader is allocated his own area and within that area he enjoys a complete monopoly.

As much as 90% of the stock carried by the hawker is accounted for by food-stuffs and groceries - bread flour, sugar, tea leaves, soap, matches and candles, cigarettes and sweets. As has already been explained, the profit margin in these goods is very thin and this may help to explain some of the problems experienced by this kind of trader.

Almost all the hawkers are full time farmers and see hawking as a means of supplementing their farming incomes. This means that they do not call at the places where they hawk as frequently as they would if they were hawking full time. The most frequent period is once a week; otherwise hawking is done whenever work at the fields allows. As will be explained below, many a hawker does not move around but sells from a hut, which is supposed to be a store-room.
As in the village demand varies seasonally. In this case it is not so much the
variation in income which is a factor, but the variation in population. The
peak period thus coincides with the agricultural season when lands are
swollen by the village population, and the period of low demand coincides
with the dry season when the hawkers are selling only to the population that
is permanently settled at the lands. During the peak season average total
sales are P120 per month and they slump to about P40 during the low season.

Most hawkers are men of modest means. More than half of the hawkers inter-
viewed had worked in South Africa as migrant workers. They all took to
hawking because it demands relatively little capital. The survey on hawkers
showed that most invest not more than P1 000, most of this money going into
the purchase of a second-hand vehicle. Some even use donkey and ox carts.
Goods are invariably ordered from wholesalers in Gaborone, but owing to
transport shortages or costs, some are occasionally reduced to ordering from
general dealers in the village.

The majority of hawkers have low formal educational standards, even lower than
the general dealers in the village. With very few exceptions, the hawkers do
not keep any books of accounts. Many of them do not know whether they are
making profit or not. Pricing of the items is merely "guessed" at or they
merely charge the same price as the village shops. The Botswana Enterprises
Development Unit (BEDU) has run courses on book-keeping and management for
these traders in the past. However, it appears that due to their low edu-
cational background, very few of them have benefitted from these courses.

The major problem facing hawkers is the high cost of transport. At 55 thebe
per kilometre (1979 prices) for hire of a one-ton truck, the transport costs
gnaw deeply into whatever profits they make. The roads in the outlying areas
are mere tracks which are not maintained and therefore take a heavy toll on
trucks. In the wet season most of the roads are virtually impassable. The
costs of repairs are astronomical and a few traders survive because they have
an elementary knowledge of mechanics. In an attempt to reduce transport costs
by reducing the number of trips, and given the low profit margins of goods
they sell, a number of traders have converted their "store-rooms" into shops
from which they sell. These "shops" are usually manned by the trader's
children or by hired "storekeepers". Herein lies another source of the
problems of the hawkers. Many attribute their low profits and bankruptcy to pilferage by the "store-keepers".

The problems of the hawkers are compounded by their customers and the Government price control regulations. Some customers will not buy at any price, knowing as they do the prices of commodities at the village shops and also the statutory prices of essential goods such as sugar. Such customers would rather travel long distances to buy at the village shops rather than pay more for the goods, even though the price is justified in terms of transport costs, and even though the cost of covering the distance to the village raises the cost of a village commodity substantially. So the hawkers are forced to sell at the same price as the general dealers, whose costs per unit of commodity sold are lower than theirs.

Finally, as shown in Fig 8.1, there have arisen in the very recent past, a few permanent shops at the lands. These are small general dealers' shops. Their owners are either people who used to hawk in the area before, or people from outside the area attracted by the market potential of the area. The main advantage of putting up a shop is the monopoly that the trader exercises over consumers who are remote from the nearest village shop. This spatial monopoly is reinforced by the law, which prohibits hawking within a radius of 15 km of the shop.

The transition from hawking to permanent trading appears to be a rare phenomenon, perhaps because most hawkers are not making much profit. Thus those who decide to establish permanent shops may have to sell some livestock to raise capital for investment. On the other hand, some of the people from the outside are also likely to be general traders in the village. They have the advantage of having more capital and of being relatively more competitive in price because the stock for the lands shop is bought in large bulk as part of the village stock.

A survey of lands shops revealed the following characteristics. First they sell mainly groceries. The stock carried is very small in quantity and value. Very rarely does it exceed P1 000; in most instances it is less than P500. The daily takings of two shops that were studied intensively did not exceed P20. They tended to be more expensive than the hawkers. This may be because they are trying to recover the costs of building. However, the
temptation to overcharge is tempered by the fear of price control regulations and the determination of the people to walk long distances, whenever possible, to cheaper outlets. Finally, the small general dealers share with other traders the characteristics of low educational attainments and poor management of their businesses.

The retail facilities at the lands are far from adequate. This is not only because of the high prices charged by some traders and the limited range of goods marketed. The law, by forbidding any hawking within a 15 km radius of a shop, may condemn people to the whims of one trader. The author has witnessed a case where the trader opened and shut the shop whenever he wanted. The people, who complained about his high prices, had no alternative within easy reach. This may mean starvation because one of the commodities in great demand is mealie-meal. This was clearly illustrated not so long ago by the experience of a lands community in the Kgalagadi District:

"Gofants Drift community in the Kgalagadi District are reported to be facing a critical food shortage and many of them are considering leaving their homes to resettle in Mochudi because of poor services provided by the shops in their area.............. They claimed that the shops only contained small items such as tea leaves, candles and soap."

(Modikwe, 1977: 3
Emphasis added.)

Some Conclusions

We can conclude this chapter first by emphasizing the inadequacy of shopping facilities at the lands. With the establishment of trading facilities at the lands we are witnessing the growth of a trading settlement hierarchy in parallel with the health one that we noted in Chapter Six. It would appear that hawkers operate in areas with less than 500 people. The threshold for a small general dealer would appear to be 500-1 000 people while that of a general dealer is over 1 000.

Given this hierarchy the trading establishments at the lands are inevitably intertwined with those in the villages. This means that the villages assume a great importance as central places for the surrounding rural areas. We now have a settlement structure that is no longer composed of large and small villages only.
CHAPTER NINE

Permanent Settlement at the Lands and Local Administration and Justice

Chapters Seven and Eight dealt with what could be broadly classified as the economic implications of settlement at the lands. This chapter examines the social and political consequences of permanent migration to the lands. It focuses particularly on the impact of these new settlements on the traditional political structures and notes if the new local government system has adapted to the changes in settlement patterns.

Settlements at the Lands and Local Administration

The new local government structures - the District Councils and Land Boards - were described briefly in Chapter Four. As already explained, the day-to-day administration of the districts is the responsibility of the Council Secretary and his staff. The Land Board office does not fall under the Council Secretary but the Council Education office does.

The Council administrative offices are located in the 'capital' village, e.g. Molepolole in the case of the Kweneng District. There are no sub-offices outside the main village. Only Land Boards have small offices - the subordinate land boards - outside the main village in the case of large districts. The other agencies of local government are not decentralized. Whatever any individual requires - whether it is a trading licence or the registration of a private school - he has to come to the 'capital' for it. The Council Secretary and his staff do make periodic visits to the areas outside the main village. Thus the Education Secretary visits all the schools in the district at least once a term.

Such a highly centralized system of government is in sharp contrast with the traditional political system that was described in Chapter Four. Indeed even today, the traditional political system, whatever remains of it, still reaches out (through the local headmen and chief's representatives) to the outlying areas (see below). It would appear that the main difference between the modern type of local government and the traditional system is that the latter was population-based.
It may sound an odd, and indeed contradictory, observation to say that the new local government system is out of line with current population redistribution when in Chapter Six we described some of its policies which are contributing to these changes. A further analysis will reveal how this curious situation has arisen.

To understand this situation, one must start by looking at the electoral processes. Botswana is a multi-party democracy and elections are held every five years. For the purposes of election, the country is divided into 32 constituencies, each of which is represented by an elected member in Parliament. The constituency boundaries are based on the population. Some of the rural constituencies, e.g. Kweneng West and Kweneng South, include lands areas within their boundaries.

The second tier of government is that of local government. The equivalent of Parliament at this level is the District Council. Like Members of Parliament, Councillors (other than nominated ones) are elected in a multi-party contest. At this level, the unit of representation is the ward. Thus the seven Molepolole wards are each represented in the Council. The other wards are based on small villages, e.g. Gabane, Lentsweletau and Mankgodi.

In theory every part of the country belongs to a ward and Vengroff (1972) has described how the system works. In practice, however, the delineation of ward boundaries is not that clear with the result that representation tends to be biased towards the villages. The overall result is that the people at the lands are not participating fully in local government politics nor are they well informed of what their local Councils are doing. This view is supported by the findings of Parson in a survey on political culture in Botswana (Parson, 1976: 395).

People at the lands communicate with their councils through their local Member of Parliament. This has been made possible by the way the constituency boundaries are drawn. Members of Parliament make regular visits to their constituencies. We have noted in Chapter Six how their constituents at the lands have made requests for their private schools to be recognised at the meetings they addressed. The curious result of this situation is that people
at the lands know the name of their Member of Parliament more often than do the people in large villages (Parson, 1976: 396).

This leads to the conclusion that the modern local government system is not in line with the recent changes in population distribution. This is not surprising because it was set up at the close of the colonial era and was thus based on existing information and assumptions. But things have changed since then and this has as yet to be reflected in the political structure. The situation has not been improved by the local government administration, which is too centralised. The unexpected result of this is that people at the lands are making full use of their national leaders to get their needs attended to.

The traditional political and judicial system

In Chapter Four we noted that the chiefs have been incorporated into the modern system of local government and that one of their remaining functions is judicial. With regard to the latter, Botswana, like a number of African commonwealth countries, has not abolished customary law. It still exists in parallel with the modern statutory and civil law. The chiefs' and headmen's courts are the institutions responsible for the prosecution of cases that come through channels of customary law. A system of appeals from very junior courts to the highest (i.e. chief's) court exists.

This hierarchy serves judicial as well as administrative functions. Under the chief and his deputy, as in the days of yore, there are senior ward headmen and then the ward headmen. The senior headmen receive an allowance, while the chief receives a salary. Outside the capital village, the chief is represented either by the sub-chief (in the case of a 'refugee' village) or by the chief's representative (or just a headman). The headmen and the chief's representatives outside the capital village are also graded. There are also senior and junior headmen. The senior headmen, like the district governors before them, are responsible for large areas outside the village. For example, the headman at Lentsweletau is a senior chief's representative responsible for large lands and cattle post areas in northern Kweneng. Under him there are a number of junior headmen.
The channels of communication (from say the central government) run through the chief and down the hierarchy. Take the example of a Minister coming to address meetings in the Kweneng villages. The notice will go to the chief, who will pass the word to the senior headmen in the villages affected and they in turn will inform their juniors to mobilize the people for the occasion. The chief will come on the day of the meeting in the company of the Minister, the District Commissioner and the Council Secretary.

The traditional system still has a role to play in mobilizing people for meetings and communal work. The new institutions have not yet taken root; there is in fact a vacuum of some kind:

"It is without doubt that the villagers still acknowledge the chief's right to demand voluntary labour and will never dare to question it, but all the same, they may absent themselves on the appointed day. The Village Development Committee (V.D.C.) or the District Councillor are granted no such authority and any call they would make for voluntary labour would be openly laughed at. The chieftainship may have dwindled but there is no new power which has usurped its prerogatives."

(Kooijman, 1978: 45)

The traditional political system is less centralised than the modern local government system that has been described above. The traditional political system has always been population-based. It is, perhaps, for this reason that it has adapted relatively well to the changes in settlement patterns. But how has it adapted? Do the headmen in the village still have control over their erstwhile subjects now permanently settled at the lands? Evidence suggests that they do not. Instead a new kind of headman, almost similar to the one Pauw (1960) found among the new Tswana settlements in South Africa, has come into being.

The New Headmen

The idea of living permanently at the lands is disliked by the chiefs and their headmen. They blame it on independence and politicians who "spoil" the people by providing services there. The chiefs and headmen complain that people remain at the lands in order to be lawless,¹ an accusation that

¹ cf Chapter Four.
Kooijman thinks has some validity. "Wrong-doers are well aware that they can avoid justice, at least temporarily and possibly forever, by retreating to their farms. A wardhead cannot exert his authority on people who live as far as fifteen miles away" (Kooijman, 1978: 86). Most people are, however, not law-breakers; they see residence at the lands as affording them an opportunity to evade what they consider to be irksome instructions from the chiefs. These instructions include the ban on gumba gumba parties during week-days.² Others stay at the lands to avoid contributing labour and money to community projects organized by the chief or the Village Development Committees.

The traditional authorities like to stress the running away from justice and communal tasks as the main reason why people are now living permanently at the lands. It cannot be denied that for a few it is the main reason. It is, however, fair to assert that this factor may explain the incidence rather than the rate of permanent migration to the lands. The latter is explained by the factors discussed in Chapters Four, Five and Six.

The reactions of the traditional authorities are nonetheless predictable. For with members of the wards dispersed all over the lands areas, the traditional political system has almost ceased to operate because the headman is no longer able to contact people easily. The chief, who in turn is dependent upon the headmen, remains cut off in the village.³ The kgotla meetings are poorly attended throughout the year, and for most of the time the kgotla is empty - a sharp contrast to the olden days.

Complete decentralization, as with services, has taken place also in this area. Court cases, even major ones such as divorce cases, now commonly take place at the lands. They are settled by neighbourhood moots in which the traditional authorities are not represented. Only cases which the neighbourhood moot is not able to solve are referred to the village.

² These are drinking parties during which loud music is played. They are banned during the week-days because they are alleged to disturb school children wanting to do their homework and working people who like to be fresh in the morning for work.

³ The old chiefs always perceived this danger and this is why they fought hard to preserve nucleated settlements (cf Chapter Four).
The moot is not an assembly of equals. There is a *primus inter pares*, who is referred to as a headman (Kgos). He chairs the proceedings and is generally responsible for the welfare of the people under his care like a traditional headman. His homestead is referred to as *kgosing* (chief's place) and there is a *kgotla* next to it.

What are also of interest are the procedures for appointment to the office of headman. There are various routes. The first one is the confirmation of a person who traditionally is the headman of the people farming in a particular lands area; i.e. if he also has settled permanently at the lands. If the headman still lives in the village, then his nearest kinsman may be selected. Secondly, and perhaps more commonly, people select among themselves (occasionally with the participation of the chief) who the headman should be. He is either one of the original settlers or a more able person, usually more formally educated, who has shown qualities of leadership, e.g. in mobilizing the community for self-help projects such as putting up schools, etc.

Each headman is responsible for large geographical areas which may be divided into units called (as in the village) wards. A ward at the lands is composed of a few homesteads; in some cases not more than four. The owners of homesteads may or may not be related. Each ward has a head, and it is among his duties to preside over moots to settle minor disputes. The ward in this sense has always existed in the North East District, where, as we have noted, homesteads are traditionally dispersed.

It is interesting to speculate on the future growth and changes of these lands wards. Okihiro (1975) says that ward or village (*motse*) formation is a result of two fundamental processes; i.e. *kgotla* formation and cluster formation. Both processes are concomitants of population changes, i.e. population increase and population redistribution. Population increase results from natural increase and absorption of foreigners.

In the case of natural increase and spatial growth, the following process takes place. A man and his wife (or wives) establish a single homestead (*lelwapa*) which may consist of several huts together with a meeting place (*kgotla*) in front of the *lelwapa*. When his sons reach adulthood, they establish their own homesteads (*malwapa*) next to the father's *lelwapa* - thus
forming a circle of homes (sebeso). Each lelwapa has its own head and the father is the headman (kgosi) responsible for the entire settlement and its inhabitants. With the process of reproduction continually repeating itself the settlement continues to grow.

How far this process will be repeated at the lands 'villages' is a matter for speculation. If people are left to themselves in a traditional set-up of tight control on movement, this process may well be replicated. But under the present changed circumstances and with increasing intervention from outside, it is difficult to imagine it taking place.

The lands headmen are not recognised by the Government or the chiefs. The latter are in fact sometimes hostile to them. Because they are not recognised, they do not receive any allowances. One Member of Parliament feels that these headmen have as many responsibilities as their colleagues in the village and intends to raise in Parliament the question of their receiving allowances.

While lands headmen are to all intents and purposes independent of the village establishment, there are still some links. Settlement at the lands is relatively too recent a development for all links to be completely severed. Another way of looking at the new headmen is therefore not to regard them as rebels but as functionaries performing, like the hawkers, a useful role at the lowest level of the new settlement hierarchy. For there are indeed certain categories of cases that the lands headman does not feel competent to handle and there are also cases where people want to appeal to a higher court.

In the case of appeal or referral of a case, there are two possible lines of communication (Fig 9.1). After a hearing by the wardhead, the case may be referred to the headman at the lands. If he also is not able to solve the case, it is referred to the nearest senior chief's representative who is likely to be living at a nearby village. From him it then goes to the chief in the village. Alternatively, the case may follow a traditional route, i.e. from the ward head after a preliminary hearing to the village ward headman of the defendant and thence to the senior headman and finally to the chief.
Routes of appeal for Lands Cases

Village Ward headman ← Wardhead

Senior (Village) Ward headman

Chief

Lands Headman

Senior Chief's Representative

Chief (village)

Source: Field data
A number of cases are, however, settled at the lands. A survey of one lands area revealed that the most common cases are those relating to land (boundary) disputes, the destruction of crops by cattle, stock thefts, divorce and general family quarrels.

The consequences of permanent settlement at the lands for the traditional political system have been shattering. This is not surprising because the traditional social structure and all social institutions were based on village life. Once people stop living (or are no longer forced to live) in the village the social edifice is bound to crack. One of the results of this breakdown in the social fabric is that it is no longer easy to organize communal self-help projects that were such a marked feature of colonial Botswana. This is inevitable since the chief, who was the nucleus and the driving spirit of the tribe, is now a spent force.

The authorities have as yet to come to grips with these developments. The traditional local government system is still modelled on conditions that have ceased to exist. The new headmen at the lands and the role that they are playing have as yet to be recognised.

Conclusions

Permanent settlement at the lands is having a tremendous effect on the traditional political structure. It is contributing to the further decline of the political power and influence of the chiefs. The traditional political system was based on the village and, with permanent migrations to the lands and the lack of authority on the part of the chiefs to force people to return to the village after harvest, the entire system appears to be in a state of collapse. Consequently the chiefs remain in the village surrounded by a few subjects. Attendance at kgotla meetings, even when a government minister is addressing, is now very low.

The chiefs have naturally been against settlement at the lands for these very reasons. They have thus tended to interpret permanent migration to the lands as a desire on the part of the people to be lawless, but this is obviously an over-reaction. People at the lands have not degenerated into anarchy; they have created new political and administrative structures which appear to be
dealing effectively with problems of law and order. The new headmen, however, are not entirely independent of the traditional system still based in the village. As with health and trading there appears to be a hierarchy of functions in relation to settlement size.

If people at the lands are still maintaining some tenuous links with the village-based traditional political and administrative system, they seem to be cut off completely from the modern system of local government, which is effectively their government. This has arisen because the areal units of electing councillors, the wards, are village biased. The result is that people at the lands do not appear to be adequately represented. Their ignorance of the political processes at this level attests to this. They are, however, linked with their local leaders via Gaborone through the local members of Parliament. This curious situation has arisen because some constituency boundaries include lands areas. Thus the one politician that the people at the lands interact with reasonably intensively is their member of Parliament. They take all their problems to him and he in turn takes them to the District Council.

The data suggests the need for both the traditional and modern local government systems to be changed to reflect the recent changes in population distribution. There is need to review the idea of over-centralizing local government agencies in the main villages. How best to do this without substantially increasing the costs of administration is another matter. But what is clear is a need for the local government administration to be accessible to all the people it purports to serve.
CHAPTER TEN

Conclusions

This study has dealt with settlement changes as a result of permanent migrations from the villages to the lands. It has also examined the implications of these changes for settlement patterns. In order to appreciate fully the significance of these changes in patterns, it is useful first to place them in a historical perspective. In this context, it is possible to differentiate between pre-colonial, colonial and post-colonial settlement patterns.

The pre-Colonial Settlement Patterns

Batswana lived in nucleated settlements. Living in villages was sanctioned by Tswana law and custom and was reinforced mainly by defence considerations. The settlements had their lands nearby. The lands were therefore farmed from a village base. The cattle, other than the milk cows, were kept at the distant cattle posts in areas with good grazing and adequate water supply. The settlements moved very often, approximately every ten to fifteen years, as the soil and firewood in the vicinity of the village were depleted. In those days it was relatively easy to move the settlements because the huts were built of free locally available materials. The balance between population and resources was also assisted by the frequent fissions of groups mainly as a result of succession disputes.

The Colonial Settlement Patterns

The colonial intervention upset the mechanisms for balancing population and resources that Batswana had developed over centuries. The colonial government reinforced the traditional political system. This enabled the chiefs to exercise a tighter grip on their subjects. One of the consequences of the colonial policies was the stabilization of settlements.

The permanence of villages was also encouraged by the adoption of European building technology - e.g. the use of brick and corrugated iron roofing - and the development of schools, shops and other public utilities.
Meanwhile through the system of indirect rule whereby chiefs were supported at all costs, the colonial government checked the fissiparous tendencies that had earlier helped to balance population and resources. On the other hand the adoption of new medical technology through the mission hospitals was contributing to population growth.

A situation was soon reached where the equilibrium between population and (arable) land was upset. The imbalance arose because the colonial government did not couple their settlement stabilization policy with the introduction of intensive agriculture. And so if the settlements could not move, the arable land had to do so as the areas near the village became exhausted.

At this point, the settlement changes from nucleated to dispersed could have started. But the changes were arrested because of the continuing existence of the traditional political system. The chiefs were not going to change some of the key ancient laws that were no longer in tune with the times. This was understandable because some of the changes would have undermined their authority.

The chiefs thus remained responsible for allocating the land and, through this, for controlling the movements of people. The ancient law of living in the village was thus retained; offenders being punished severely. This resulted in the settlement pattern where village, lands and cattle posts were spatially separate from each other. People had to build "temporary" homes at the lands for use during the agricultural season as it became impossible to farm from the village base.

The Post-Colonial Settlement Patterns

The "compartmentalized" colonial settlement, comprising villages, lands and cattle posts, has not broken down, but is in the process of changing. Among the changes is the practice of keeping cattle at the lands and not at the cattle posts. This has had some far-reaching consequences for changes in settlement patterns.

Another recent change that has had implications for settlement patterns is institutional. The major institutional change has been the removal of the
chiefs from their former position of power. The independent government of Botswana has created new elected institutions, notably the District Councils and Land Boards, that have inherited the powers and functions of chiefs. Because these new leaders are elected, they can ill-afford the autocracy of the former chiefs. They are thus more sensitive to the wishes of their people from whom they have to seek a mandate every five years.

The political changes have had tremendous implications for the way people see the village, particularly the district capital. During the colonial era, it was the seat of power. Now the seat of power is Gaborone and the village has consequently lost its sanctity; it is to all intents and purposes one of many places in the district and authorities do not bother to force people to live here.

It is within this framework of institutional changes that a new settlement pattern is emerging. Some people are now settling permanently at their lands, producing a dispersed pattern of settlement. At the lands they are also keeping their cattle.

The desire to be near their fields and livestock was by far the overwhelming reason given for the decision to migrate permanently to the lands. Given the costs of transport between villages and lands, the amount of time wasted travelling between the village base and the lands, the loss in production arising out of the journeys to and from the village and the delays in planting, and the demands of livestock management, the decision to settle permanently at the lands can be justified in economic terms.

The desire to be near their fields partly to improve their production and productivity, has as yet to be translated into fact by most farmers. The survey revealed that a vast majority of the farmers were subsistence - if not below subsistence. One may argue that for these farmers an increase in production of even half a bag of sorghum as a result of living close to their lands represents a major achievement. However, it has to be realised that improving agricultural productivity in Botswana will involve more than one factor. Living near the lands is a necessary but not sufficient condition for improving agricultural productivity.
Other factors, which affect arable agriculture directly and indirectly have to be examined. Such factors include marketing, credit facilities, technology, education and health facilities, transport, etc. It is only when all these necessary factors have been taken into account that there can be hope for dramatic improvements. In this regard the Arable Lands Development Programme (ALDEP) has taken off on the right note.

While the most important reason for settling permanently at the lands was clearly economic, there were other reasons that were mentioned. One of them was the lack of land to build at the village. Evidence suggests that the shortage of land in the village is not absolute but relative. People seem to prefer building their homes near their lands, rather than at the edge of the village, if they cannot get space to build in their wards. Thus approximately one third of the heads of households are people who previously did not have homes in the village.

The third most important reason for settling at the lands was that the cost of living was lower here than at the village. While items sold at the shops are relatively more expensive at the lands, other things, notably firewood, building materials and wild fruits, are not. These items are available in relative abundance and one is able to gather them for oneself. The income derived from gathering is substantial, and added to this is the income derived from selling any surpluses.

Life at the lands could be difficult or impossible because of shortage of water, especially during the dry season. For modern Batswana accustomed to sending their children to school and receiving treatment at the hospitals, the lack of educational and health facilities at the lands could constitute another form of hardship. The post-colonial government, by adopting policies of providing water and social services outside the villages, is thus directly encouraging settlements at the lands.

The provision of social services, particularly education, has been forced on the authorities by the grass-root actions of the people. People have built schools for themselves and have put pressure on the authorities to take them over. The water policies on the other hand have been formulated from "above". They are linked with the desire of the Government to improve agricultural
productivity, which is assumed will result from people living close to their lands.

Consequences of Recent Changes in Settlement Patterns

This study has not restricted itself to merely describing the causes of recent settlement changes, it has also attempted to examine the implications of these changes. These implications are far-reaching and complex.

Some of the effects, notably the diffusion of social services, are inextricably linked with the causes. In providing social services to the dispersed population at the lands, the authorities have found themselves trapped between what is socially and politically desirable and what is economically feasible. The costs per capita of providing social services are higher at the lands than in the villages. These costs are currently being borne grudgingly; some see them as a necessary evil if agricultural productivity is to be improved.

The conflicts between the demands of the Ministry of Agriculture and the three Ministries providing services are, however, not irreconcilable. At the moment they appear to be very divergent because there has not been any attempt at integrated planning. The Ministries have tended to work in parallel and there has been no attempt, even through the Ministry of Local Government and Lands, to co-ordinate policies. And so schools have been set up without any reference to water supplies. The Ministry of Education's recent policy guidelines on the location of schools at the lands have been formulated purely from the point of view of education. As we have noted above, integrated planning has only been initiated by ALDEP.

On the other hand the manpower problem, particularly of trained teachers, is being tackled successfully. In the long run, as more trained teachers and nurses are produced, we can expect the situation to improve considerably.

There are, however, some positive aspects to these policy changes. The main one is the increasing accessibility to social services of the majority of the population. This makes social justice, one of the national principles, a reality and not an empty political slogan.
The other major consequence has been the changes which have occurred in the trading system. There is a diffusion of trading facilities as a result of the legislation of the post-colonial state. This legislation has brought about the growth of hawking at the lands, and, recently, the beginnings of permanent shops. However, both hawkers and small general dealers at the lands offer a very limited range of goods, and in some cases, even this service is of very poor quality. The villages are therefore assuming an important role as central places offering a wide range of goods.

This study has also examined the political and social implications of the recent settlement changes. The highly centralised local government system that, unlike the traditional political system, is not population-based has as yet to cope with the recent settlement changes. The use of pre-existing wards as local government constituencies is acting against the participation in local politics by the people at the lands. The benefit of this has been to increase their participation in national politics.

The effect of settlement at the lands on the traditional political system has been shattering. The power and influence of the chiefs and their headmen have been reduced further. Instead a new kind of headman has come into existence at the lands. The new headman is responsible for administration and justice like his predecessors. These administrative changes have brought about other changes, e.g. important cases are now tried at the lands, a thing which until recently was unheard of. However, as with other structures and institutions, the headman at the lands still maintains some links with the traditional political and judicial system based in the village. Thus, as with trading and social services, there is an emergence of a hierarchical system in line with the size of settlements.

Implicit in the discussion of the consequences of settlement at the lands is the emergence of a new settlement hierarchy. Settlement at the lands has created small settlements - thus extending the settlement hierarchy at the lower end. Until recently, the settlement hierarchy, composed of nucleated settlements, large and relatively small, has been "top-heavy". Looked at from this point of view, permanent migration to the lands will not lead to an immediate demise of the villages.
Finally, although the prime interest of this study was in the people who have settled at the lands, a brief examination of the people who are still involved in seasonal migration was undertaken. They were found to be people who

(a) lack water at their lands,
(b) still value living in the village because
   (i) it is the "done thing to do", and
   (ii) they have invested heavily in village property, and
(c) value the adequate services offered by the village.
APPENDIX I

Data Collection and Analysis

Human motives are not easy to explain, and this is particularly the case when it comes to motives for migrating from one place to another. Bogue (1959) has listed 25 migration-stimulating situations for persons, 15 factors in choosing a destination, and 10 socio-economic conditions which can stimulate or retard mobility among a population. Clarke (1972: 133) has noted that Bogue's lists are not exhaustive. A number of possible reasons for migrating to the lands suggested themselves. The one that seemed most definite was the desire of the people to be near their fields. This served as the main hypothesis that the data collecting exercise was to confirm or reject.

As it is not easy to explain the motives for migration, it was decided to use more than one method of data gathering. The main method was a questionnaire survey, supplemented by the collection of oral data, and in-depth interviews, etc. Where one method proved superior, it was used, but also, where necessary, data collected by one method was supplemented with data collected by another. The merits of each method for collecting this kind of data are noted, the method, as used, is described and its adequacies or inadequacies are explained. In this way the reader is able to decide how much confidence to place on the data.

Preliminary Survey

The picture of the Kweneng District, the size and consequent diversities of the District, have been presented in Chapter Two.

The Kweneng District was selected mainly because of its proximity to Gaborone. It would have been difficult to do as much detailed work for the same amount of money and time if a more distant district had been selected. This was because the author was dividing his time between research and teaching and other duties. Because the Kweneng is so close to Gaborone, it was never absolutely necessary to establish a base in the District. Gaborone was used as a base but from time to time, and whenever necessary, the author stayed days in the Kweneng.
It was also necessary to pick one large village. Since Molepolole is the main village, it was automatically chosen. A study on Molepolole could thus provide some insights on changes in traditional urbanization that could be a useful reference for the study of other large villages across the country.

A good impression of the District, especially of its eastern part, was gained in July, August and September of 1975. Those months were spent in trying to learn as much about the District as possible.

Several research trips, accompanied by a research assistant, who also served as an interpreter, were undertaken. Interviews covering a wide spectrum of people – varying from all grades of farmers through traders to civil servants – were carried out. Areas covered included cattle posts, lands areas and villages of all sizes, e.g. Gabane, Lentsweletau, Thamaga and Molepolole itself.

Typically, the subjects discussed during these open-ended interviews covered a wide area. An example of an interview with Mrs Sanuka Nthuyathutho (born 1906) at Kopong village on the 24 August 1975 is illustrative. The first part of the interview dealt with the origins and history of the village (see Chapter Two); the second part dealt with the spatial organization of the village before 1966; the third part dealt with reasons why some people are now living permanently at the lands and the last dealt with the villages and why certain people still preferred living here. Other topics were also covered depending upon the knowledge and inclination of the person being interviewed. For example, an interview with Mr L Mabe at Lentsweletau on 9 August 1975, in addition to the above topics, included topics of labour migration, hawkers and the provision of social facilities in the past as well as at present.

Since the interviews were open-ended a large number of questions were discussed mainly as a result of following up the remarks made by the persons being interviewed. Not all interviews were as wide ranging. Some, e.g. an interview with the Head Teacher of Metsemotlababa School on 5 August, were specifically restricted to one topic.

These preliminary surveys indicated that living at the lands, while it had
occurred before 1966, had become more widespread and accepted since 1966. Secondly there were indications that long distances to the lands were a major factor in the decision to migrate. Thirdly it was clear that settlement at the lands did not take place easily in the past because the chiefs disallowed it. Finally, it did seem that the current policies of providing water and social services to the lands must serve as an encouragement to this development.

The Questionnaires

It was decided to use a questionnaire survey as the main method of gathering data because it allows one to gather a large amount of data. Accordingly, the first part of the 1975/76 long vacation was spent designing this questionnaire. Two overlapping questionnaires, one for the village and the other for the lands, were designed. As part of the idea was to compare the two populations some of the questions asked were similar. However, in each questionnaire there were distinctive questions for each of the populations.

The draft questionnaires, partly drawing upon previous surveys carried out in Botswana, were widely circulated for comments to the Department of Statistics at the University, the Central Statistics Office and the Department of Planning and Statistics in the Ministry of Agriculture. Some very useful comments were incorporated in the final pilot questionnaires. Open-ended as against pre-coded questionnaires were preferred on the grounds that they could allow all ranges of possible answers. In arranging the format of the questionnaire, care was taken to ensure that the sensitive economic and political questions (e.g. on cattle ownership) were placed at the end.

(a) The Village Questionnaires and the Pilot Surveys

The major aim of the questionnaire was to find out the main characteristics which distinguish the village-based population from the population that has migrated permanently to the lands. Questions covered a wide area but can conveniently be divided into five categories. The first dealt with social questions; demographic questions and questions on educational attainments. Secondly there were questions which were aimed at finding out the patterns of movement between village, lands and cattle posts of different members of the
household. Thirdly, there were economic questions which formed a major part of the questionnaire. The economic questions covered the following fields:

1. Distance to the fields and cattle posts
2. Crop husbandry and production
3. Cattle ownership and management
4. Other sources of income outside agriculture
5. Ownership of means of transport.

One of the major aims of the economic questions was to find out the economics of farming from a village base, and, therefore, to see if this could throw more light on the decision to settle permanently at the lands.

Fourthly there were questions dealing with provision of retail and social services and water both at the village and at the lands. The Rural Income Distribution Survey had shown that the lands areas were poorly provided with social services. One major aspect was to examine that assertion and see if it could be an explanation of why some people still prefer living in the village.

Fifthly there were political questions. These questions were aimed at finding out participation in both traditional and modern systems of government. Is the village population more traditional than the lands population? Finally there were what one would call opinion questions on why some people have migrated permanently to the lands while others have continued to live in the village.

The draft questionnaire was tested by a pilot survey on Gabane. Gabane was selected because (a) it is near Gaborone, an important consideration in view of the shortage of time; (b) it possesses attributes of a large village. With respect to the latter, the preliminary survey had revealed that some of its people farmed beyond 20 kilometres from the village and one of its lands, Metsemothaba, had the largest lands primary school in the Kweneng. Thirdly, Gabane (with a population of 1936 in 1971) is a smaller village by the standards of Molepolole, and so it was not absolutely necessary to take a sample of households, which was a saving on time.
The decision to survey the entire village had two important implications. Firstly it offered the enumerators greater training time on the questionnaire than would have been the case if a few households had been sampled. Indeed the village survey was as much a training ground for the enumerators as a test on the questionnaire. Secondly it provided another source of data that could be used (and has been used wherever necessary) in the study.

Four enumerators, employed through the Central Statistics Office (which had employed them in previous surveys of its own), were trained on the pilot survey for two days. After the training, which involved mock interviews, the enumerators immediately started on the pilot survey. The survey, during which the enumerators were supervised very closely, took five days. The unit selected for interview was a household, defined as people eating from the same pot.

When interviewing an illiterate population, there is always the problem of estimating ages and, in this case, distances. With regard to the former, an events calendar of the Kweneng District was prepared and given to each of the enumerators. They had been trained on the techniques of estimating ages during the mock interviews. In estimating distances, an indirect method was used. The enumerators started with estimating the time it took to cover the given distance(s) by a method of travelling used. The time was then converted into distances according to the formula in Table A1 on the next page:

The survey was preceded by a formal introduction of the researcher to the public in a kgotla meeting. The purposes of the survey were fully explained to all present. In addition each of the enumerators was furnished with a formal letter of introduction.

The pilot survey generally proceeded with minimum difficulty. The main objectives of testing the questionnaire and training the enumerators, appear to have been achieved with a reasonable measure of success. With regard to the questionnaire, the pilot resulted in the changes in the layout of some questions and the omission of some of them in the final draft. The questions omitted were the political questions because the answers they yielded were not easy to interpret. The explanation for this may lie in the very sensitive nature of these kinds of questions. Although the questions were not on people's political views or even opinions, it does seem this is the way some of the people interpreted them.
The pilot survey yielded extremely useful data, which was analysed manually into tabular form. There are altogether twenty five tables. Some of the data has been used in the relevant chapters. Among other things the pilot survey did confirm that movement to the lands had accelerated since 1966. The enumerators had been instructed to find out from the neighbours of deserted homesteads when and where the owners had gone. Of the 90 households that were reported as having left the village, 72 or 80% had settled permanently at the lands. 70% of them had settled at the lands since 1966.

**TABLE AP1**

<table>
<thead>
<tr>
<th>Method of travelling</th>
<th>Kilometres per hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walking</td>
<td>6</td>
</tr>
<tr>
<td>Ox-drawn sledge</td>
<td>6</td>
</tr>
<tr>
<td>Donkey/ox-cart</td>
<td>8</td>
</tr>
<tr>
<td>Cycling</td>
<td>16</td>
</tr>
<tr>
<td>Tractor</td>
<td>20</td>
</tr>
<tr>
<td>Car/motor cycle</td>
<td>40</td>
</tr>
</tbody>
</table>

(b) **Lands Questionnaire**

This was the main questionnaire and was drawn up at the same time as the village one. Again the draft questionnaire was discussed with interested parties and comments were incorporated into the final draft. Some of the questions, for example the economic and social questions, were similar to the ones in the village questionnaire. It was hoped the answers would indicate some interesting characteristics that would contrast sharply with those of the village population. These characteristics might shed useful light on the reasons for permanent migration to the lands. For example, are the lands households more progressive in agriculture than village ones?

The main part of the questionnaire was taken up by questions trying to elicit information on why people had settled permanently at the lands. One of the questions was concerned with finding out the reasons for permanent migration to the fields as well as the form this migration has taken; i.e. whether it
has occurred in stages with members of the household moving at different times starting with the head.

An attempt was also made to find out if people would name the curbed powers of the chiefs as a reason for their migrating to the lands. However, very few respondents mentioned this as a reason. Questions on social, water and retail provisions were aimed at finding out the nature, extent and use of these facilities at the lands as a means of assessing their impact on migration.

While it was accepted that these people had settled permanently at the lands it was also recognized that some of them might still maintain some links with their former villages. Some questions on the form and frequency (if any) of links with former villages were therefore included.

What links existed could be an index of the break with the former village. It could also give an indication of the functioning of the settlement system found in rural Botswana.

As the enumerators had already been trained on the village questionnaire, very minimal training was given here. The same procedures for estimating ages and calculating distances were used.

Immediately after completing the village pilot survey a one day pre-test of the lands questionnaire was carried out in the Metsemotlhaba (i.e. Gabane) lands area. With scattered settlement at the lands entailing a lot of time wasted on travelling, it was not possible to have the same coverage as in the village. However, some useful experience was gained to make possible minor revisions of the questionnaire. The main aim of the pre-test was to test the questionnaires as the training had been adequately taken care of during the Gabane pilot survey.

The Surveys

As soon as the results of the pilot and pre-test surveys were analysed, the final questionnaires were produced and they were ready by the end of September. Time was very much at a premium as it was necessary to start on the surveys before the rains. This was more crucial for the lands survey as a delay
until after the rain might lead to the mixing of the lands with the village people. For this reason, the lands surveys were given a priority. The main rains did not fall until towards the end of December, by which time both surveys had been carried out. To this extent it can be claimed that each population was surveyed at its own base.

(a) The Lands Survey

Given the questionnaire, which has already been outlined, the objectives of the survey were stated as:

a) to find out the reasons why lands people have migrated permanently from the village;
b) to find out when the movements took place and whether movement occurred in stages; i.e. not all members of the household moving at the same time;
c) to find out the demographic and socio-economic characteristics of the lands population that might explain this permanent migration;
d) to find out to what extent the lands people had severed links with their former villages and if there are still links, what form they take;
e) to find out where the lands people get their water, grocery and other requisites and social services. This was an attempt to find out the extent of physical and social provision at the lands so as to find out how much it was a factor in the decision to settle permanently at the lands.

The lands to be surveyed had already been selected. A map of Molepolole lands had been drawn (Fig AP1) based mainly on the information supplied by the District Agricultural Officer (DAO) and the agricultural demonstrators. As it turned out most of the lands areas coincided with the extension areas.

The original aim was to select a 10% random sample of households in the Molepolole lands. Ideally the sample would be stratified according to distance from the village as one of the aims was to find out the influence of distance on the decision to settle permanently.
Source: Prepared from information supplied by the District Agricultural Office, Molepolole.
In order to get a random sample at the lands it would have been necessary to have obtained a list of all the households in each stratum. But to get such a list would have required prior mapping of all the lands households. This would have been time-consuming and very costly. In any case to survey scattered households, with available staff and time, would not have been possible.

In the event it was decided to select lands in one direction from Molepolole and lying at different distances from the village.

This method has never been used anywhere. Given the constraints of time and cost, it seemed the most appropriate for the area. It would have been very costly and time-consuming to transport enumerators from one part of the district to another, if lands located at spatially separated areas had been selected. The logistical problems were reduced considerably as a result. At the same time the selection of a collection of lands areas in one direction by a random process gave one some scope to generalize about the other lands. Results, however, should be treated with caution if used for Molepolole lands generally.

Molepolole lands can be reached through one of the five major routes from the village; viz Molepolole-Gaborone (east), Molepolole-Lethlakeng (west), Molepolole-Thamaga (south), Molepolole-Lephephe (north) and Molepolole-Lentswelela (north-east) (Fig AP1). Three lands lying on one of these directions were to be selected. A lottery method, using labelled discs, was used to select the direction, which turned out to be the north-east, comprising the following lands: Poaneng, Medie, Mahetlwe, Digwagweng, Mmamarobole, Ditshukudu, and Lentswelela.

The lands were then classified according to distance from Molepolole; nearest (0-15 km), further (30+ km) and lying in-between (16-29); respectively Mmamarobole; Poaneng and Medie; and Digwagweng, Mahetlwe, Ditshukudu and Lentswelela. Mmamarobole, as it was the only one in its class was automatically selected. For the other two groups of lands a lottery method was used to select one lands area in each, Medie and Ditshukudu respectively. The combined population of these lands according to the 1971 census was 3 153. This number was made up as follows:- Medie (2 226), Mmamarobole (705) and
Ditshukudu (222). As would be expected the lands near Molepolole are more densely populated than the more distant ones. One result is that the former has a higher density of fields (Fig AP2). The near lands are, however, continually being abandoned as they become exhausted (see Chapter Five). The total population of the Molepolole lands area was 24 760 (1971); thus the sample population was about 12.7% of the total.

In carrying out the survey there were two problems that we had to cope with. The first was the relatively large distances between homesteads as the settlement pattern at the lands is a dispersed one (see Fig AP3). The enumerators were each provided with a bicycle, which the Central Statistics Office (CSO) had kindly lent to us. The second problem was water, which in some localities was either scarce or distant. This problem was overcome by establishing our bases at the points that had a good supply of water. We also received tremendous help and co-operation from the local people and the DAO and his team of extension officers in this respect. For example, at Medie, one of the permanent residents, a progressive farmer and the local Member of Parliament, used to help fetch water for us from his borehole with his tractor.

Generally, the respondents were very co-operative; they gave their answers very freely. Inevitably suspicions were encountered here and there. But generally people's fears were to a greater extent allayed when they learnt that the survey was being conducted by the University. Thus a Government-sponsored survey, unless a lot of propaganda were undertaken, would suffer as a result of people's suspicions that enumerators were either detectives or income tax officers. To some extent we cannot say in this case that all these fears were completely allayed or absent, even though each of the enumerators had been furnished with a letter of introduction. For this reason data on crop and livestock production should be treated with some caution; for the tendency is usually to deflate the figures. With livestock, the situation was complicated by the current debate on the Tribal Grazing Land Policy (TGLP). It transpired in the course of interviews that some of the people who were opposed to the policy feared that if they were known to own large numbers of stock, they would be ordered out of the tribal areas to the new commercial grazing areas towards the Kgalagadi.
Source: Based on Field Data, Dept. of Surveys and Lands Airphotos 1/75/A/115 nos.130-133 and Topographic Sheet 2425B2
However, to ensure as much reliability of data as possible, it had been impressed upon each enumerator to explain clearly to the respondents the purpose of the survey. As in the pilot survey, the enumerators had been told to assure the people they interviewed that the information gathered would be treated confidentially, that the names of the interviewees would remain anonymous and that the information gathered would be treated in a general way as coming from their lands area and not from specific individuals.

The enumerators were also asked to stress the positive aspects of the survey, namely:-- that the main aim was to help people in their development by trying to find out where they were and what their problems were. Thus once it was known how many people lived at the lands, their reasons for doing so and what their felt needs were in terms of water, health and education, the government would then be in a position to help them.

If they did not find anybody to answer the questions, the enumerators had to keep going until they found somebody. Only households who said they had settled permanently were to be interviewed.

The lands surveys were completed by the middle of December, in time for the main rains, which did not fall until around Christmas.

(b) The Village Survey

Once the lands survey had started and was going smoothly, plans were made to begin on the Village Survey. A questionnaire had been prepared. The aims of the Village Survey were:

1. to find out what farming from the village base entailed in terms of distances to the lands and costs of transporting crops and personal effects;

2. to find out the advantages and disadvantages of living at the village; and

3. to find out the socio-economic characteristics of those who still partook in the traditional seasonal migratory system. Were they more or less progressive in agriculture than their lands counterparts? Or were they richer or poorer, etc?
Molepolole, as already noted, is a very large village with a population of more than 14,000 people. It would have been impossible to interview all the households; so it was decided to take a sample instead. In order to take a sample, a sample frame was needed. One method of sampling would have been to use a recent census map (1971 map in this case) to divide the village into areas of approximately the same number of households. The next stage would have been to select a number of these areas at random, update the map of each of the areas and then select a number of households from each area. This is the methodology used by the current National Migration Survey and the household expenditure surveys conducted by the Central Statistics Office. The disadvantage with this methodology is that it is liable to two errors, which may have a negative effect on the results. First, the enumerators may select a wrong area and secondly, they may include too wide an area. This is exactly what happened with the Department of Statistics Gaborone Survey at Old Naledi in 1975.

To avoid these problems, a different but more laborious method was used. It consisted of a number of stages. The first stage was to take a census of all the households using the 1971 census map as a base. Households that had ceased to exist were deleted and those that had come into existence since then were added. Most of the census taking was done by the first and second year University Geography students during weekends in the months of September and October 1976. Fortunately many of the numbers on metal plates nailed on the doors during the 1971 census were still in place. These numbers corresponded with the numbers on the map. So identifying households on the map was very easy. Altogether 3,200 households were identified. It was an exercise that the students really enjoyed and was useful practice for them.

The next stage was to sample the households to be interviewed. To ensure that the sample was spread over the entire village and that all households including the latest ones were included, systematic sampling was used. 200 households consisting of 10 independently selected samples of 20 households each were selected. The choice of 200 households was dictated by our financial and time resources. At the same time it was considered a sufficiently large sample to allow some precision. This kind of systematic sampling is called replicate sampling. With replicate sampling, a number of sub-samples rather than one full sample, are selected from the population. All sub-samples have
exactly the same design and each is a self-contained and adequate sample of the population.

Replicate sampling has other advantages. The first is practical. If the size of the total sample is too large to permit the survey results to be ready in time, one or more of the replications can be used to get out advance results. The other advantage lies in the light which the samples can throw on variable non-sampling errors. Each of the sub-samples produces an independent estimate of the population characteristics, and the variation in these can be used to obtain the standard error of the overall estimate. Also if each is carried out by, say, a different interviewer or set of interviewers, one can obtain an estimate of between-interviewer variation.

For these interviews, because of pressure of time, four university geography students were employed. It was essential to catch the farmers in the village before they left for their lands. The enumerators at the lands could not finish in time to undertake this survey, and so local students were employed. They went through the same rigorous training as had been given to the enumerators.

They were allocated to different parts of the village and each of them was given a map showing the sampled households together with the group to which it belonged. If there was nobody to answer questions in any of the sampled households they were instructed to try another household next door. They were to note for each household interviewed the number and the replicate. The questionnaires were thus initially analysed by replicate. Altogether 184 households, representing 6% of the total number of households, were interviewed; they were distributed as shown in Table AP2 on the next page.

In 16 households the enumerators did not find anybody to answer the questions. Instead of making another selection, it was decided 184 households were sufficient for our purposes.

The response from the respondents was generally good and cordial. The enumerators received a lot of co-operation from the people. The fact that the survey had been publicised earlier helped a great deal.
Data Processing

During the surveys there was a regular check of completed questionnaires for missing information, and accuracy. Any missing information had to be collected while the memories of the enumerators were still fresh. A lot of time and expense was thus saved.

After each visit to the field the checked questionnaires were taken back to Gaborone. When all the surveys were completed all the remaining questionnaires were taken to Gaborone and the work of editing and coding began. These tasks were performed by three final year statistics students, who had been involved in similar tasks (including the pilot survey) before. In consequence, they did not require much training.

<table>
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<tr>
<th>Sample Group</th>
<th>No. in Sampled Group</th>
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</tr>
<tr>
<td></td>
<td>184 Total</td>
</tr>
</tbody>
</table>

As the questions were open-ended, the main aim of editing was to ensure that all the answers to the questions made sense. There was also a thorough check for accuracy, especially in the estimation of distances. Finally, there was some checking for uniformity in the answers.

One of the aims of editing was to find a coding frame for each question. In the process of going through the questionnaires it was possible to draw up a list of the main answers to each question, or the main categories for the quantitative questions. Each of the coders was allocated a whole set of each of the lands areas and at least three groups (replicates) of the village
questionnaires. The checking, editing and coding of the supplementary surveys questionnaires was done by the author.

For all the questionnaires, the coded answers were then reduced to tabular forms. There were 45 tables made from the lands questionnaire and 30 tables from the village one.

Once the tabulations were finished the task of analysis and interpretation began. One of the first tasks was to estimate the standard errors for the village questionnaire survey. The formula used was:

\[
S.E. = \frac{(P_i - P)^2}{r(r - 1)}
\]

where

\(P_i\) = population in replicate i

\(P\) = overall population

\(r\) = number of replicates

For percentages up to 20%, the standard errors tended to be in the range of 1½ - 2½%. The same is true for percentages ranging from 80% to 100%. For other values of percentages, the standard error is about 10%.

Most of the analysis of the questionnaire data involved working out simple statistical measures, the most important of which were the percentages. However, wherever necessary and possible, other measures, notably frequency distributions and means, have also been worked out. Some of the data has been analysed in diagramatic form.

**Supplementary Surveys**

The general surveys were supplemented by small-scale surveys focusing on different phenomena. There were three such questionnaire surveys covering transport operators, firewood dealers and traders. The main aim was to get as much in-depth information as possible on these crucial areas to supplement the data gathered through the main surveys. The surveys were carried out by the students during the December vacation in 1977. Not very firm conclusions can be
drawn from the surveys other than the surveys of village traders. The rest — firewood dealers, transport operators and hawkers — formed an elusive population and it is thus difficult to say how representative the samples were.

In-Depth Interviews

The data from the surveys has also been supplemented by in-depth interviews with various categories of farmers, traders, educational officers, some head-teachers and the health staff. For example, it is necessary to study in detail the work calendar of a progressive farmer in order to appreciate his decision to settle permanently at the lands.

In selecting people for interview, much care was taken to ensure representativeness.

Oral Data Collection

It was expected from the beginning of the research that not all the necessary data could be collected through the questionnaire survey method. Allowance was made for some form of oral data collection right from the start. In order to understand the present, it is important to know what happened in the past and although a lot of what happened since 1890 can be found in colonial files in the Archives, and published materials, there is still a great deal of local history that is not recorded anywhere. It is stored in the minds of some of the people who either were there when it happened or are bearers of information transmitted to them by their forebears.

The collection of oral data is now an accepted scientific method of gathering data. Vansina (translated by H M Wright) (1965) has laid down the rules for data gathering using this method. In short, when using this method, it is essential to know the language and culture of the people one is studying, and to select one’s informants carefully.

Collections of oral data have been made in Botswana notably by historians. Tlou’s (1972) work was derived mainly from this method of data gathering. There are, of course, some problems in using this method (Tlou, 1972: 5-6). However, the problem of availability of informants was not a serious one in
the case of this research as oral data gathering was only a supplementary method. Because of this it cannot be claimed that all possible bearers of Kwena history were interviewed.

Concluding Remarks

The use of different methods of data gathering ensured that a large amount of data required for the study was collected. The methods used supplemented each other and this enabled the author to understand in greater detail the processes at work in permanent migrations to the lands. The oral data and in-depth interviews, for example, gave the human touch to the "dry" statistics collected through questionnaire surveys.


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