

SEROWE: A DISTINCTIVE FORM OF AFRICAN URBANISM?

by

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FOREWORD

The field work for this dissertation was undertaken whilst the author was stationed at Serowe in 1964-65 and up to 1972 whilst still in Botswana. Subsequently, two return visits have been made to Serowe in 1976 and 1981 to check the information collected. The dissertation however does not claim to reflect accurately the development of Serowe and its place in the economy of Botswana to 1981. It is however claimed that the survey was accurate up to 1972 which has been adopted as a cut-off point.

The names of some countries and settlements have changed over the period since the research for this dissertation was started. Where the names of places included in the dissertation have been changed the name used is the one appropriate for the period being written about. In addition whilst it is common for the names of the tribes of Botswana to be written thus e.g. Bakwena, here the more traditional form of e.g. baKwena will be used. For the Bamangwato the shortened version of baNgwato will be used. Where appropriate, Botswana will be used for the country, baTswana for the people of Botswana and Setswana for the language spoken by most of the people in Botswana.

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I would like to acknowledge the support and encouragement of those who have helped me in carrying out the research for the dissertation. These include the students of the Serowe Teachers' Training College who assisted with the field work, the officials of the Bamangwato Tribal Administration, in particular the acting Chief Mr Rasebolai Kgamane, and the District Commissioners Office, Serowe. I would also like to express my deep appreciation to Professor Isaac Shapera for his help and advice and to Ms Debbie Potts for her most meticulous guidance over the development and presentation of the material.

ABSTRACTSEROWE: A DISTINCTIVE FORM OF AFRICAN URBANISM?

This thesis details the establishment, organisation and development of Serowe from 1902 to 1972 and through the analysis of the nature of Serowe society seeks to show that Serowe represents a distinctive form of African urbanism.

Chapter I reviews the nature of urban settlements.

Chapter II summarises major changes that have taken place in the field of urban geography and in particular considers the impact of the urban environment on ways of living. Chapter II concludes with a consideration of alternative conceptualisations of urbanism and illustrates the process of urban transformation.

Chapter III focuses upon urbanisation in Africa with a broad overview of movements in African urbanism, using Yoruba urbanism as a case study. Chapter III concludes with descriptions of five selected aspects of African urbanism, namely primacy, ethnicity, occupational development, spatial arrangements and housing types.

Chapters IV to VIII provide a detailed description of Serowe and are based on field work carried out in 1965 and 1966.

Chapter IV traces the origin of the nucleus of the baNgwato of Botswana and the early history of Serowe.

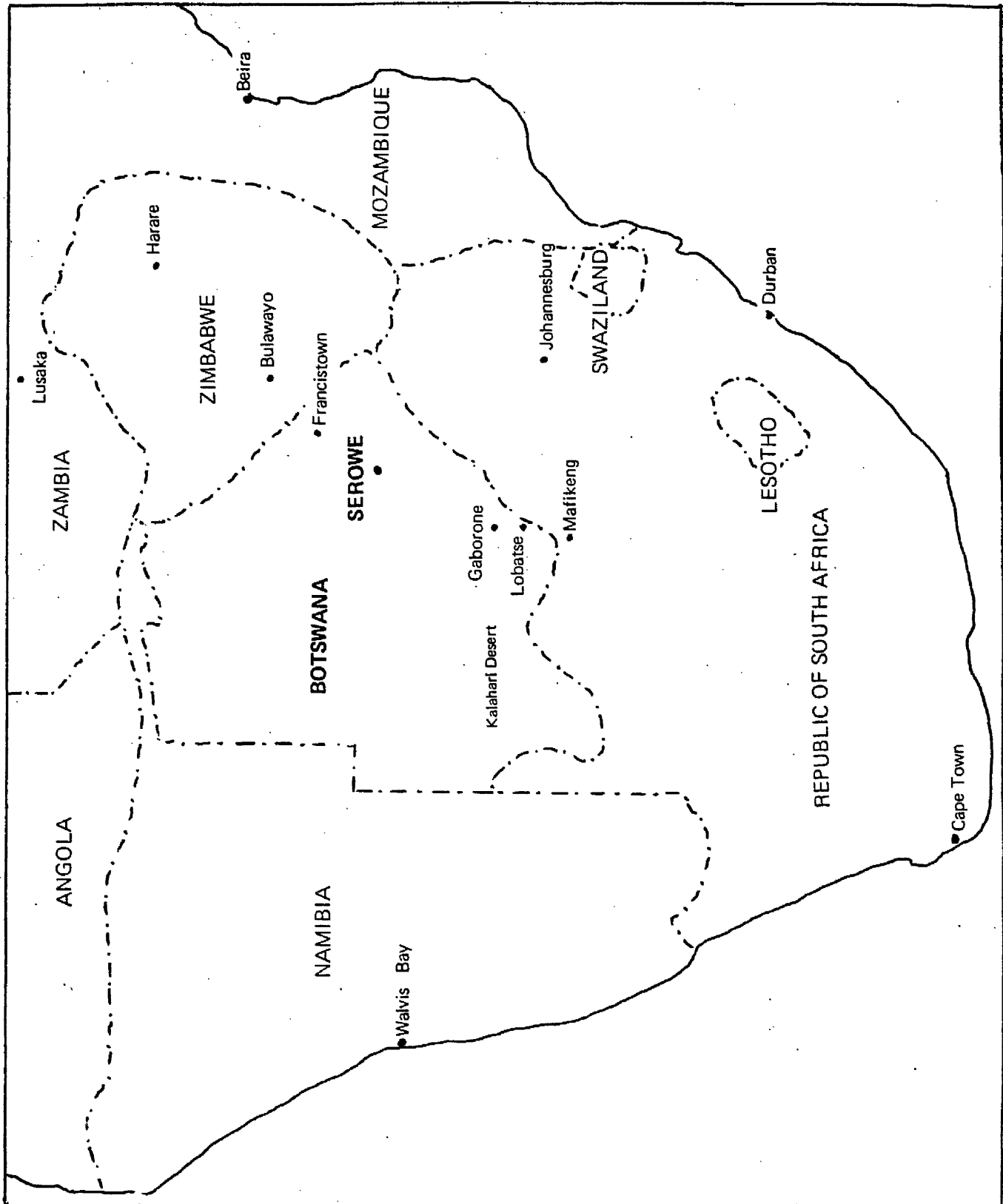
Chapter V reviews the sociological factors affecting the organisation of Serowe and stresses the importance of the Chief and the ward in the layout and development of the settlement.

Chapter VI considers the impact of the geology of the Serowe area on the growth of Serowe and demonstrates the importance of water.

Chapter VII traces the growth in size of Serowe in the context of national and regional totals and concludes with a summary of the major periods of growth.

Chapter VIII provides a detailed description of Serowe in 1972.

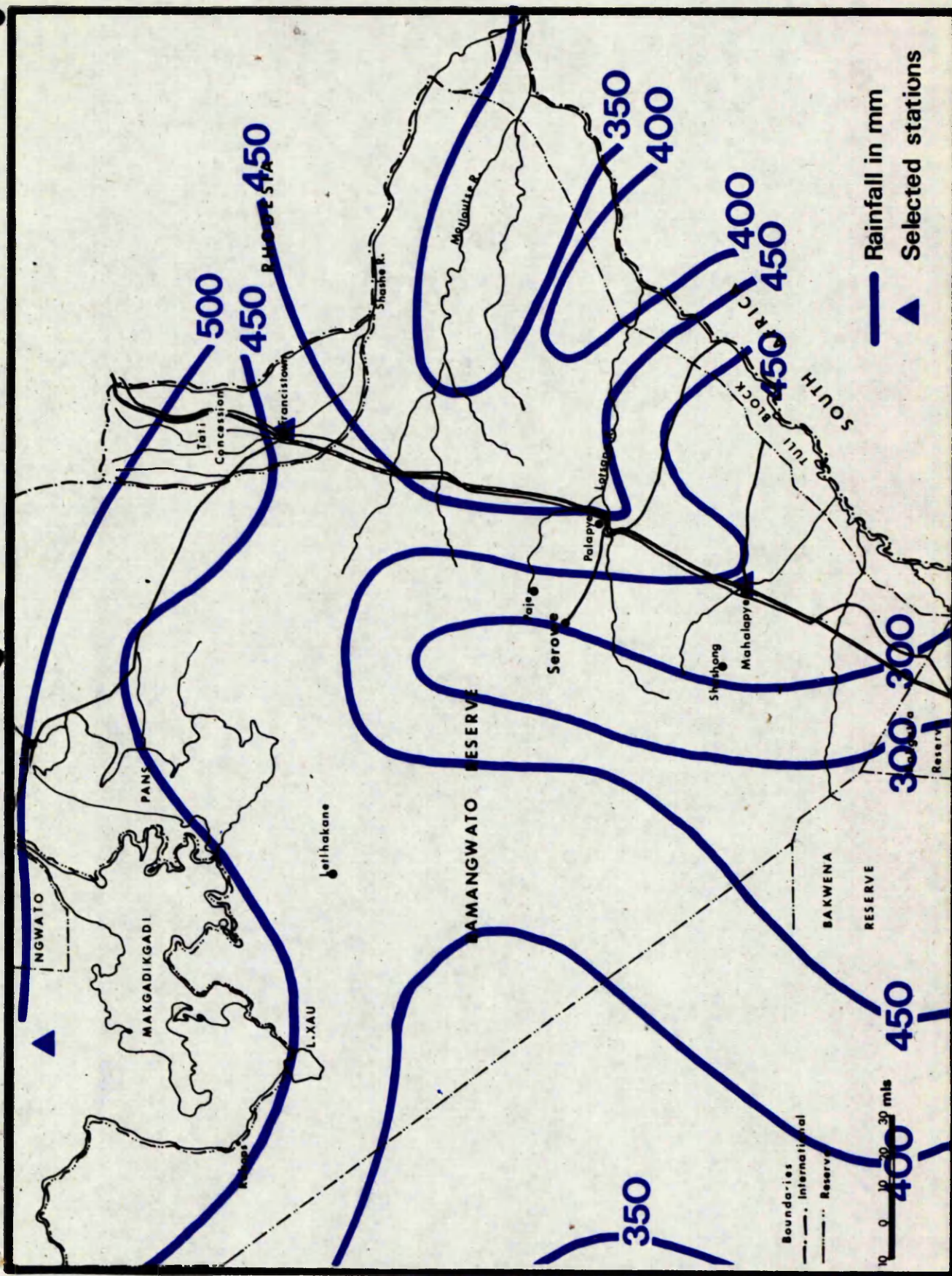
Chapter IX identifies the unique features of Serowe, traces changes in the social organisation resulting from non-indigenous influences, relates Serowe to the theories of urbanism and concludes that Serowe can be classified as urban.



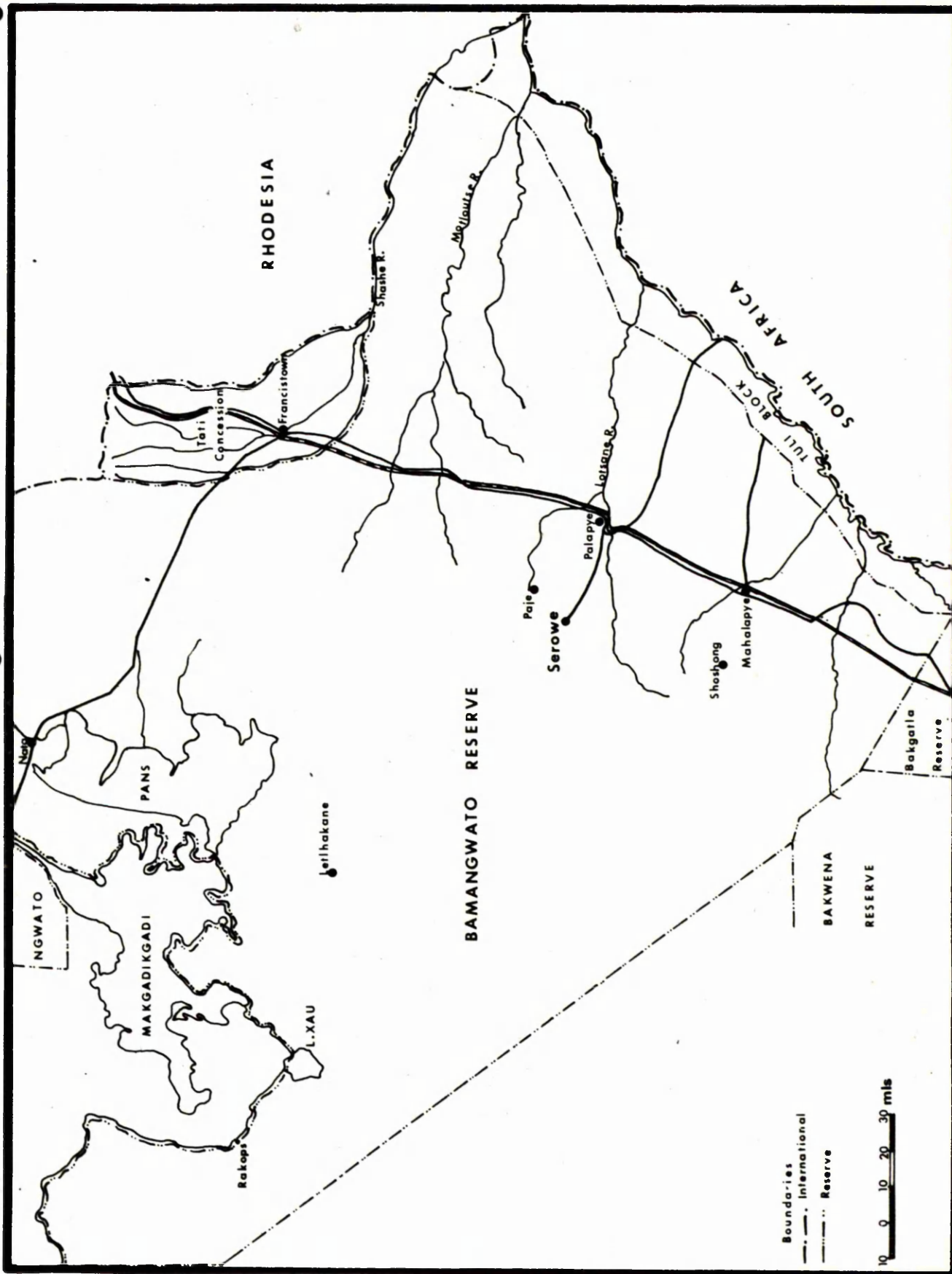
CHAPTER I

WHAT IS URBAN?

Serowe is a settlement of considerable size, importance and interest. With a recorded population of 45,560 in 1971 (Crone, 1972) it was the largest settlement in Botswana and the capital of the baNgwato, the largest tribe in Botswana. Serowe is situated some 54 kms west of the Mafikeng to Bulawayo railway and the main north-south road and within a stones-throw of the eastern rim of the Kalahari escarpment. Serowe is also situated in the semi-arid desert of the thorn-veld of Southern Africa where water supply is precarious and agriculture persistently marginal. The annual average rainfall for Serowe, which is shown on Map 1, is approximately 450 mm but the annual variability is estimated at 50%. Serowe is therefore an outstanding phenomenon. Moreover, despite progressively increasing contacts in recent times with non-indigenous socio-political forces the settlement up to 1972, the end of the period of research for this dissertation, had retained its essentially traditional character. It had been affected but little by exotic concepts of architecture, layout and organisation. There were, for example, few of the features that one might expect to find in such a large settlement. There were no clearly definable neighbourhoods each with its related services, nor markets, nor amenities in the form of public transport services, parks and open spaces, reticulated water and electricity facilities or major opportunities for paid employment. Housing was restricted for the most part to the traditional African rondavels (round houses) of mud and thatch although



MAP 1: NORTH - EAST BOTSWANA



MAP 1: NORTH - EAST BOTSWANA

by 1972 the number of square-shaped houses was increasing. Most houses had only one room within each building and throughout the whole of Serowe up to 1972 there were no buildings with two or more storeys.

Serowe was similar in layout to that of other large traditional settlements in Botswana such as Kanye and Molepolole but quite different from the modern-style towns of Gaborone, Lobatse and Francistown which were modelled more upon European patterns of growth and development. It is certain that each of the three last named towns would be considered to be urban and the 1971 Census (Crone, 1972) for Botswana formally distinguishes between Gaborone, Lobatse and Francistown and the remaining settlements of Botswana which were considered to be rural with all places classified as villages. However, because of its size and importance in the administration of both the Central District, and of Botswana as a whole, questions must be asked whether Serowe should be classed as urban. It is the purpose of this dissertation to analyse the nature and role of Serowe in Botswana up to 1972 and to assess the rural/urban qualities of the settlement. Within the limits set by the availability of data, an attempt will be made to trace the origin of the nucleus of the settlement and to describe the changing nature of the community through time. An analysis of the settlement in 1972 will serve to demonstrate its contemporary contribution in a national context and to highlight those elements upon which future development might be based.

The question of what is urban or rural has occupied writers for a very considerable period of time and one difficulty arises from the use by some authors of 'town' as a synonym for 'urban' and 'village' for 'rural'. It seems also inevitable in some cases that authors immediately equate 'urban' with 'city' and discussions proceed on the

basis that the city is the main expression of urban life. Whilst it is accepted that the city does represent the clearest form of urban life, it is also argued here that other settlements can and do exhibit urban qualities. What are needed are accepted paradigms which define urban and rural qualities so as to assist in the classification of settlements. The Yoruba towns have been discussed in terms of a distinctive urban form (Vide Wheatley, 1970, Patterson, 1970, Mabogunje, 1962, Mitchel, 1961) and a detailed consideration of the Yoruba urban forms will be given later. What is suggested is that Serowe and the other large, traditional, nucleated foci of Botswana also offer examples of a unique pattern and deserve to be placed within a hierarchy of urban settlements. Peil (1984) avoids the question when referring to the 'agrotowns of the Tswana of (sic) Swaziland' (p. 59)).

Peil (1984) has noted a range of variables for an urban classification including autonomy and community (Weber 1921), a literate elite (Childe 1951 and Sjoberg 1960), distinctive institutions (Fustel de Coulanges, 1889 and Pirenne 1925), mental stress (Simmel 1908 and Spengler), deviant subcultures (Fischer 1975, 76) and stimulus to social movements and class conflict (Castells 1977, 78). Wirth (1938) in his most famous definition of urban life said, 'A city may be defined as a relatively large, dense and permanent settlement of socially heterogeneous individuals' (p. 8). However, the most commonly used criterion for urban status is that of size despite Wirth's stricture that the 'characterisation of a community as urban on the basis of size alone is obviously arbitrary' (p. 4). A substantial range of cut-off points for settlements being classed as urban have been adopted and these are summarized in Table 1 which lists the minimum population

levels used in a number of countries around the world. In addition, it is noted that Carter (1972) identified other patterns in Iceland, Spain and Italy. For Iceland, Carter stated that 300 people marked the boundary of rural and urban because the rural environment could not support populations at and above that level engaged solely in agriculture. He also claimed that in Spain and Italy there were settlements which were essentially rural in quality with population totals of 8,000 to 10,000. Table 2, adapted from Peil (1984), shows the size of selected cities and the levels of urbanisation in a number of African countries. Whilst it is common practice to use the 10,000⁰ figure adopted by International Population and Urban Research, Berkeley for making international comparisons to indicate urban status, it is clear from Table 2 that many countries in Africa do not have any settlements of that size. Gibbs and Schnore (1960) examined 1064 metropolitan areas in 1950 and found that reasonably accurate statistical data for over four-fifths of them were available. They suggested that the criteria devised by the Berkeley team were applicable. However, size alone was only one of the criteria and it was the amalgam of a number of contingent factors that made the 100,000 figure viable as a basic indicator. Peil (1984) has suggested that the precise level to indicate urban status should depend upon 'history, custom and the extent to which 'urban way of life' (however defined) is experienced in relatively large agglomerations of peoples' (p. 50) Peil goes on to suggest that it is generally accepted in a settlement with a population of at least 10000 to 20000 the presence of urban life may be accepted as being present but regrettably she does not outline the characteristics which would make the matter certain.

TABLE 1Definitions of Urban Places

<u>Criteria</u>	<u>Number *</u>	<u>Examples</u>
Population size	33	<u>Denmark:</u> 200 or more people <u>Switzerland:</u> Communes of 1000 and more <u>Austria:</u> Communes of 5000 or more <u>Senegal:</u> 10000 or more <u>Venezuela:</u> 2500 or more
Population size plus additional criteria	20	<u>United States:</u> 2500 or more inhabitants incorporated as cities, boroughs, villages and towns <u>India:</u> towns and all places with 5000 or more inhabi- tants and a density of not less than 390 per square kilometres and at least three quarters of the adult male population employed in pursuits other than agriculture <u>Zambia:</u> 5000 or more inhabitants, the majority of whom are in non-agricultural activities

<u>Criteria</u>	<u>Number*</u>	<u>Examples</u>
		<u>Sweden</u> : built-up areas with at least 200 inhabitants
		<u>Bangladesh</u> : 5000 or more inhabitants with and centres having streets, plazas, water supply systems, sewerage systems, electric light etc.
		<u>Zaire</u> : 2000 or more inhabitants where the predominant economic activity is non- agricultural
Legal, administra- tive and govern- mental	65	<u>Egypt</u> : governorates of Cairo, Alexandria, Port Said, Ismailia, Suez <u>Hungary</u> : Budapest and all legally designated towns <u>Thailand</u> : Municipalities
Total	118	

* Number of countries using criteria

Source: United Nations (1977) Demographic Yearbook Adapted from
Clark, D, (1982), Urban Geography.

Table 2 National and urban population by country and city (in thousands)

Country	National Population		Percentage Urban Later			City ^b	Population ^a Latest		Earlier	
	N	Year	1967	%	Year		N	Year	N	Year
Angola	7 262	'81	12	21	'80	Luanda	1 200A	'82	225A	'60
Benin	3 618	'82	16	23	'75	Porto Novo	114	'80	70	'64
						Cotonou	685	'80	109	'64
						Gaborone	60c	'81	4	'64
Botswana	937	'81	9	15	'78	Bujumbura	141c	'79	71	'65
Burundi	4 111	'79	2	4	'78	Yaounde	352	'80	90c	'62
Cameroon	8 700	'81	17	35	'80	Douala	800	'80	150	'61
						Praia	39c	'80	13Ac	'60
Cape Verde	296	'80	NA	20c	'70	Bangui	709A	'80	111c	'64
Central African Republic	2 349	'81	27	41	'80	N'Djamena	313	'80	99	'64
						Moroni	16	'78	12	'66
Chad	4 405	'79	9	18	'78	Brazzaville	422	'80	145c	'64
Comoros	408	'80	8	9	'75	Pointe Noire	185	'80	100	'66
Congo	1 608	'82	38	40	'75	Djibouti	102	'76	62A	'70
						Malabo	151	'80	27	'60
Djibouti	310	'80	90	50	'76	Addis Ababa	1 277	'80	432	'60
Equat. Guinea	244	'79	30	60	'80	Asmara	424	'80	119	'60
						Libreville	251	'75	31c	'60
Ethiopia	31 065	'80	5	15	'80	Banjul	44c	'83	28c	'63
						Accra	1 416A	'80	338Ac	'60
Gabon	800	'81	23	20	'75	Kumasi	588A	'81	180Ac	'60
Gambia	695	'83	13	16c	'73	Sekondi/Takoradi	212A	'80	75Ac	'60
Ghana	11 742	'79	26	40	'80	Tema	102Ac	'70	30Ac	'60
						Conakry	763A	'80	112c	'60
Guinea	5 275	'79	10	19	'80	Bissau	109c	'79	71	'70
Guinea Bissau	768	'79	12	23	'75	Abidjan	1 800A	'83	282	'64
						Bouake	174	'80	55	'61
Ivory Coast	7 920	'79	22	38	'80	Nairobi	828c	'79	267c	'62
						Mombasa	311c	'79	180c	'62
Kenya	17 000	'82	9	14	'80					

Table 2 Continued

Country	National Population		Percentage Urban Later			City ^b	Population ^a Latest		Earlier	
	N	Year	1967	%	Year		N	Year	N	Year
Lesotho	1 341	'80	3	5	'80	Kisumu	153Ac	'79	24c	'62
						Nakuru	100A	'82	38c	'62
						Maseru	65c	'82	14c	'66
Liberia	1 911	'81	15	33	'80	Monrovia	209	'78	81c	'62
Madagascar	8 955	'81	15	18	'80	Tananarive	625	'80	248	'60
Malawi	6 282	'82	5	10	'72	Lilongwe	103c	'77	19Ac	'66
						Blantyre	226c	'77	109Ac	'66
Mali	7 160	'82	10	20	'80	Bamako	450A	'80	130c	'60
Mauritania	1 600	'83	6	65	'81	Nouakchott	250Ac	'82	6	'62
Mauritius	971	'81	50	44	'76	Port Louis	147	'81	135	'67
Mozambique	12 615	'80	17	9	'80	Maputo	755c	'80	178c	'60
						Beira	250	'82	59c	'60
Namibia	1 100	'81	20	44	'70	Windhoek	135	'80	36c	'60
Niger	5 687	'81	6	13	'80	Niamey	344	'80	40	'62
Nigeria	80 000	'80	17	21	'80	Lagos	4 500A	'82	1113Ac	'63
						Ibadan	1 500A	'82	728c	'63
						Kano	1 000A	'82	295c	'63
						Ogbomoshos	432	'75	343c	'63
						Ilorin	400	'80	208c	'63
						Aba	400	'80	131c	'63
						Port Harcourt	377	'83	179c	'63
						Abeokuta	363	'83	187c	'63
						Oshogbo	350	'80	209c	'63
						Jos	285A	'82	90c	'63
						Enugu	274	'77	138c	'63
						Onitsha	272	'80	163c	'63
						Ilesha	224	'75	165c	'63
						Zaria	224	'75	166c	'63
						Iwo	214	'75	159c	'63

Table 2 Continued

						Ado-Ekiti	213	'75	158c	'63
						Kaduna	202	'75	150c	'63
						Maiduguri	189	'75	140c	'63
						Ede	182	'75	135c	'63
						Offa	179	'80	86c	'63
						Calabar	179	'83	76c	'63
						Ile-Ife	176	'75	130c	'63
						Ila	155	'75	26c	'52
						Oyo	152	'75	112c	'63
						Ikerre	145	'75	107c	'63
						Makurdi	144	'82	54c	'63
						Benin	136	'75	101c	'63
						Iseyin	115	'75	95c	'63
						Katsina	109	'71	90c	'63
						Awka	100	'82	49c	'63
Reunion	516	'82	35	50	'75	Saint-Denis	148	'78	66	'61
Rwanda	5 046	'80	1	5	'82	Kigali	118c	'78	5c	'63
Sao Tome and Principe	95	'81	15	29	'78	Sao Tome	25	'78	8	'60
Senegal	5 703	'80	29	32	'71	Dakar	950A	'80	375Ac	'61
						Thies	117c	'76	69c	'61
						Kaolack	107c	'76	70c	'61
Seychelles	64	'80	27	26	'71	Port Victoria	23Ac	'77	12	'67
Sierra Leone	3 571	'81	13	25	'80	Freetown	388Ac	'74	128c	'63
						Koidu	145	'80	12c	'63
Somalia	4 895	'81	13	30	'80	Mogadishu	450	'80	170Ac	'66
						Brava	118	'80	NA	
Sudan	18 901	'81	12	25	'80	Gtr. Khartoum	1 100A	'80	439c	'56
						Port Sudan	256	'80	110	'64
						Wadi Medani	196	'80	48	'62
						Juba	100	'82	13	'62
Swaziland	635	'79	7	14	'75	Mbabane	39	'82	14c	'66
Tanzania	19 200	'81	6	12	'80	Dodoma	46c	'78	23c	'67
						Dar es Salaam	769c	'78	270c	'67
						Mwanza	111c	'78	34c	'67
						Zanzibar	111c	'78	68c	'67

Country	National Population		Percentage Urban			City ^b	Population ^a		Earlier	
	N	Year	1967	%	Year		N	Year	N	Year
						Tanga	103c	'78	60c	'67
Togo	2 544	'79	20	17	'80	Lome	273	'80	86	'66
Uganda	12 630	'80	6	12	'80	Kampala	468c	'80	146	'59
Upper Volta	7 094	'81	9	15	'80	Ouagadougou	248	'80	60c	'60
						Bobo-Dioulasso	149	'80	50c	'60
Zaire	30 148	'81	15	34	'80	Kinshasa	3 089	'80	403	'59
						Lubumbashi	600	'80	190	'60
						Kananga	400	'80	140	'60
						Mbuji-Mayi	400	'80	39	'59
						Kikwit	394	'80	16	'59
						Kisangani	330	'80	127	'59
						Mbandaka	209	'80	51	'59
						Likasi	208	'80	80	'59
						Matadi	130	'80	60	'59
						Bukavu	122	'80	61	'59
Zambia	5 680	'80	21	43	'80	Lusaka	538c	'80	119c	'63
						Kitwe	315c	'80	115c	'63
						Ndola	282c	'80	89c	'63
						Luanshya	184c	'80	72c	'63
						Mufulira	150c	'80	76c	'63
						Chingola	146c	'80	57c	'63
						Kabwe	144c	'80	46c	'63
Zimbabwe	10 000	'82	17	23	'80	Harare	656c	'80	314c	'62
						Bulawayo	414c	'80	211c	'62
						Chitungwiza	172c	'80	NA	

Sources: national censuses, censuses, surveys and estimates. Main sources are: *Africa South of the Sahara 1983-4*; Hance (1970, 223); United Nations (1980, Table 48); *World Population 1979* (pp. 125-8); World Bank (1980, Table 20). Many of these figures are subject to considerable errors.

^aA indicates that the figure refers to the population of the urban agglomeration (city and suburbs; where this is not clear, A is not used).

^b= census.

^cThe capital is listed first and is included even though it has less than 100 000 population.

Size may or may not be related to the level of urbanisation. Where urbanisation has taken place on a large scale, large towns and cities could have emerged. However, even at a low level of urbanisation, there could be large settlements, or at least one, with many small villages, as in the case of the baNgwato Reserve. The level of urbanisation is itself influenced by cultural experience and expectations. Where it is the expectation and practice that people live in large agglomerations then it is likely that the level of urbanisation will be higher than where the population maintains a pattern dispersed over the countryside. The boundary for the rural/urban divide may be higher in societies which prefer large nucleated settlements despite similarities which exist in functions and economic activities in the larger and smaller settlements. The quality of being 'urban' then must have a cultural dimension which may be related to the physical circumstances of the sites of the settlements or may have historical and social roots which have been of considerable significance. Smailes (1961) has demonstrated the importance of historical factors with respect to the large settlements of Hungary:

In the plains of Hungary there are extraordinary 'peasant cities' e.g. Szegedin, Debreczin, Keeskemet, Hodmezovasarhely set amidst a countryside that was until recently empty of the usual forms of rural settlement. Some though not all of these extensive concentrations show a distinct urban nucleus where commercial and other services are grouped but the great mass of the settlement is simply an exceptional agglomeration of dwellings of agriculturalists. They date from the Turkish invasions of the sixteenth century when the country was depopulated and its peasantry gathered for protection in large pseudo-towns which in character were outsize villages. When their communal land was later parcelled out and redeveloped the scattering of population that might have been expected to accompany the redistribution of land was delayed by ordinances designed to keep the citizens in towns in order that they might better respect their religious and civic duties (ibid; 74 - 75).

It is worth noting at this stage that the larger and more traditional settlements of Serowe, Kanye and Molepolole had a similar historical background although the disturbances which led to their establishment took place more recently in the nineteenth century.

Size as a criterion for urban status may also be relative to the time at which the status is awarded. Steel (1961) noted that for the Nigerian Census of 1931 a population of 2000 was chosen as a dividing line but Prothero (1956) noted for the 1952-53 Nigerian Census:

Towns defined as those which are considered by the residents of the various provinces to be an urban centre, each containing a population of 5000 or more in a compact area (p. 179).

The use of size alone as a criterion for the assessments of settlements may be useful but it is however too simplistic and the acceptance of urban status must include other factors. It is noteworthy that the Berkeley team also included in their identification of 100,000 people, the concepts of concentration of population and a profile of economic activity in which non-agricultural work predominated.

Similar difficulties arise over the use of density as a criterion for distinguishing urban places. Table 1 shows that in India a density of 390 people per square kilometre is the minimum level needed, but this cannot be taken as a general yardstick to be applied internationally. Density is a correlate of the physical and social factors influencing settlement patterns. Where the population has to be crowded into a small area such as an island e.g. Hong Kong, or a hill, densities are likely to be high. Where high-rise buildings are common or where there is over-crowding in small, closely-packed houses considerable densities can be reached. High densities might also occur even where single storey buildings are the rule. O'Connor (1983) has noted a general repugnance among African people to living in high-rise buildings and

a preference for single-storey accommodation. This should not be taken however to mean that low densities predominate. High densities may occur where people share accommodation in order to keep living costs down. For example, Ayeni (1981) has shown that in Lagos there was an average of 4.1 persons per room in 1976. For Dar es Salaam the 1967 census showed that 70% of the dwellings consisted of only one room, occupied by families of five or six people. On the other hand, the density in parts of large urban complexes may be considerably lower than elsewhere in the city or indeed possibly some densely settled parts of the countryside. High-income areas of urban settlements may have low densities where the basic unit of accommodation is a large house on a large plot with ample space between properties but there would however be no question that such areas would be urban. Density therefore cannot easily be used as a determinant of urban status. At best density should be seen as being relative to the cultural context of the settlements being reviewed.

Permanence was Wirth's third major criterion for urban living and perhaps is one of the easier criteria to apply. Most settlements are permanent in that the residents remain in the location for considerable periods of time as generations succeed each other. However, settlements grow and decline in importance as populations migrate or as functions are transferred to and from them as the fortunes of settlements change. Permanence, therefore, can be a relative term. Some settlements do decline over time and towns in the past have been destroyed by war, fire, **disease and other** natural disasters. Settlements which are intended to be used as war camps or to hold periodic markets do not have opportunities to develop permanent buildings and social institutions and cannot be considered to be permanent in the

sense intended by Wirth. Hence, such places cannot be considered to be urban.

Social heterogeneity was a major criterion for Wirth and it is perhaps the most difficult to adopt. Wheatley (1970) also has suggested that there is doubt as to the exact meaning of 'social heterogeneity' and that Wirth was not explicit on this point. Social heterogeneity could mean the existence of class differentiation in society and in view of the time at which Wirth was writing it may well have been the class society of Chicago that he had in mind. It may however have been ethnic diversity which Wirth considered important and here too he could have been reflecting the nature of Chicago society with its high immigrant populations. In an attempt to refine the concept of heterogeneity, Bascom (1955) resorted to defining it in terms of:

specialisation to the extent that each individual is economically dependent on the production and the special skills of the other members of his community (p. 453).

Still dissatisfied with the concept as a tool for cross-cultural analysis, Bascom (1958) rejected Wirth's criterion of heterogeneity in favour of a notion of formalised government, 'mechanisms of control on a secondary, superkinship level' (p. 191).

The emphasis on social heterogeneity stemmed from the belief that in urban situations the nature of relationships between individuals and groups is different from that within rural settlements. Towns and cities are meeting places for people from widely differing backgrounds and the relationships that develop are thought to be less dependent on familial ties. Contacts are thought therefore to be more impersonal in character and city dwellers are considered to be low

in group solidarity and integration. In addition, urbanites it is claimed, participate in crime more than ruralites and become alienated from their society. These paradigms for urban people have been successfully challenged by many researchers and the persistence of primary relationships in the urban milieu has been amply demonstrated (vide Hoselitz, 1955).

The urban setting is thought to influence the personality of the residents. Simmel (1908) argued that the urban dweller has a different personality from the rural dweller and he attempted to correlate city size, the division of labour and a rational drive for money and material possessions. He argued that the large number of contacts made each day provided great mental stimulus and led urbanites to develop a more cosmopolitan personality in order to be able to cope with the diversity of experience which the urbanite has. Simmel went on to claim that the urbanite replaced emotional responses by those based more on intellect and rationality. The urbanites develop a reserve which allows them to cope with many interests and with the many demands for their attention without being overwhelmed by the dimensions of the stimuli. Without this reserve the urbanites would be unable to cope and would give way to mental stress. Secondary relationships predominate and little is known about the people with whom one comes into contact except perhaps through the roles those people play in their working day. Fewer contacts are made outside the working milieu. On the other hand, this lack of knowledge of other people also has its own benefits since it permits an individual considerable freedom of movement and association which is not possible in the more personalised setting of the rural community. Simmel argued that time and money are more important in the materialistic world of the

town than in the country and he correlated this with the migration of people to the urban areas to improve their standards of living.

Saunders (1981) has commented on the need for punctuality and precision in the urban setting and the inflexibility of the urbanites' daily life as compared with that of the rural dweller and the agricultural worker.

A further characteristic of the urban milieu may be identified in the pattern of roles performed by urbanites. In the town the individual is most likely to perform a role which is dependent upon others and for which others depend upon him/her. This interdependence of roles leads to a compartmentalising of economic life which itself provides the mainspring for social contacts and ties. In the rural situation there are likely to be fewer roles which people are called upon to perform and the degree of interdependence and compartmentalisation are reduced accordingly. It is argued that for the ruralite this leads to more social contacts than in the town. Not everyone agrees, however, and Banton (1973), suggested that although towns have higher population densities they also have lower densities of social contact as compared with the villages. Peil (1984), though, has argued that the diversity of contacts leads to the urbanite being more tolerant of social differences than rural dwellers suggesting that tolerance is based on an acceptance of urban heterogeneity. Whereas rural dwellers may be intolerant of different ways of doing things because they have little experience of alternatives, urbanites it is claimed take variety for granted, perhaps, indeed, searching for or, at least, anticipating the non-standard or exotic behaviour.

Fischer (1975, 76) has offered an additional aspect of the urban society which might be used as a means for differentiating between

urban and rural communities. Fischer argues that in urban society there will be enough people to allow for the emergence of viable groups with their own particular interests. These interest groups can support life styles sufficiently distinct from that of the majority of the urbanites for it to be appropriate to call them subcultures. Fischer sees the emergence of subcultures as being a correlate of city size, heterogeneity and the variety of behaviour patterns. He claims that the important variable for the urbanite is her/his freedom to behave in ways which deviate from the social norms in terms of food, dress, recreation, religion, speech or work patterns. In general, the larger the settlement the greater the freedom to deviate and the lower the pressure to conform to received patterns of behaviour. Fischer (1975) provides for the emergence of subcultures which are defined as:

a set of modal beliefs values, norms and customs, associated with a relatively distinct social subsystem (a set of interpersonal networks and institutions) existing within a large social system and culture (p. 1323).

The theory holds that the larger the settlement the greater the variety of subcultures that will emerge and it is through the diffusion of their unconventional ideas that social change will be brought about (Epstein, 1969). In smaller communities the subgroups might be ignored or forced to conform to social norms.

Peil (1984) has argued that the relationship between size and the variety of subcultures is more complex than Fischer's dichotomy allows and that urban size is not the only variable which influences this correlation. Peil suggests that the city's economy and power structures, the nature of migration, the distinctiveness of groups, their relative powers and interactions, the usefulness of innovations

to other groups, the relative position of the innovators and the level of tolerance for new ideas all influence the rate of adoption of new ideas or non-adoption by others. However, Peil accepts that Fischer's theory, whilst inadequate as a basis for the analysis of all changes stimulated by subgroups, does offer a means of explaining why there are differences between urban and rural people. Fischer argues that cities should not be seen as whole communities but that they are the product of many communities which interact in different situations in the economic, political and social spheres. Conflict, exchange and diffusion between subgroups shape an urban way of life which includes both disorganisation and assimilation.

An aspect of urban society which is related to the emergence of subgroups is the growth of interest groups which span a wider range of specialisms than in rural society. Within the town one would expect to find a range of activities, each activity being supported by an adequate number of members to ensure the continuity of the interest group and its progressive development over time. Thus organisations might be expected not only for all types of sports but also for cultural interests such as amateur dramatics, debating societies, art clubs, dancing lessons and tuition groups associated with the home e.g. home maintenance, cooking, flower arrangement etc. There would also be sufficient people to support additional educational offerings in the evenings and possibly at weekends for adults in a wide range of subjects, some related to professional interests e.g. shorthand, typing, or to general education e.g. for examination purposes. In the rural setting, it is less likely to be the case that interest groups would find sufficient support in order for them to be viable and the authorities might find it more difficult to be able to justify

the level of subsidy needed to continue to offer particular activities. One means of assessing the degree to which settlements were rural or urban might be the number of social, and cultural, including educational, groups that exist at any one time. To this might be added a measure of the level of participation of the local population in the interest groups.

The work 'social' however covers a wide area and it can be interpreted also as being associated more with socio-administrative characteristics. Boating (1955) has made the point that in his view:

The traditional distinguishing feature between towns and villages is social ... the town has the chief (p. 158).

Mitchel (1961) has made a similar claim in considering the Yoruba towns: that the most conspicuous focus was the afu or chief's compound. Associated with the chief's location was the influence this had not only on the settlement but also upon the area over which the chief had controlling power. Gradations in the level of control were important and led to the emergence of a variety of names to cover the variety of functions. Thus among the Yoruba the ilu is a place of government, but it may also be an ilu alade i.e. a capital with an oba with the right to wear a beaded crown, an ilu ereko, a subordinate town governed by a bale, or an oloja, a market town (Krapf-Askari, 1969). Table 1 shows some countries where urban status is linked to administrative functions and government and one would expect all urban settlements to have some range of functions to perform on behalf of either central or local government. Smailes (1947) has made this clear :

there has been a great increase in the number of centralised services which by their nature find their locus in towns. It is of the very essence of a town that it should be the seat of centralised services Minimum equipment of central services indicative of urban status are secondary schools and hospitals (p. 157).

Peil (1984) however argued that the spread of services has made them less of a distinguishing feature between urban and rural although hierarchies in services are still discernible. The numbers of primary and secondary schools, the development of a university or the presence of a hospital as opposed to a clinic may indicate the existence of an urban centre. The establishment of a specialised hospital may also mark steps along the way to a more urbanised status. Peil also suggests that the existence of a full-time maternity centre may be indicative although villages would have a weekly or monthly clinic.

The functions that urban centres perform have been shown to be hierarchically organised and the work that has taken place on the central-place theory of Christaller (1933) has demonstrated the complex mathematical models that can be used to define stages in a hierarchy. The degree of centrality can be assessed from the nature of goods and services provided from the specialised offerings of the large urban centre to the more limited range available in the smaller centre or village which only meets the immediate needs of the local populace. The distances between competing centres are important in conditioning the use made of particular services and transport facilities play a major role in the relative fortunes of different centres. Christaller's theory led to a formalised approach to the analysis of centres and it is valuable to note that Mabogunje (1965)

has stressed the importance of the perceptions that residents have of the significance of particular centres. Cultural factors such as traditional links are important in understanding why people may be willing to travel to selected places, and indeed perhaps live in them. If a settlement is perceived as a central place it may receive more support in terms of population and services than perhaps its location might suggest. The relationship between the settlement and its hinterland may also be crucial and where the settlement accepts a degree of trusteeship towards the area over which it has influence, Fair (1949) has claimed that this indicates urban qualities.

The economic functions that settlements perform are reflected in the profile of employment that is found among the residents and those who commute to work but may live outside the administrative boundaries of the defined urban area. Settlements can be classified according to their major roles as administrative, commercial, transportation, service or industrial centres although many places may have more than one role to perform and indeed may offer all these functions to some degrees. Retail and wholesale trading capacities together with transportation are perhaps the best indicators of status and the existence of banking facilities is of significance although in recent decades the diffusion of banking services has reduced their value as conclusive proof of an urbanised place. Industry may or may not be important in terms of employment opportunities in countries where there is little modern industrial development and administration may be a more important indicator to be used in evaluating urban status. There is general agreement however that the occupational distribution of the work force is of major

importance in assessing urbanism. The Berkeley team mentioned above adopted a cut-off point of 65% of the population being engaged in non-agricultural activities and this closely matches Voight and Boustead (in Spelt, 1958) who respectively used 80% and 70% as being the point at which a settlement changed from being rural to urban. Undoubtedly in large cities and towns the division of labour between different types of employment would show a large proportion of workers in administration, services, commercial and industrial activities. At the other end of the scale, in rural settlements which in general would be smaller the population would be concentrated in agriculture. In the first instance no one would question that the settlement was urban: in the second that it was rural. The continuing argument is at what point a settlement becomes urban. Employment profiles offer only one indicator and it may be arguable that this is not necessarily the most important one. Peil (1984) has summarised the difficulty thus :-

Size and density, heterogeneity as a factor in interpersonal relations, conflicts over resources, influence on decision-making, centrality and distribution of functions in space are relevant to many questions which are asked about urban life. While it might be convenient if one theory could be used to answer all our questions, reality is too complex for this (p. 79).

Studies of size, density, permanence and social heterogeneity are clearly important approaches to the assessment of urbanism. So too are studies based on organisations and institutions and on the functional roles played by settlements. What is suggested here is that the selection of one or even a limited number of criteria for the assessment of settlements is not an adequate approach to urban analysis. A complex, interrelated model is needed in which all

the variables mentioned above are given due weight and the status assigned to settlements is based on an amalgam of the criteria so far identified. Grove and Huszar (1964) and Abiodun (1967) have argued for different means of assessing the functional centrality of Ghanaian towns. The conflicts that have emerged in their evaluation indicate the difficulties that exist in the measurement of this large but restricted area of study. To go further and attempt to provide a model to combine all the aspects of urbanism discussed above would be an extremely difficult task but a composite approach is needed if the individual character of settlements is to be fully appreciated. To dismiss a particular settlement on the grounds that it does not satisfy fully all the criteria for urban status may be inappropriate and it is necessary to bear in mind the local situation in which any settlement is found when making a judgment. It is argued here that the nature of the settlement of Serowe which is detailed below is such that it raises important questions about its urban or rural character. One need not immediately accept the view of Sorokin and Zimmerman (1929) who emphasized the importance of agricultural occupations as a criterion of rurality. Within the context of Botswana, Serowe could be considered to be urban despite its employment profile which shows that most of the residents are agriculturalists.

CHAPTER II

URBAN PROCESSES

1. Theories of Urbanism

As with all other areas of intellectual study the form of urban investigation has changed over time. From the early emphasis on descriptions as exemplified by Pinkerton (1807) which might be representative of what Clark (1982) has called the Classical period of urban geography, the focus has moved through a number of phases which have been characterised by words such as Environmentalism, Regionalism, Exploration, leading to the more contemporary emphasis on Spatial Analysis. Diagram 1 summarises the major stages:

Diagram 1

Major Stages in the Evolution of Urban Geography

<u>PERIOD</u>	<u>PARADIGM</u>	<u>DOMINANT FIELD OF STUDY</u>	
C O N T E M P O R A R Y		Intra-Urban Scale	Inter-Urban Scale
		Behavioural Analysis	Political Economy Approach
	Spatial		
	Analysis	Factorial Ecology (Berry 1971)	Urban Systems Analysis & modelling (Wilson 1970)
		Social Area Analysis (Shevky & Bell, 1955)	Central Place and Spatial Analysis (Christaller, trans 1954)
M O D E R N	(Hartshorne, 1939)		
	Exploration	Urban Morphology	City & Region (Dickinson, 1947)
	Regionalism		
	Environmentalism (Darwin 1985)	Site and Situation Analysis	

<u>PERIOD</u>	<u>PARADIGM</u>	<u>DOMINANT FIELD OF STUDY</u>
C L A S S I C A L	Exploration	{ Gazetteer & travelogue approaches

Source: Clark (1982) Urban Geography p. 7 (after James 1972)

The evolution of urban geography has been reviewed by Auroousseau (1924), Dickinson (1948), Mayer (1965), Berry & Horton (1970), Carter (1972) and Herbert and Johnson (1978) et al. Site and situation analyses initially stressed by Blanchard (1911), marked the transition of urban studies from the purely descriptive to the analytical and involved not only the description of site but also an assessment of the effects of location and situation on urban form and development. This lead in 1948 to the emergence of a major emphasis in urban geography on the environment and Dickinson (1948) argued that the primary function of the geographer in urban study was to investigate site and situation.

This direction of study in urban analysis was balanced to some extent by developments in the area of socio-economic influences on the organisation and growth of urban places. The emergence of studies in urban morphology went some way to redress the balance. By attempting to differentiate between towns in terms of their street plans, appearance of buildings and land use, the approach attempted to place the importance of the physical environment in a proper perspective. Originating in Europe in the 1920's and 1930's, these studies were criticised by Dickinson for being based in description and for not providing an

explanation for the origin of settlements. Conzen (1960, 62) attempted to formulate appropriate conceptual frameworks but the approach was still considered to be too descriptive.

The period of the 1920's and 1930's also saw the emergence of an emphasis on the relationships between the urban settlement and the area around it, the umland and the hinterland. Urban - rural links became important as an area of investigation. Two levels of study emerged, one concentrating on urban spheres of influence as indicated by community (Chabot, 1938) and food supply (Dubuc, 1938) and the second emphasizing the role of the city in the region over which it had influence.

By the 1950's there emerged a new emphasis in urban geographical study. The work that had been undertaken in site and situation, urban morphology and regional studies had taken urban geography a long way along the road to more analytical approaches. However, these perspectives still depended largely upon description and inductive inference. Opinion emerged that the studies had tended to concentrate on the individual nature of particular settlements and that little had been said about general relationships which applied to all urban places. From the 1950's urban geography began to concentrate more on general theoretical statements about spatial organisation using deductive methods. This represented a major change in approach to urban analysis and required the formulation of models against which data were matched. Model-building and model-refinement in the light of tests and reformulation were intended to lead to general explanations. Chorley and Haggett (1967) showed how far model-building had developed in geography particularly in the analysis of the location of cities and the internal social and spatial distributions.

For urban location much had been done by Christaller (1933). Central place theory had demonstrated that fundamental principles determined the distribution of towns and cities and these factors could be combined into a mathematical model to give general theoretical explanations of urban locations. One aspect of the innovatory nature of Christaller's work was that it led geographical study away from the detailed analysis of individual settlements to an emphasis on the system of cities as a whole. The refinement of the mathematical models which emerged allowed for predictions about future growth and change once extrapolative data could be used as inputs. A major development in this area of study was that of Wilson (1970) who used the models to predict the most likely state of urban systems. By concentrating on aspects of the urban system, (for example traffic flows) Wilson sought to predict how the system would operate under particular conditions and to identify the degrees of uncertainty that existed.

These major steps in the analysis of inter-urban systems were matched by innovations in studies in the operation of urban settlements themselves. Intra-urban analysis had been restricted at earlier stages to studies of urban morphologies, but the 1900's saw a rekindling of interest in how people lived in cities and the use to which urban land space was put. New models of urban land use were proposed by Shevky and Bell (1955) in their analysis of social area. This presented a new approach to urban social change and indicated how this would affect the social and economic structure of the city. Social area theory led to a proliferation of studies involving the mapping and elementary analysis of census data on a small scale. The analysis of factors affecting the city became more sophisticated as

computing capacity became available and factorial ecology represented a major technical advance for urban social geography. Its aim was to test and reformulate theoretical explanations of the social and spatial structure of settlements.

In recent years, urban geography has seen the emergence of two approaches. The first is the behavioural approach which attempts to analyse the processes by which urban patterns are established.

Amedeo and Golledge (1975) have suggested that :

Behaviourists believe that the physical elements of existing and past spatial systems represent manifestations of decision-making behaviour on the landscape and they search for geographic understanding by examining the processes that produce spatial phenomena rather than by examining the phenomena themselves (p. 348).

The behaviourists stress the importance of the decisions made by individuals and organisations on determining the direction of growth or decline of urban spaces. People when making decisions may or may not have an adequate background of knowledge upon which to base their conclusions, but nevertheless decisions are reached and put into effect. The decisions may reflect the images that people have of the society and the city they live in and may have major effects upon them as individuals and the communities in which they live. The most obvious areas where individual decisions may have significant impacts on the community are in the spheres of where to obtain goods and services, where to live and whether or not to migrate. Decision-making studies have parallels outside of urban use and Wolpert's (1964) study of agricultural productivity, Pred's (1967, 1969) work on agricultural, retail and industrial location and Rushton's (1969) analysis of consumer behaviour added to the work of Lynch (1960) on residents' images of Boston.

The second approach to urban geography to emerge in recent years has been in the sphere of political economy which seeks to explain urban processes and problems by reference to political ideologies. This approach arose from concern over social inequalities and led to the mapping of poverty, homelessness, deviance and unemployment. The emphasis on basic ecological relationships was significant but the approach did not lead to the suggestion of remedies mainly perhaps because it did not include the role of government agencies and financial institutions. Two other areas of focus emerged within this approach. One area stressed the analysis of conflict and management in the city and sought to analyse the ways in which individuals and interest groups define and pursue their geographical objectives. The second area of interest focused on social injustices and Harvey (1973) argued that these stem from the capitalistic base of society and that change can only be brought about by the removal of private ownership, especially of land. The importance of this area of interest is that it seeks to change the neutral, objective stance traditionally adopted by geographers, whose task is seen to be to describe spatial distributions, into one which demands commitment to social change. Many geographers shy away from such overtly political motives being associated with their work.

2. Urban Ways of Living

Much emphasis in research in recent decades in urban geography has been upon the elaboration of generally applicable paradigms of urban settlements and during the 1950's and the early 1970's there was considerable interest in the nature of the urbanising process. The emphasis at that time was upon attempts to produce models which explained

urban patterns of behaviour, drawing its intellectual roots from the work of Wirth (1938) briefly referred to in Chapter I. There was a parallel interest in attempts to formulate a model of urbanism which set out the steps through which settlements pass from a folk society to an industrial society. The process of change could be likened to rungs on the ladder of progress towards the industrial society and the tenor of the literature at the time reflected the contemporary world view that progress represented a move towards western models of society and economy as exemplified in Rostow's (1964) Stages of Economic Growth and Harbison and Myers' (1967) Human Resource Development. For each step urban characteristics were postulated and major texts (Hauser and Schnore, 1966, Hatt and Reiss, 1964, et al) focused on the all-pervasive spread of urban characteristics. Lampard (1966) attempted an historical approach to urbanisation and Sjoberg (1960) in selecting one major category of settlements postulated the Pre-Industrial City as a stage through which all cities must pass before becoming modern in their social and economic organisation.

Theories about the social and behavioural effects of the growth of urban centres have their foundations in the writings of sociologists of the late nineteenth century who drew a distinction between two types of society, a traditional rural one and a modern urban one. Berry (1973) has attempted to summarise the characteristics of the pre-industrial and urban-industrial society thus :-

TABLE 3

Polar Distinctions between Pre-Industrial and Urban-Industrial Society

	<u>Pre-Industrial Society</u>	<u>Urban-Industrial Society</u>
Demographic	High mortality, fertility	Low mortality, fertility
Behavioural	Particularistic, prescribed: Individual has multiplex roles.	Universalistic, Instrumental. Individual has specialised roles.
Societal	Kin-group solidarity, extended family, ethnic cohesion: Cleavages between ethnic groups.	Atomisation: affiliation secondary: professional influence groups.
Economic	Non-monetary or simple monetary base - local exchange; little infrastructure; craft industries; low specialisation.	Pecuniary : national exchange; extensive interdependence; factory production: capital intensive.
Political	Non-secular authority: prescriptive legitimacy: interpersonal communications; traditional bases.	Secular policy: elected government: mass media participation: rational bureaucracy.
Spatial (geographical)	Parochial relationships, close ties to immediate environment: duplication of socio-spatial groups in a cellular net.	Regional and national interdependence: specialised roles based upon major resources and relative location within urban-spatial system.

Source: Berry, B.J.L. (1973), The Human Consequences of Urbanisation, p. 13.

Tönnies (1887) contrasted the community with the society and introduced the concepts of gemeinschaft and gesellschaft. In the community the main unit of organisation was the family or kin-group. Roles were defined by the head of the group and the group operated cooperatively according to agreed customary procedure. In the society the more personalised links of the community were replaced by formal, impersonal patterns based on contract. The family and kin-group were thought to become less important for purposes of economic and social organisation and were replaced by relationships built on rationality and efficiency. Durkheim (1893), Simmel (1903) and Weber (1921) elaborated the differences and Berry (1973) has commented that what emerged was the belief that in the change from a pre-industrial to an urban industrial society primary relationships based on sentiment, custom, intimate knowledge and hereditary rights were replaced by secondary relationships based on specialisation. Wirth (1938) supplemented this view of rural-urban differences and sought to introduce the concept of a rural-urban continuum in which there were gradual changes in social behaviour. At one end of the continuum in the traditional folk society rural patterns of interaction and association would be evident whilst at the other end an urban way of life might be expected. In between there would be gradations of behaviour which reflected the level of urbanism reached. Redfield's (1941) work on the Yucatan confirmed the expectation that compared with the peasant village the town was less isolated, more heterogeneous, had a more complex division of labour, depended more on a money economy, had professional specialists who depended less on support from the spirit world, had less well-organised kinship institutions, was less religious, regarded illness less as a lapse of

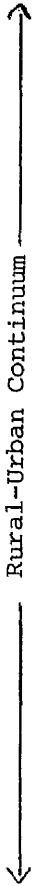
morals and there was greater freedom of action for individuals. Redfield (1941) in drawing contrasts between a peasant village, a tribal town and a city stressed the predominance of the personal character of relationships between individuals and in particular the high value that was placed on the family as an integrative force demanding the subordination of individual conduct to the mores of the group. Stress was placed upon sacred sanctions and upon the expression of belief through ritual. For the individual the homogeneous cultural background of the rural environment provided a foundation upon which stable relationships could be built. These led to the organisation of conventional understandings within a single web of inter-related meanings. Redfield and others did not go on to describe the urban pole of the continuum which it was perceived had characteristics which were the opposite of those of the rural pole.

The polarisation of theoretical attributes of the rural and urban settlements was criticized by many writers and whilst the impact of urbanism in terms of size, density and heterogeneity was accepted, the claim was made that the hypothesis had not been subject to empirical research (Hauser and Schnore, 1966). The argument stressed that the extension of the hypothesis into the differentiation of 'folk' and 'urban' was largely an ideal-type construct which empirical evidence suggested was not applicable in many countries. Hauser and Schnore (1966) also went on to claim that what was of greater importance was the difference that might exist between potential and realised personal and group interactions in the city and the degree to which human behaviour remains the product of the primary group even in densely settled places.

Since the work of Wirth and Redfield many authors have investigated social relationships along the rural-urban continuum and Clark has summarised these as follows:

Diagram 2

Selected Studies of Ways of Life along the Rural-
Urban Continuum

<u>URBAN</u>	<u>SCALE</u>	<u>STUDIES</u>
	Urban village	Gans (1962b) Young & Willmott (1957) Abu-Lughod (1961) Mayer (1962)
	Suburbs	Muller (1981) Gans (1967) Berger (1968)
	Commuter Village	Pahl (1965) Mayer (1963)
	Rural small Town	Stacey (1960)
	Rural Village	Littlejohn (1963) Rees (1960) Williams (1956) Bailey (1957)
	Folk Village	Redfield (1941)
Rural		

Source: Clark, D. (1982) Urban Geography, p. 78.

One thrust of the studies has been upon the social and behavioural relationships of residents in the central area of large cities. Whilst Wirth suggested that residents there would be prey to social anarchy, crime and deviance, studies have suggested that several distinctive life styles exist in the inner city. In place of a single response to the city, central areas appear to have a wide selection of social milieux. Gans (1962a) identified five types of inner city resident i.e. the urban villagers, the cosmopolitan, the unmarried or childless, the trapped and downwardly mobile and the deprived. Of these the best researched were the urban villagers who were members of small, intimate and often ethnic communities which depended upon kinship networks and primary contacts. The family remained a major influence and religion was an important factor in daily life. Studies in London by Young & Willmott (1957), Cairo (Abu-Lughod, 1961) and East London (Mayer, 1963) confirmed this view and provided a sharp contrast with Wirth's model of urban life.

A second focus of studies on life styles was upon the suburbs of great cities. The first studies were undertaken in the early 1960's and showed that the areas were populated mainly by young, married, child-rearing, middle income, white-collar groups, (Gans 1967), characteristically living in single family units. The theory of the rural-urban dichotomy would provide for these residents to be dependent on secondary relationships and to exhibit marked impersonality, isolation and disaffection. Gans (1962a) showed however that a quasi-primary way of life prevailed which was based on close relationships with others expressed through social and cultural organisations and informal visiting. Members of the community also participated in local civic affairs and local norms of behaviour, both social and

personal, were enforced through the expression of opinion through formal and informal channels. The studies of the suburbs in the early 1960's showed little similarity to Wirth's conceptualisation of urban life. By the 1970's and 1980's the situation had changed in many suburbs with the basic homogeneity of the 60's giving way to a more heterogeneous population as lower economic groups and non-professionals took up residence. Muller (1981) noted four groups in American suburbs i.e. exclusive/affluent apartment complex, middle-class family areas, low income ethnic communities and cosmopolitan centres. Each group had its own means of providing for social interaction which was related to the nature of the respective communities and their financial capacities.

A third focus of studies of urban life styles was concerned with the fringes of the urban and rural areas, and Pahl (1965), in investigating the northern commuters belt of London, identified major groupings. These were large property owners, the salariat, retired workers with some capital, urban workers with limited capital or income, rural working class commuters and traditional ruralities. The large property owners despite their long traditional links with the village played little or no part in rural affairs and many may have lived away from the village for parts of the year. The professional and salaried workers chose the village because of the pattern of social relationships that can emerge. They attempted to integrate into the community and to participate in local affairs, whilst keeping their distance from manual workers and their families. The retired workers and the urban workers chose the village because of its attractive locality or because of cheaper housing. Both groups attempted to integrate and participate in local affairs. The

last groups of rural working class commuters and traditional ruralities whilst varying in numbers may have many interests in common and close kinship relations may exist between them. Pahl's analysis showed that despite a common location, each of the groups had a distinctive life style. Thus, size, density and heterogeneity did not appear to impose a common social or behavioural response and rather than being determined by location, life styles appeared to be more dependent upon individual choice.

The importance of the studies on life styles in the inner city, in suburbs and the urban/rural fringe indicate that little support exists for Wirth's view of the urban way of life. The speed and spread of urban development has meant a different social and urban milieu from that commented upon by Wirth. Alternative explanations of urban life styles have been offered and in contrast to the determinism of Wirth, which stressed the break-down of primary groups, alienation, deviance and anomie, two approaches have emerged. The compositional approach, as exemplified by Gans (1962a, b, 1967), Lewis (1952) and Pahl (1970), stresses that city living does not weaken primary groups and the approach insists behaviour is the product of social class, ethnicity and the stage of life cycle. Whilst urban living has no direct effect it may have indirect effects by improving the chances of promotion and better paid jobs leading to changes in life style. The second approach, as exemplified by Fischer (1976) emphasizes the emergence of subcultures in urban life styles as outlined above in Chapter I.

3. Alternative Conceptualisations of Urbanism

a) The Pre-Industrial City

Criticisms of the rural-urban continuum led to the continued search for a further explanation of the urbanising process and the wish to make comparisons over time and between societies led Sjoberg (1960) to distinguish three types of societies:

- the folk or pre-literate society;
- the feudal society which may also be termed the pre-industrial civilised society or literate pre-industrial society; and
- the industrial-urban society

Only the pre-industrial and the industrial-urban societies had urban centres.

To achieve this typology, technology was taken as the key independent variable and Sjoberg considered that levels of technology could be correlated with distinctive types of social structure. In the folk society technology is simple and there are no cities. The folk society is typically small, self-sufficient and either isolated or with few external contacts. As a result of the low level of technology there is an absence of food surpluses which in turn restricts the degree of specialisation of labour beyond the demands imposed by sex and age. Most people are directly engaged in agriculture and the cultivation or collection of foodstuffs. Sjoberg claimed that even in slightly more complex folk societies not enough people could be released from cultivation to develop the skill of writing and thus the folk-society is non-literate. The folk society is, however, a highly homogeneous society without any marked class system.

For Sjöberg, the pre-industrial city is characterised by a more advanced agricultural technology which produces sufficient food surpluses, especially grain, to support large non-agrarian populations. It includes animal husbandry, large scale irrigation works, the plough, metallurgy, the wheel and other devices to improve production. The pre-industrial society however is still dependent upon animate sources of energy. Unlike the folk society, the pre-industrial society has a well-defined and rigid class structure together with clear-cut divisions of labour. The social classes include a literate elite and a small privileged upper class who command key positions in political, religious and educational spheres. The upper class sets the pace for the whole of society. It maintains an extended family system, acquires formal education and generally shuns economic activity.

In contrast, the industrial society is dependent upon inanimate power and it demands a complex set of tools and scientific knowledge about the production of goods and services. In the industrial society social structures are in sharp contrast to those in pre-industrial society. The class system of the industrial society is a highly fluid one that emphasizes achievement rather than inheritance. Social power is spread throughout the society and is shared between the classes. The ideal family is no longer conceptualised as the extended family but becomes restricted to the flexible, small conjugal unit. In the economic sphere the industrial city demands highly skilled specialists in every field and this implies the existence of mass literacy and scientific education. Norms within the social order tend to be more permissive rather than prescriptive and the flexibility extends to religious attitudes as well. Characteristically the proportion of people living in cities is greater in the industrial society than in the pre-industrial society.

It is perhaps in its attempt to establish a sub-system of the pre-industrial society that the pre-industrial city marks a significant departure from previous theories of urbanisation. The attempt to show that pre-industrial cities and the feudal societies which support them have similar characteristics, Sjoberg claimed, makes the model cross-cultural. He claimed that cities of this type have existed probably since 4000 B.C. and that they have been relatively small, seldom having more than 100,000 residents. In the pre-industrial city commercial activities have only secondary importance. At or near the centre live the elite groups occupying substantial residences whilst the poorer people or the outcast groups were found on the periphery of the settlement in poor and often inadequate housing. Services are frequently absent or poorly-developed away from the centre and thus the lower echelons of society suffer the joint disadvantages of long distances to travel over ill-maintained roads to places of employment, usually located in the centre, and inadequate accommodation at the periphery. Within the pre-industrial city ethnic separation is maximised, the class system is marked and there is little opportunity for social mobility. The family is both the key socialisation agency and the main unit for the organisation of both economic and social activity. In the economic sphere, there is little attempt to delimit sites for particular functions or to ensure the rational placement of trade functions to reduce undue effort on the part of the consumer. However, in Herat, English (1968) has shown that the shops and markets were distributed so as to ensure that everyone could reach a range of services within a 10 minutes walk of their homes.

In the pre-industrial city, according to Sjoberg, there is a multi-functional use of sites. The predominant economic force is the guild

which demands certain standards of excellence from its members. Guild membership preceded by guild apprenticeships was a pre-requisite to the practice of almost any occupation. This situation can lead to monopolisation and recruitment to the guilds may well be on kinship rather than an universalistic criteria. Trade and craft are carried on by the outcaste groups or by the lower classes. A fixed price is rare and business is often conducted in a leisurely manner, money not being the only desired end. The sorting of goods according to size, weight and quality is not common and marked variations may occur. The spatial organisation of the pre-industrial city was not entirely haphazard and direction and control were required to provide for security and privacy, the separation of private and public areas and the rational use of space (English, 1968). Buildings in pre-industrial cities were thought to be low in height, being probably only single or double-storey buildings, and they were crowded together. The streets were often mere passage-ways for people and for animals used in transport.

Pre-industrial cities depended for their existence upon food and raw materials obtained from without and for this reason they were marketing centres. Some centres became specialised as centres for handicraft - making or religious functions. The proportion of urbanites relative to the peasant population was small and the amount of surplus food available to support an urban population was limited by unmechanised agricultural production techniques, by poor transportation facilities and inefficient methods of food preparation and storage.

Diagram 3A Summary of Sjoberg's Model of the Pre-Industrial CityMain characteristics

- Smallness of population and area of the city.
- Division into occupational and ethnic sectors.
- Bifurcated class system permitting only restricted social mobility between mass illiterate and literate elite.
- Patriliney emphasizes the inferiority of women.
- Guilds controlled manufacturing.
- Animate sources of energy.
- Specialisation in product and not process.
- Trade engages more people than any other activity.
- Rudimentary credit facilities.
- Ruling class appeals to absolutes and traditions, and priests and astrologers.
- Particularistic rather than universalistic criteria.
- Government of the city concerned with the maintenance of order and exacting tribute. Provides few services.
- Prescriptive religious forms.
- Specialisation of knowledge to promote man's adjustment to his environment.
- Incomplete knowledge of market.
- Barter.
- No fixed price or quality.
- Begging recognised as an economic activity.
- Corruption prevalent.

Many criticisms have been levelled at the model of the pre-industrial city and not the least of these has been concerned with the very restricted number of cities upon which the model was built. Sjoberg, according to Wheatley (1963) appeared to have based his conclusions on a few cities that existed at the end of the nineteenth century and Sjoberg mentions in particular Seoul, Peking, Lhasa, Mecca, Cairo, Fez, Florence and Bokhara. Conspicuously absent from these is any mention of the cities of sub-Saharan Africa, S.E. Asia, Latin American and cities of the ancient civilisations, such as Rome. Moreover, Horvath (1969) has questioned the applicability of the model to the Third World and Paterson (1970) has shown the weaknesses of the model when applied to Yoruba towns. A more fundamental challenge has been made by Wheatley (1963) that the distinction between the industrial and the pre-industrial cities had not been fully substantiated and Friedmann (1961) claimed that there is no fundamental distinction between industrial and pre-industrial cities but that both can be distinguished by their communal life. Friedmann held that all cities have a common way of life which is characterised by degrees of heterogeneity, inventiveness, creativity, rationality and civic consciousness. In his later writings, Sjoberg modified the model to introduce the 'industrialising city', a city neither industrial nor pre-industrial.

A further objection to the model was lodged also by Wheatley (1963) against the manner in which conclusions about the applicability of the pre-industrial model had been made. By claiming that the pre-industrial city had remained unchanged for thousands of years and basing his assumption upon relatively recent feudal societies, Sjoberg felt it possible to extrapolate backwards in time. Whereas this procedure may be justifiable in certain areas of analysis, it did

produce a stereotyped city into which many cities did not fit. In no way could the settlements of Mesopotamia and mediaeval Indo-China be described as compact aggregations of non-agriculturalists. Moreover, the insistence upon the pre-industrial city being a static model precluded the analysis of hierarchies within pre-industrial cities. The concept of the static pre-industrial city is in conflict with that of central-place theory which holds that far from being static, the influence and character of cities may vary with the stage of evolution of the hierarchy and with the position of the city within a hierarchy. Finally, Wheatley (1963) contended that the social stratification of the pre-industrial city model did not match known situations. He claimed for example that some merchants in India and the Far East possessed such wealth and power that a ranking of lower class or outcasts would have been inappropriate. In the spatial arrangements of the pre-industrial city no attempt was made to provide for religious forces as determinants of the layout of the universe, magis mundi, and Wheatley argued strongly that no analysis of the spatial relations of pre-industrial cities in East and South Asia can afford to ignore the significance of the 'ritual orientation of urban space' (op.cit. p. 182).

b) An historical approach to urbanisation

Lampard (1966) thought that it should be possible to gain insights into the incidence and structure of urbanisation from a study of descriptions of cities. Three conceptions of urbanisation are found to hold general sway:- the behavioural, the structural and the demographic. The behavioural concept has been outlined above and the conduct of individuals and the changes in personal behaviour that are associated with urbanisation. For Lampard, urban behaviour is not

necessarily restricted to any particular social or physical environment and urbanism is not restricted to the city itself. The structural concept ignores the behaviour of individual persons and considers the pattern of activities of the whole population. Here, urbanisation, typically, represents the migration of people from agricultural to non-agricultural pursuits and the establishment and definition of work styles within the community. The structural conception of urbanisation gives recognition to varying orders of occupations and industries in a given area and seeks to make a correlation between economic development and urbanisation. The demographic conception of urbanisation largely ignores individual behaviour and the structure of occupations. It concentrates on the distribution of the population in space. Cities are viewed as points of population concentration and are therefore the product of urbanisation. Urbanisation is seen therefore as a process in society that must precede and accompany the formation of cities. What a population does with its environment depends in large part on the means at its disposal and the form of social organisation it adopts. Thus the actual number and size of the population concentrations at any time is largely determined by the technological capacity of the population. Urbanisation can be seen as a framework of organisation by which a community attains a level of subsistence and security in a given environment. Technology is necessary before urbanisation can begin but technology is found both in urban and rural centres and is not exclusive to the city. Lampard (1966) noted four variables to explain the process of urbanisation i.e. population, environment, technology and social organisation. These factors explain not only the emergence of urbanisation and show the contemporary pattern but also indicate the probable paths for

future development. The concept thus provides a human ecological framework for the study of urbanisation.

The last two centuries have witnessed the tremendous growth of cities and the increasing urbanisation of societies. After thousands of years of slow growth during which the urban centres represented less than 10% of the total population, the change to present day levels of more than 50% in cities, has been rapid. This may be correlated with the rapid increase in total world population associated with declining death rates and with increased means of production which has allowed for the maintenance and growth in the standard of living of those who live in the cities. Lampard suggested that urbanisation may be seen to fall into two phases - the primordial and the definitive. Primordial urbanisation is represented in an incipient urban organisation as a more productive way for the community to adapt to the physical and social environment. The definitive stage is reached as a culmination of primordial tendencies and is marked by its capacity to generate, store and use social savings. Lampard also considered it possible to subdivide the definitive stage before and after about AD 1700, into classical urbanisation, where circumstances moderated the growth of population and cities, and into industrial urbanisation where the checks and balances of classical urbanisation are removed through technological and organisational changes which herald population concentration.

Primordial urbanisation required both the technological achievement of food production and the social organisation of village agriculture. Upon such foundations were developed cultural institutions including monumental buildings, forms of writing and the great arts. These in turn are associated with a form of

specialisation of labour and a hierarchy based upon religious and political bases. The community, or oikumene, maintains a position of entropy between the total population and the environment in which technology and social organisation have dominant roles. Organisation is significant for without it the regularity of interaction is reduced and technology is not applied. The tendencies of primordial urbanisation become definitive when relations among partly differentiated sub-environments are integrated at an areal level. Sooner or later repeated transactions in goods and services reinforce a pattern of reorganisation within the area itself. This can be assisted by the strengthening of contacts through exchanges on both the physical and intellectual levels. This leads to the more formalised pattern of interdependence of the disparate parts of the whole. In due course the outlying population orders its life and activities around the centre which in turn is bonded to its hinterland. At this stage primordial urbanisation cannot be coterminous with the folk, pre-literate society of Sjoberg since primordial urbanisation spans a wider portion of the urban spectrum, its towns being found beyond the folk society and within the pre-industrial society as described by Sjoberg.

Definitive urbanisation demands the organisation and appropriation of an agricultural surplus. The capacity to obtain and utilise social savings was the major achievement of the first cities and it became the framework within which other roles could be performed. From this stemmed the dominance of the centre over the population as a whole. As the primordial tendencies to urbanisation are reinforced by further interaction, other functions within the centre became emphasized. These interactions stimulate more complex

responses which serve to heighten the unity of the city and its hinterland. In due course specialised military and political functions become more significant. Palaces, storehouses, craft shops, residences, roadways and water works, citadels and tombs are concentrated near to the temple and its precincts. The concentration of functions at a node and the specialisation of services is essential to the maintenance of a larger whole. Cities, however, do not become dissociated from their rural backgrounds since both the city and the rural areas are dependent upon each other for their continued survival and development. Diversity marks the end product of definitive urbanisation and Lampard (1966) has suggested that there has existed a great variety of urban forms both historically and geographically. Urban centres have not conformed to any one spatial or structural pattern and the great variety of urbanised forms underlines the fact that population concentration is everywhere an adaptive process. Each urban centre represents the interaction of societal tendencies and demographic and environmental factors. As a form of collective adaptation, a city meets both human and cultural needs. These universal themes can be seen in society as a whole and the city models the character of the society in which it is found. Thus in some cultures the city bears a relationship to the spiritual ethos of the society and is designed to be a reflection of the universe (Wheatley, 1963).

Definitive urbanisation covers a wide variety of urban forms and the progress of any one city through this part of the process of urbanisation may be slow. Definitive urbanisation ranges from classical to industrial urbanisation. Under classical conditions the process of population concentration produces a coherent patterning

of settlements, the proportions and balances of which do not alter much over considerable periods of time. There are relatively stable relationships of interdependence between settlements in an ascending order of nodality. The static order of classical urban systems was rooted in the constraints of a largely undifferentiated agrarian base and productive activity remained local and unspecialised. During its rapid growth industrial urbanisation has been shown to be a cumulative process with greater incidence and more differentiated structures. It has apparently no limits save for its inclusion of the entire population.

c) Urban transformation

Within the pre-industrial construct the city may be looked upon as a centre for economic development based upon improved technology. Cities may also be looked upon as centres for cultural change and have been divided according to type representing orthogenetic and heterogenetic transformations of the folk society (Redfield and Singer 1954). In both these roles the city is a place in which change takes place although the character of the change is different. The city was imagined as that community in which orthogenetic and heterogenetic transformations of the folk society occurred, the folk society being characterised by a 'long established, homogeneous, isolated and non-literate integral (self-contained) community' (Redfield & Singer, 1954, p. 58). Folk culture was seen as one in which an old culture was carried forward into 'systematic and reflective' dimensions. It brought about the 'Great Tradition' and its special intellectual class; administrative officers and rules closely derived from the moral and religious life of the local culture; and

advanced economic institutions, also obedient to these local cultures. The city of orthogenetic transformation was identified as "the city of the moral order, the city of the culture carried forward" (Redfield & Singer, 1954, p. 59) In the early civilisations, the first cities were of this kind and usually combined the developmental cultural function with political power and administrative control. This combination occurred because local moral and religious norms prevailed and found intellectual development in the literati and exercise of control of the community by the ruler and laws.

The city of heterogenetic transformation is the city of technical order and:

the transformations have accomplished the freeing of the intellectual, aesthetic, economic and political life from the local norms and have developed on the one hand an individual expediential motivation, and on the other hand a revolutionary, nativistic, humanistic or ecumenical viewpoint now directed towards reform, progress and designed change ... Men are concerned with the market with expediential relationships between buyers and sellers, ruled and ruler, native and foreigner .. businessmen and administrators alien to those they administer, rebels, reformers, planners and plotters are the dominant social types in the heterogenetic city (p. 60).

Redfield and Singer make the point that many cities exhibit different characteristic stages of evolution at the same time. Thus a city may have preserved within it the folk society in so far as the ethnic communities of which it is made up preserve folk-like characteristics. Cities may exhibit double urban characteristics and the institutions and mental habits that prevail there may be identified with either of the orthogenetic or heterogenetic transformations. Redfield and Singer conclude that the pace of heterogenetic transformation has been accelerated by the migration of

peoples especially in the West. More recent cities are predominantly of the technical order.

An understanding of the cultural role of cities demands a full appraisal of the place of cities within a civilisation which in turn requires an assessment of the number, size, composition, distribution, duration, sequence, morphology, functions, and rates of growth. Much of the information required is not readily available and Redfield and Singer therefore made a tentative classification of primary and secondary urbanisation to provide two hypothetical frameworks. In the primary phase a pre-civilised folk society is transformed by urbanisation into a peasant society with a correlated urban centre. It is 'primary' in that the people share a more or less common culture which remains the matrix too for the peasant and the urban cultures which develop from it in the course of urbanisation. Primary urbanisation thus takes place almost entirely within the framework of a core culture that develops, as the local culture becomes urbanised, into an indigeneous civilisation. This core culture dominates the civilisation despite intrusions of foreign peoples and cultures. When the encounter with other peoples and civilisations is too rapid and intense the indigeneous civilisation may be destroyed by de-urbanisation and be transmuted. This leads to secondary urbanisation where a folk society, whether pre-civilised, peasant or partly urbanised is further urbanised by contact with peoples of widely different cultures. The secondary pattern produces not only a new form of urban life in some part in conflict with local folk cultures but also new, social types in both city and country. In the city appear 'cosmopolitan' man and an 'intelligentsia'. Thus whilst the primary phase of

urbanisation is an extension of the common culture from a small settlement to a town, the secondary phase of urbanisation is begun through the institutions of travel and trade among local communities with different cultures. Redfield and Singer (op.cit) did not claim to have established universal sequences within primary and secondary urbanisation but they considered that the degree to which any civilisation is characterised by patterns of primary or secondary urbanisation depends on the contact with other cultures. If technical development is slow and the civilisation is relatively isolated, primary urbanisation might be expected to prevail. If technical development is rapid and contacts multiply and intensify, secondary urbanisation would prevail.

The consequences of the primary and secondary processes of urbanisation serve to illuminate the concepts of orthogenetic and heterogenetic urbanisation. In primary urbanisation the most important consequence is the transformation of the Little Tradition into the Great Tradition which becomes the core culture of the homogeneous civilisation and a source for cultural norms. The appearance of the literati is significant. New forms of thought appear including systematic reflection. Intellectual and aesthetic forms now appear that are both traditional and original. In government and administration the orthogenetic nature of urban civilisation is represented by the chiefs, rulers and laws that express and are closely controlled by the norms of the local culture.

In short the trend of primary urbanisation is to co-ordinate political, economic, educational, intellectual and aesthetic activity to the norms, provided by the Great Tradition. (Redfield & Singer, 1954, p. 63).

The general consequence of secondary urbanisation is the weakening and suppression of local traditional cultures. There is a rise of self-interest expressed primarily in an acceptance of impersonal controls, characteristically supported by sanctions of force. New sentiments arise expressed in a nationalistic movement and in a demand for religious reform. New larger groups are formed by a few powerful common interests that replace the complex, interrelated roles and statuses that are characteristic of local, long-established cultures. Moreover, the future is regarded less as a retrospective view of the world. In cities of heterogenetic cultural influence the future is seen as being different from the past and gives rise to reform movements. New attitudes are generally secular, worldly and stimulate new political and social aspirations. The Redfield-Singer analysis builds upon the folk-urban dichotomy and in large measure is dependent on the folk-ideal type of construct.

These concepts of Redfield and Singer were paralleled by Hoselitz (1955) for whom primary urbanisation exists where the pre-civilised folk share a common culture which remains the matrix for the urban culture which develops from it. Secondary urbanisation leads to a weakening of the local and traditional cultures by the emergence of states of mind incongruent with those cultures. An equation is established between primary urbanisation and orthogenetic transformation on the one hand and secondary urbanisation and heterogenetic transformations on the other. Hoselitz went further to question the assumption that cities are always of generative growth and he argued that cities could be either 'generative' or 'parasitic'. Moreover he contended that economic generation or parasitism did not simply go hand in hand with cultural change.

Hoselitz classified a city as generative:

.... if its impact on economic growth is favourable i.e. if its formation and continued existence and growth is one of the factors accountable for the economic development of the region or country in which it is located.

He classified a city as parasitic:

if it exerts an opposite impact (p. 280),

Hoselitz also made it clear that the periods during which cities are parasitic or generative may vary a great deal and may shift from one type to another. He noted too that some cities may be generative in terms of their immediate environs but parasitic for the larger area they dominate. However, the parasitic/generative division does not correspond entirely with orthogenetic/heterogenetic model and a complex cross-classification can be envisaged. Hoselitz noted that European colonial cities in Africa and Latin America are examples of economic parasitism since they were centres for the extraction of wealth alone and were, therefore, not initially generative of development. Yet these cities produced a conflict within the cultural environment and could thus have been both parasitic and heterogenetic and hence a part of secondary urbanisation. Similarly, orthogenetic cities in attempting to preserve the local culture, can become resistant to change and hence parasitic. As in the case of Pirenne's (1925) classification of cities, the parasitic - generative classification also has the limitation of not being detailed enough to handle all the variety of cities found in the Third World.

Table 4 offers an opportunity to compare and contrast the approaches to urbanism of Redfield and Singer, Sjoberg and Lampard and clearly there are parallels to be drawn between the different schemes. Each approach assumes that the transition from the folk society to the industrial urban society takes place over a long period of time and it is implicit within the models that the speed of transition will vary according to the stimuli to which individual societies are subjected. Moreover, the speed of transition may not be even for any one society and at different periods the rate of growth may increase or decrease as the importance of individual societies or settlements varies. Such variations in significance may result from modifications in the role of settlements in terms of administrative, economic and political developments which are also stimulated by changes which are endogenous in origin. These may have been exogenously encouraged through changes in the pattern of trade, revaluations of strategic value, or realignments of political groupings. Whatever the source of the variation the net result will be seen in the growth or decline of settlements, in their economic structure and in their degree of urbanism.

The models offered in Table 4 do have value in attempting to place settlements and societies along a continuum but the application of the models cross-culturally has met with great difficulty. The essentially western-oriented nature of the assumptions upon which the models have been based has inhibited their wide use. The assumption of the apparently inevitable albeit slow, progress to industrial-based urban societies raises important questions about the fundamental goals of societies and appears to condemn to some undefined lower level a society which is essentially agricultural and can be expected to remain as such. Again, the models as discussed so far appear to suggest that if a society

TABLE 4

A Schema of theories of urbanism

After	Folk Society	Urban Society
Redfield and Singer (1954)	Long established county. Homogeneous, isolated and non-literate. Self contained. System of common understandings.	<p data-bbox="252 151 285 463"><u>Heterogenetic Cities</u></p> <p data-bbox="318 31 467 463">City of the technical order, Reform, progress and change. A forward view adopted. Impersonal and expedient relationships.</p>
Sjoberg (1960)	Small, pre-literate community. No division of labour. No Class System. Simple technology.	<p data-bbox="1053 214 1078 463"><u>Industrial Urban</u></p> <p data-bbox="1111 53 1202 463">Inanimate sources of energy Complex tools and advanced technology Fluid class system Diffusion of social power.</p>
	<u>Pre-Industrial City</u>	
	Small population and area. Division into occupational and ethnic sectors. Bifurcated class system. Restricted mobility from mass illiterate to to literate elite. Patriliney emphasizes inferiority of women.	
	<u>Primary Urbanisation</u>	
	Folk becomes a peasant society. Common culture Little Tradition becomes Great Tradition. Intellectual and aesthetic forms both traditional and original.	
	<u>Secondary Urbanisation</u>	
	Further urbanised through contact with different cultures. New social notions and new social types. Begins through travel and trade. Weakening and suppression of traditional cultures impersonal controls with sanctions of force.	

Primordial Urbanisation

More productive adaptation to environment,
Food production and social organisation
of village agriculture,
Cultural institutions of monuments,
forms of writing and great arts.
Some specialisation of behaviour,
Hierarchy based on religious and
political bases.
Organisation is important to aid
development.

Definitive Urbanisation

Organisation of an agricultural
surplus.
Social savings utilised. Dominance of
centre over periphery and hinterland.
Diversity the end product.

Classical

Constraints moderate
growth of population.
Coherent patterns of
settlements.
Undifferentiated
agrarian base.
Local productive
activity.

Industrial

Technological,
organisational
capacities
expanded.
High per capita
levels of inanimate
forms of energy.
More differentiated
structures.

is placed along the continuum this implies that the whole of that society has uniformly reached that degree of urbanisation. The models in providing for a longitudinal change in urbanisation do not appear to allow for a cross-sectional study of a society to explore the varying degrees of rural/urban differences that exist at any one time. Societies do show marked variations between settlements and in many countries of the developing world folk and industrial-urban societies and orthogenetic and heterogenetic cities exist side by side. This may indicate the state of change within those societies and may serve to illustrate the contrasts in societies undergoing rapid but uneven change.

Despite the difficulties associated with the use of these models of urban change it should be possible at least to apply them to individual settlements. Through an analysis of the changes which take place in a settlement over time it should be possible to discover if sufficient indicators can be found to suggest the progressive urbanism that was taking place and to assign that settlement to points on the continuum over time. An attempt will be made to do this with respect to Serowe in the concluding chapter of this dissertation.

CHAPTER III

AFRICAN URBANISM

1. An overview of African urbanism

Urbanisation in Africa has increased rapidly in the last forty years and whereas in 1940 only 7% of the population were living in urban areas, in 1980 this had increased to 29%. This rate of growth was matched in South Asia and East Asia where the increases were from 8% to 24% and 13% to 33% respectively. The United Nations (1969, 1980) figures show that these increases were very substantially below those of Latin America (19% to 65%), Europe (37% to 69%) and North America (40% to 74%). However the rate of urbanisation of Africa is considerably higher than in North America and Europe, the main reason being the low starting base for Africa. The implications of the fourfold increase in urban living in Africa in terms of the provision of housing and social amenities are of great importance especially in view of the low per capita income in most of the countries concerned. The annual growth rate of the urban population in Africa was 5.9% in 1975-80. This was higher than any other region of the world and more than double the 2.9% average for the world as a whole (U.N. 1980).

The rate of urbanisation in Africa has not been even throughout the continent and Steel (1961) has suggested four main patterns: viz high population density and high urbanisation, high density and low urbanisation, low density and high urbanisation and low density and low urbanisation. Steel classifies African countries in the following way.

TABLE 5Patterns of Urbanisation in Tropical Africa

Density of Population	Level of Urbanisation	
	High	Low
High	Nigeria	Central African Rep.
	Ghana	Congo, Djibouti,
	Zanzibar	Mauretania, Namibia
		Mauritius, Zambia
Low	Burundi, Malawi,	Chad, Lesotho
	Rwanda, Uganda	Niger, Tanzania,
		Upper Volta

After: Steel, R.W. (1961) The Towns of Tropical Africa

Botswana is not included in this classification because it lies outside tropical Africa but it would be perhaps correct to place Botswana in the low density and low urbanisation category. From Table 2, Chapter I it may be seen that in 1978 Botswana had 15% urban population and this compared favourably with Chad (18%) Lesotho (5%) Niger (13%) Tanzania (12%) and Upper Volta (15%). However the Botswana figure was calculated using the population of only the 3 towns formally classified as such viz Gaborone, Lobatse and Francistown and did not include the large settlements of Serowe, Kanye and Molopolole. If these settlements had been included the level of urbanisation would have been higher.

In attempting to understand the process of urbanisation in Africa attention can be directed to the likely areas of growth and Hance (1960) has argued that major growth points in Africa can be classified into 5 types namely - inland commercial cities which are expanding from the rising standard of living of the local population; district centres in successful cash crop areas; new administration centres; towns with new industries or hydro electric projects; major towns where growth is well established. Each of these would benefit from their success in attracting new investment and can develop into primate cities (Richardson, 1980).

Urban settlement is however not a new phenomenon in Africa and there is overwhelming evidence of continuous urban settlement in Africa over the last 1000 years. Cities such as Kano, Zaria and Mombasa were established before 1500 AD and as the collection of evidence continues the existence of earlier large integrated kingdoms with concentrated urban centres is confirmed. Very many cities in Africa owe their origin to the interests of traders and many coastal towns such as Freetown and Monrovia trace their development from the nineteenth century. Others such as Harare, Nairobi and Kampala were established in the late nineteenth and the early twentieth century. This range of age of African towns has led authors to attempt a classification, and a distinction between 'traditional' and 'modern' has been commonly used with pleas being made for the inclusion of the colonial city as a distinctive type of settlement (McGee 1971, Morgan 1969, Kay 1967). O'Connor (1983) has suggested that the differentiation of traditional/indigenous and modern/elite parallels the Redfield and Singer (1954) orthogenetic and heterogenetic cities outlined in Chapter II, and that other linkages can be made with cities in south east Asia (Ginsburg

1955, McGee 1967). Southall (1961) has offered a classification of cities into Type A and B, the characteristics of which are summarised in Table 6. O'Connor (op.cit) found the Southall typology to be too all-embracing and proposed a six-fold classification of the truly indigenous city, the Islamic city, the colonial city, the European city, the dual city and the hybrid city.

For the traditional city, O'Connor concentrated on the Yoruba towns which will be described more fully below. He also dealt with Addis Ababa which he showed had been selected in the nineteenth century by Emperor Menelik (Pankhurst 1961). Despite European influences on the city as a result of new contacts through trade, Addis Ababa depended more upon indigenous stimuli for its development than many other African cities and it is the persistence of the indigenous cities to resist modification by outside pressures that marked them as a distinguishable category. O'Connor argues that other indigenous urban traditions have been overwhelmed elsewhere as in Kumasi, and Kampala (Gutkind 1963) and that 'no real representations of these urban traditions' (p. 30) remain. What is argued in this dissertation is that the towns of the baTswana represent a tradition of urban life which has remained largely unchanged until relatively recent times despite exotic influences as a result of European contact. This will form the main burden of the conclusion of this dissertation.

O'Connor's (1983) second city type is that of the Islamic city mainly located in the Sahel of West Africa. Castello (1977) and Blake and Lawless (1980) have shown that these cities have much in common with cities of the Middle East and it can be argued that this urban tradition had migrated with the spread of Islam from the Middle East across the Sahara. Mabogunje (1968) has provided an historical study

TABLE 6

Southall's Typology of African Towns

<u>Type A</u>	<u>Type B</u>
Old established growing slowly. Population is almost totally indigenous with a homogenous core.	Generally newer centres. More diversified population with foreign ethnic groups.
Scale of status based on ascription.	Class status based on occupational structure.
Importance of traditional institutions.	No traditional institutions to provide a focus.
Tribal and Kinship concentration important.	Tribal and Kinship concentration less possible.
Administration dominated by traditional authorities.	Administrative control close and dominated by foreign ethnic groups.
Subsistence agriculture.	Subsistence agriculture excluded.
Town dwellers have farms, even at considerable distances, to which they go to work and from which they obtain supplies.	Break between town and country sharp. Capitalistic use of land near to the town.
Occupations mainly clerical and commercial, not industrial.	Distinctions between clerical, skilled and unskilled workers. Clerks from elite groups.
Working groups small, many independent entrepreneurs.	Dominance of few large corporate organisations.
Housing policy permissive and laissez faire. Uncontrolled residential pattern vary greatly as does housing.	Housing closely controlled and inflexible.
Religious missions strongly represented.	Religious missions linked to educational welfare and medical work.

Source: Southall, A.W. (1961) Social Change in Modern Africa

of Islamic cities. Some of the cities are of considerable antiquity such as Kano and Zaria but some are of more recent origin such as Sokoto and Maiduguri. The older cities were surrounded by substantial walls many of which remain partially intact and included within the walls, where possible, were rocky prominences which were used as places of importance. Also within the walls were areas of cultivation. The majority of residents within the city walls were indigenous to the city and strangers lived outside the city in an area known as Sabon Gari.

O'Connor's third city type is that of the colonial cities such as Dar es Salaam which emerged mostly during the late nineteenth and early twentieth centuries. These cities were established for the purposes of trade and administration and were designed to meet the needs of the colonial powers. They developed as points of contact with the local populace and attracted migrants as their importance grew. The cities often had two identifiable sectors for the European and African populations marked by considerable differences in the style of housing, the size of plots, the provision of roads and the organisation of services. These divisions to some extent remain although they are being eroded as time passes. Western influence persists in the use of metropolitan languages and the organisation of education. O'Connor separates Freetown and Monrovia as a subgroup of colonial cities since these were established by the British and American governments to house freed slaves in the nineteenth century.

O'Connors fourth category is the 'European' cities which he considered could be regarded as a special type of colonial city. Harare, (formerly Salisbury) and Bulawayo, Lusaka and Nairobi were established to meet colonial needs to control and administer the countries occupied. Nairobi was established as a railway town in 1899 in the no-man's land between the Masai and the Kikuyu. Essentially the

European city met the needs of permanent European settlers in the rural areas (Hake 1977). Administration and trade have predominated. As time progressed the local African population came to reside in the cities but only on the terms dictated by the settlers. The cities consisted of two separate communities which had only limited contact.

O'Connor's fifth category is that of the dual city which has two parts which are distinguishable by their different traditions of housing and layout. In some cases, the original city with a traditional pattern, such as Kampala, had grafted onto it a new section with a layout more typical of a modern, western style. Elsewhere the city consisted of two areas separated by a major physical feature such as the R. Nile between Khartoum and Omdurman. The relative importance of the two portions of the city may be a reflection of peoples perceptions of the city itself and O'Connor argues that both parts of the city must be seen as representing two cultural traditions and must not be labelled, simplistically, rich and poor. The two portions do have similar services but to a different degree.

O'Connor's sixth category is of a hybrid city which combines indigenous and foreign traditions in an integrated way, the two not being merely placed side by side. Over time as fuller cultural integration can be expected to take place, it is certain that more cities will fall into this category. O'Connor suggests that Kumasi falls into this category because of its chequered history from being the capital of the Ashanti empire in the seventeenth and eighteenth centuries, a major provincial headquarters for the British in the twentieth century and now a flourishing trade centre. Lagos, Accra and Ouagadougou, O'Connor also places within this category, each city having been the centre of a local culture and adopted for colonial

purposes, today combines the traditions of both cultural influences in one societal structure.

This six-fold classification is valuable in attempting to reduce the variety and complexity of urban development to a manageable form. For the purposes of this dissertation it is important to concentrate more fully on the indigenous city and it is proposed to look more closely at the Yoruba towns.

2. Yoruba Urbanism

A substantial literature has emerged on the Yoruba towns (vide, et al Bascom, 1955: Daryll Forde 1951: Lloyd 1950, 73: Mabogunje 1962, 68: Morton-Williams 1955: Mitchel 1961: Steel 1961: Buchanan and Pugh 1955: Harrison-Church 1957: Eades 1980: Wheatley 1970: Krapf-Askari 1969: Schwab 1965). The dense settlements of the Yoruba are of long standing and their permanence is demonstrated by Crowthers' list of principal towns of the Yoruba in 1841. Yoruba territory was explored in 1825-30 by Clapperton and the Lander brothers who passed west and north of the major cities of today. Of the towns they visited many are still in existence, though this savanna region of Yorubaland suffered from the Fulani and Dahomey wars of the nineteenth century. From the journals of the explorers it is possible to conclude that Old Oyo (now destroyed), Ilorin, Igboho and Kishi had populations of at least 20000. Some other settlements had at least 10000 inhabitants. Ijebu-Ode was mentioned by Pancheco Pereira (1505-08) and other early sixteenth century visitors indicated the existence of Ile-Ife.

The origins of the Yoruba towns are not clear and written evidence is not available. Traditionally, the Yoruba were not a literate society

and such evidence as does exist is based on early arabic writings and myths and traditions. Two major assumptions are commonly made. The first is that towns, states and empires having an internal exchange economy emerged in the savanna lands of the Sudan. The second is that the emergence of settlements in the Guinea area to the south was largely due to influences from the north, from the western and central Sudan. The developments of towns and states may have been stimulated by influences spreading westward from the Nile valley from 800 BC to AD 350. The urban centres along this axis have a number of features in common. Their areas may be extensive; the circuit walls of Kano and Katsina are both about 20 kms around whilst that of Ibadan was 15 kms and Ife 11 kms. The area within the walls was often much larger than that needed for dwellings. Some of these towns developed as great commercial centres and by and large the traders were indigenous and not immigrants.

Tradition suggests that the area was colonised by immigrant conquerors who came from the north east. This matches the history of Abeokuta and Ibadan, both built as a result of the nineteenth century Yoruba wars. Mabogunje (1968) considered the Yoruba were an immigrant group who with the knowledge of iron-smelting, pottery-making and yam cultivation moved into south-western Nigeria between the seventh and tenth centuries. After the founding of Ife, the sons of Oduduwa, first king of Ife, dispersed to found their own kingdoms. The Yoruba towns starting largely as a form of colonial settlement among indigenous and perhaps hostile peoples were a conscious attempt to dominate and control an unorganised mass of aborigines found in the region. Village and hamlets were forced to move into the new towns. For example, for 15 to 30 kms around New Oyo the area was

depopulated and the people forcibly relocated in the town. Yoruba towns became administrative centres and over time developed elaborate power structures and a hierarchical system of administration at the level of both the city and the kingdom. Paterson (1970) claims that the present day similarity in the institutional characteristics of the political system remains a major element in the consciousness of the Yoruba as a nation and in their belief in descent from a common ancestral stock.

The development of large concentrations of population was aided by the possibilities of agricultural production. Emphasis has been placed on the fortunate climatic position of south-western Nigeria with both early and late rains which permit two harvests in a year. The combination of a favourable climate, soil and moisture conditions made possible a productive economy and with a more advanced technology and commercial structure it has been suggested (Lloyd 1962) that Yoruba society could have supported a large non-food producing group. The actual percentage engaged in non-agricultural activities is however still small.

Any consideration of Yoruba urbanism must take due cognizance of the nature of the kinship system which lies at the basis of all Yoruba social life. Though the Yoruba form various sub-groups, geographically separated and distinguished by slight nuances in cultural usage and dialect, they are united by a substantially homogeneous culture. Thus Schwab (1965) in his study of Oshogbo, is fundamentally studying Yoruba kinship in general and not only that of his study area. Schwab emphasizes that the most important single principle of organisation in traditional Oshogbo was kinship. Every facet of life, institutional and individual, was regulated and coordinated to a greater or lesser

extent by the comprehensive body of legal and moral norms that constituted the Yoruba kinship system. Kinship affiliation was the primary determinant of a person's jural, economic, political and ritual status. This does not mean that governmental processes were carried out by kin units, or that religious or economic relationships and residential associations were indistinguishable from those of kinship, but over a wide range of social behaviour they were inseparable.

The most important unit was the exogamous, corporate patrilineage defined by reference to its remotest acknowledged male ancestor and embracing all agnatic descendants of its founder. The lineage structure was based on two distinct but closely related principles. The first was the principle of corporateness, based on common agnatic descent, which implied group unity, exclusiveness, continuity and an authority structure. The second was the principle of internal segmentation, the internal segments being hierarchially articulated and characterised by differentiation in terms of both descent and function.

Residence was patrilocal and each lineage or segment shared a common residence or compound. Rights to farm land were granted by the Oba (King) to a lineage and held by it in perpetuity. In the spiritual world the lineage affiliation played an important role. There were two separate aspects, the more important being ancestor worship. The Yoruba believed in the power and influence of ancestors over the lives of their descendants and in reincarnation whereby ancestors were reborn into their earthly lineages. The notions of lineage cohesion and temporal continuity, which were central to these ideas, provided one of the most important bases of lineage reciprocities. The elaborate rituals associated with ancestor worship, performed at

graves in the lineage home, served both as a source and an expression of lineage unity. The most serious punishment conceivable to a Yoruba was the loss of rights to ancestor communion and its protection. In addition to ancestor worship, each lineage served a common deity (orisha) but the orisha cult and a patrilineal unit were not coextensive. The cults thus served to link lineages that might otherwise have no common interests or relationships. These were the only significant associational units outside kin and residence. The head of the cult was appointed by the Oba and given the rank of a minor chief. Members of lineages with rights to political office were accorded a superior social position because of the belief that the office was not conferred on an individual but was vested in a patrilineage of which an incumbent chief was the representative. The members of these lineages also had the right to benefit from a chief's economic prerogatives, which might be considerable. Political power, social position and economic position were thus joined. For most males, occupation was prescribed by lineage affiliation. Most were subsistence cultivators exchanging whatever surplus they had from domestic consumption and ritual or social obligations for clothing, utensils, ritual objects or religious or healing services. Rights to farmland were held corporately by a lineage whose members exercised control over its inheritance. Each member was entitled to an equitable share of farmland- a right passed on from father to sons- and to the economic benefits derived from his labour. In addition to farmers, there were hunters, skilled artisans, and entertainers, doctors and diviners.

Within the Yoruba kingdom traditional power was vested in the Oba and in his council of chiefs and a division between political and administrative aspects of the government was not easily observable. The chiefs were ranked in several grades without reference to their general functions, though title holders may have been given specific duties. The most senior chiefs advised the Oba and their functions were political. These chiefs however, also had administrative duties in their own quarters. The junior chiefs carried out the orders of the council of chiefs although they were able to offer their views on policy to the senior chiefs. The main lines of administration were from the Oba via the palace servants and messengers. Age regiments were organised to carry out tasks including war and the town was divided into quarters each with its own chief.

The Oba was the focal point of Yoruba life and his role in respect of land was vital. The myths surrounding the founding of a Yoruba town lead to the interpretation that all the land was originally held by the Oba and that he gave certain rights over it to the newcomers and their descendants. The first Oba held the land not in his capacity as a ruler but as the head of a descent group- now the royal descent group- and that the ultimate rights over the land are held by the members of this group. The form of the myths is dictated by the need to prove the descent of the present from Oduduwa and the establishment of the dynasty by peaceful means and not by conquest. It seems likely that the first Oba found the land already settled with a complex pattern of established rights. On the death of an Oba, powerful princes who contested unsuccessfully for the throne and refused to acknowledge the new Oba, were driven, with their supporters, from the kingdom, to be received by neighbouring rulers in their

towns as commoners. Important but less rebellious princes were sent to the margins of the kingdom either to rule an existing settlement or to create a new one with their own followers. These latter princes became hereditary rulers of the subordinate towns so created.

The traditional Yoruba towns were thus dense and permanent settlements of people organised around a central political authority which protected its citizens from outside threats and reduced or minimised tensions and conflicts in the community, so that a large population could live in a small area. Farming was commercialised to the extent that agricultural surpluses were traded for goods and services. Although there was little ethnic heterogeneity, people were differentiated on the basis of skill, occupation and political rank.

These traditional aspects of Yoruba life have been modified though not destroyed by external influences over the past half a century. Today the majority of Yoruba are either Moslem or Christian. Schwab (1965) showed for Oshogbo that 80% were Moslem and 15% Christian. Lloyd (1962) showed for Ekiti 8% were Moslem and 70% Christian. Though the percentage still officially adhering to traditional animism is small, it should not be thought that its significance and influence has disappeared or is disappearing from Yoruba life. Another area of change was connected with the power of the chiefs. By the end of the first decade of the twentieth century the colonial administration was firmly established in most of Yorubaland with two immediate effects. Firstly, it removed power and responsibility for the maintenance of social order from the hands of the chief and vested it in the colonial administration, while maintaining the administrative machinery very nearly intact. Secondly, the colonial administration provided alternative channels of authority e.g. formalised

courts. Shorn of much of his traditional authority the chief could no longer claim complete allegiance or control the various conflicts between lineages. Also, as society changed, new areas of conflict arose in which there was no precedent for the chief's intervention. Nevertheless, central government did not encroach upon the ritual and mystical values attached to chieftancy and the Oba has remained the traditional symbol of unity. Later, with the formation of native authorities with elected members, political competition was encouraged.

A third area of change was associated with occupational activities. The increase in trade and economic development increased the numbers involved in non-farming activities. In Oshogbo, Schwab (1965) noted that nearly one-third of the adult males were engaged in new occupations that had been introduced to the Yoruba since 1900, but Lloyd (1953) thought the relative numbers of traditional craftsmen did not seem to have diminished considerably. The expanded economic activities of the towns attracted migrants to work as labourers, traders etc. Cash crops (e.g. cocoa, groundnuts, cotton) were introduced, and agricultural production witnessed a shifting of emphasis from production for consumption to production for sale. Thus, there was a fully fledged market system with the wage and contractual ties that it implied.

The establishment of alternative economic avenues in which the significance of kinship was slight has had repercussions on the kinship relationship. The sanctions available to a lineage for reinforcing traditional patterns of behaviour have also been curtailed in fact, if not formally, by the diversification of economic roles. New and effective political groups not based on descent have been established,

and through them men can achieve status and power which traditionally would not have been accessible to them. . . Legally the individual is now separated from his status as a member of a kin unit and associational structures have emerged that are not characteristic of traditional life but which stress identity of interest rather than common descent. . . Changes in social relationships have given rise to patterns that in some ways resemble those observed in cities elsewhere. . . Economic specialisation and differentiation have increased and there have been changes due to the establishment of an urban industrial system. . . There has been a weakening of primary relationships and an elaboration of secondary relationships. . . Assignment of status is being made on an individual achievement basis as well as on the basis of hereditary group ascription. . . Education, wealth, occupation and individually achieved political influence have been acknowledged as additional criteria of status evaluation. . . Similarities with the cities of the West and with those of south and east Africa have been brought about by the development of a system of market relationships, by increased diversification of economic roles, and by the separation of economic interests from wider kinship relationships. . . Kinship relationships have also been influenced by changes in the political sphere, in education, and in religious beliefs and customs. . . Underlying each of these factors is a system of values which stresses individual competition and achievement and judges behaviour on impersonal criteria.

Nevertheless, the patrilineal kin-groups have remained the predominant source and framework of social interaction. . . The sentiments of common descent, their notions of social continuity and the corporate solidarity and responsibility have been weakened, in

certain circumstances by the competing interests and values of new social forms, but they have by no means been destroyed. Where necessary, the principles and structures of a lineage have been modified to accommodate the expression of conflicting interests and to meet changing conditions. This has been facilitated by the stable, ethnically homogeneous nature of the population of the Yoruba town, which has a basically uniform system of values. Secondly relationships tend to give way to claims of kinship in most of the important situations. The flexibility and the continuing strength of the patrilineage, together with the fact that there is still no highly specialised division of labour, have prevented the fuller development of secondary associations as well as of the greater elaboration of more informal personal relationships. These factors have also hampered the development of a sharply differentiated social class. Only where an individual can separate himself physically, economically and emotionally from his lineage does he find it easy to adopt simultaneous changes in norms and behaviour. For the future, if both geographical mobility and intergenerational mobility, based on economic differences, increase and if an even stronger emphasis is placed on a market system of relationships, traditional values and principles of behaviour may be compelled to give way to those that are more consistent with a Western urban mode of life. Yet, it seems much more likely that the Yoruba, missing the full and direct impact of industrialisation, may give rise to norms and behaviour patterns that are distinctive but that the core of orthodox values will remain for the foreseeable future and give their characteristic stamp.

The discussion as to whether Yoruba towns are urban or non-urban has persisted over a long period and centres upon the number of criteria

for urban status the Yoruba towns satisfy. In political, religious, economic and associational heterogeneity the Yoruba towns are clearly urban although the social homogeneity of the population has raised questions and doubts in many analysts' minds. Moreover, the absence formerly of a literate elite has been considered important. Considering the pre-industrial and industrial cities, Sjoberg (1960) insisted upon the inclusion of a literate elite in his profile of pre-industrial urbanism. Sjoberg, after Childe, held that a formal education system supported by a political apparatus, with craftsmen, servants and merchants is necessary for true urban life. Without education, settlements merely are large villages. Probably only a few Muslim traders were literate (Schwab 1965) but the majority of the populace and the traditional leaders were not literate. Moreover, the close links between the population of the town and the surrounding country, the importance of large, cohesive kinship units and the vast percentage of people wholly dependent on agriculture for their livelihood have led writers to question whether the settlements are urban (Schwab 1965), but as large dense and permanent settlements, Yoruba towns did exhibit distinct urban qualities. Their classification as urban has become certain in more recent times with the growth of more diversified economies and their continued importance in the distribution of population in south western Nigeria.

3. Selected Aspects of African Urbanism

a) Primacy

One of the commonest characteristics of African urbanism is the presence of primate cities. The concept of primacy has two inter-

pretations and may refer to population concentration or to the concentrations of functions in one place. Some cities combine both aspects. Primacy has attracted attention in recent decades and writers have stressed that it is not only identifiable in countries in the developing world but also in Europe (Linsky 1969) and North America. Primacy it has also been suggested is correlated with stage of development of a country and Hoselitz (1957) has pointed out that functional primacy occurred in countries such as Sweden (with Stockholm), Belgium (with Brussels) and Greece (Athens) at a very early stage in their development. Hoselitz suggested that probably in its early stages of development a country can support only one great city. Berry (1973) has concurred and concluded that the importance of a single primate city tends to decline as development proceeds. This is similar to Hoselitz's (1955) view that the degree of penetration of a given country by a rationalised system of economic organisation and activity might be shown by an analysis of central places. It was argued that at an early stage of development of a city system, the competition and interaction between cities which was thought to be a necessary condition of central place systems did not obtain. What did rule was the principle of separation whereby each centre served a surrounding area, and the lack of communication prevented competition. Guttenberg (1960) characterised this as a situation with 'distributed facilities', that is where the urban facilities were distributed according to population in a system in which little interaction took place. If economic organisation was rudimentary there was still need for political and administrative control which was exercised from a single centre which attained pre-eminence. Smith (1982) also suggested that intermediate towns grow more rapidly as the system matures.

Primacy may have been the result of economic, political or historical factors or a combination of some or all of them. In Africa primacy has been associated with the introduction of colonial rule under which a limited number of centres were selected for administrative purposes, and with economic dependence on overseas markets. The concentration on agricultural production for export also contributed to primacy since there was little need for intermediate settlements handling the produce on the way to be exported. Mabogunje (1965) has also argued that industrialisation increases primacy and regional inequality because it is more likely to be based on markets than upon resources.

Primacy has been attacked because of its supposed effects upon the whole society. Dependency theory suggests that rather than providing poles of growth from which benefits flow into the community, primate cities improvish the countryside of resources. Hauser (1963) has summarised the costs and benefits of primacy.

Primacy of population may be measured in two ways both using population statistics. The simplest approach is to declare a city as being primate if it contains more than half of the ^{urban} population of the entire country. More than half of the populations of the following countries live in their respective capitals - Angola, Congo, Gabon, Ivory Coast, Lesotho, Liberia, Namibia, Rwanda, Senegal, Sierra Leone, Swaziland and Uganda (Mabogunje 1973). Elsewhere the proportion of the total population in the capital is lower but the difference between that and the next largest settlement is considerable. For example, Dar es Salaam is seven times larger than Mwanza and Zanzibar. The second means of measuring primacy is to calculate an index based on the use of population totals for the largest three settlements. The

populations for the second and third towns are totalled and divided by that of the largest settlement. Peil (1984) has shown that there is a greater range of urban primacy in Africa than in other developing countries but was unable to suggest why the range was so wide since :

.... countries at both extremes have experienced colonialism, are among the poorest in the world, are small, got their independence early, have low levels or a long history of urbanisation and so on. Thus, although countries can be differentiated by levels of primacy, hypotheses as to its causes are not supported by the evidence. (p. 85).

Peil ranks the African countries from high to medium and low primacy with Uganda at 16, Liberia 34 and Tanzania at 29 having high urban primacy; Madagascar at 31, Ethiopia at 40 and Swaziland at 56 with medium urban primacy; and Benin at 63, Zimbabwe at 89 and Zambia at 111 having low urban primacy. Botswana is rated at 102 and is firmly placed in countries of low urban primacy. Peil does not state the date of the figures for any countries in the table, but it is presumed that for Botswana the totals were taken from the 1981 Census and is presumably based upon the populations of Gaborone, Lobatse and Francistown, these being the only settlements listed as urban in the Census reports. The level of primacy may change over time and Peil notes for example that Tanzania and Nigeria have shown a tendency to increasing primacy, although the tendency is more marked in Tanzania. Ghana and Ethiopia Peil suggests have become less primate as intermediate towns have expanded more rapidly and reduced the gap between themselves and the capital cities.

Functional primacy is more difficult to assess than population primacy and different measures have to be adopted. Primate settlements do have a larger proportion of services than elsewhere and

differences can be increased in the employment of the population and in the supply of water, electricity, public and private housing, telephones, air and rail links and so on. An indication of the growth of primacy may be taken from Lagos where over the period 1963 to 1970 the proportion of Nigeria's manufacturing employment located in Lagos rose from 30% to 51%, the share of national electricity consumption rose from 41% to 47% and telephones from 24% to 45%. Finally in respect of banking facilities whereas the total number of bank branches in Nigeria increased from 173 in 1960 to 301 in 1972 in Lagos the increase was from 34 (19.6%) to 83 (27.5%) (O'Connor 1983).

For Kenya, O'Connor (op.cit) selected wage employment, wage earnings, municipal expenditure and private dwelling completed in the period 1975-80. For the first three indicators the Kenya Statistical Abstract for the period 1970-80 showed that :

TABLE 7

Wage Employment, Wage Earnings and Municipal
Expenditure, Kenya 1970 - 80

	<u>Wage Employment</u>		<u>Wage Earnings</u>		<u>Municipal Expenditure</u>	
	(hundreds)		(£ K Mill)		(£ K Mill)	
	<u>1970</u>	<u>1980</u>	<u>1970</u>	<u>1980</u>	<u>1970</u>	<u>1980</u>
All Towns	3036	5233	111	459	13.4	39.4
Nairobi	1640	2742	74	288	9.1	26.7
Mombasa	571	947	19	74	1.9	4.6

Source After O'Connor (1983) The African City (p. 251)

From these figures it is clear that of the national increase of 219700 jobs 110200 (50%) were located in Nairobi and 376 (1.7%) in Mombasa. Nairobi maintained its share of wage employment with only

a slight reduction from 54% to 52% and Mombasa remained steady at 18%. The gap between Nairobi and Mombasa in wage employment is considerable but is greater in annual earnings and both employment and earnings rose faster between 1970 and 1980 than in other towns such as Nakuru and Kisumu.

Official data on buildings completed for private ownership indicate an even greater contrast in current dynamism between Nairobi and other centres, though these perhaps distort the picture slightly through the nature of the coverage. (O'Connor, 1983, p. 251).

In general in Africa there has been a substantial growth in primacy but an exception is Sierra Leone where Freetown has become less important relatively. Gleave (1981) has suggested that because of a stagnant economy, and the growth of the diamond-mining area there has been a decline in the primacy of Freetown with Koidu having grown faster between 1963 and 1974. The exception of Freetown should however not direct attention from the growth of capital cities in Africa since the coming of independence and Gaborone is perhaps a particular case in point. Gaborone, immediately prior to independence was but a small station although its occupation for administrative purposes dated from the early period of the Protectorate. The location at Mafikeng, outside the Protectorate, of the government administration had prevented all settlements of the Bechuanaland Protectorate attaining that degree of primacy achieved elsewhere. However, the choice of Gaborone for the new capital of Botswana and the rapid development of administrative, commercial, industrial, social and diplomatic functions in Gaborone provided the stimulus for growth. Table 2 Chapter I shows that Gaborone grew from 4000 in 1964 to 60,000 in

1981 and totally eclipsed all other settlements in Botswana including those with long established nuclei such as Serowe, Kanye, Molepolole, Lobatse and Francistown. Only in the 1973-78 National Development Plans (Botswana Government, 1973) were serious consideration given to the decentralisation of functions which could lead to the further growth of regional centres.

b) Ethnicity

Hanna and Hanna (1981) have suggested that in urban Africa there are three categories of ethnic membership. These are characterised as relating to broad continental groups such as those from Europe, the Middle East, Asia and Africa. A second division identifies the African population indigenous to a particular area and the third group distinguishes 'tribal, clan and locality groups' (p. 114). The latter group allows for the identification of individual clans as distinct entities within the overall settlement. The importance of ethnicity Hanna and Hanna claims will be influenced by a variety of situational factors :

These include the relevant referential subsystem (e.g. fellow urbanites or rural family members, Africans or Europeans), the kind of cultural response that is involved and the relevant analytic subsystem (e.g. political or social) (p. 114).

The importance of ethnic origins cannot be over-estimated in Africa and perhaps we can agree with Van den Berghe (1975) that 'the real nations of Africa (are) not Nigeria, Uganda or Tanzania but rather the Ibo, Kikuyu or Baganda'. Neither should it be presumed that urban life leads to the lessening of tribal feelings (Gluckman, 1961). Rouch (1956) has agreed that the urbanite's sense of ethnic identity

is often greater in the urban setting than in their home-town milieu and group cohesion may be reinforced by town life and not reduced. Within the town, the urbanite may feel it necessary to defend his/her ethnicity whereas with the home-town there is no need to do so. This does not mean necessarily that ethnicity leads to conflict (Cohen, 1969). Cordial social relationships can and do exist between different ethnic groups over long periods of time. However, ethnic differences can be the source of friction and provide the flash point for localised disturbances which can spread with considerable speed.

Within the African city minority racial groups, mainly European and Asians, can be of considerable importance although the distribution of minority groups throughout African settlements is very common. Whilst among the Yoruba the numbers of people from minorities always constituted a very small percentage, perhaps no more than 1 percent, this was not the case elsewhere particularly in those towns which had been major centres of colonial administration or centres of trade. In east Africa the percentage of non-African people was considerably higher, with Asian migrants and their descendants greatly exceeding the European population. For example in 1979, in Mombasa Asians were four times as numerous as Europeans and in Kampala in 1969 before the exodus of Asians they outnumbered the Europeans by 8.1. Elsewhere the proportions were reversed and in Salisbury (now Harare) in 1969 25% of overall population was European and only 1% Asian. For Bulawayo the ratio was 20.1.

The role of minority groups in African cities is noteworthy. The norm among Europeans is for short-term residence on a contract basis particularly among the Anglo-phone countries, whereas O'Brien (1972) noted in the Franco-phone countries small communities of

Europeans who intend to remain. Only perhaps in Zimbabwe and the Republic of South Africa are there groups of Anglo-phone Europeans who expect to remain in permanent residence although the post-independence out-migration has modified the pattern substantially. The profile of the Asian population is somewhat different and little change in residence is expected without compulsory expulsion as in Uganda (Twaddle, 1975).

In terms of the social and economic contribution of non-African groups in African cities little change has taken place over the period before and after independence. Whilst African peoples have taken over the vast majority of the positions in administration in line with policies of localisation and many Africans have acquired qualifications and now practise as doctors, lawyers, architects and other professionals, Europeans still occupy senior positions in business and commerce. International companies regularly exchange expatriate personnel in senior positions and little change in this practice is likely whilst industrial enterprise in many African countries is dominated by supra-national corporations. Adedeji (1981) has demonstrated that dramatic change has taken place in this area over the last two decades although the rate of change has been different in Lagos and Accra as compared with Abidjan and Blantyre. Asians tend to congregate in trade and in government and industry and in particular in those occupations demanding high levels of skills. In some cities such as Nairobi and Dar es Salaam Asian residents have formed the majority of permanent residents. Policies of Africanisation have led to increasing numbers of Africans occupying high income positions but many non-Africans have retained a high social status and are able to continue to exercise considerable power. (Werlin 1974).

That the African population is highly diversified ethnically in most urban settlements has been alluded to above. Parkin (1969, 1975) has suggested as with Hanna and Hanna (1981) that the main division is between those who consider themselves to be indigenous to the town and those who are migrants. Host groups cannot always be easily identified as in Lusaka or Kaduna and instances can be quoted where the location of a city has been chosen so as to avoid potential conflict between groups. The choice of Abuja in Nigeria and Gaborone may be cited as examples.

One difficulty with the concept of ethnicity is that different interpretations can be placed on ^{the} nature of the group in particular contexts. Some groupings may include large numbers of sub-groups which within their own context would consider themselves discrete. Among the Yoruba there are sub-groups such as the Egba and Ijebu and the Ibo of Owerri might be looked upon as strangers elsewhere among the Yoruba. Cohen (1969) and Schildkrout (1978) have discussed the concept of super-tribes and regional identity is probably important in particular circumstances. On the other hand regional labelling may be rejected by individual groups who perceive themselves as distinct and separate, such as among the Kanuri and Hausa in Nigeria. To illustrate the diversity that does exist, cities in east Africa may be taken as an example. O'Connor (1983) has shown that in 1979 the Kikuyu made up 33% of the total of Nairobi population and the Luhya, Luo and Kamba each added a 12% to 18% each. O'Connor also noted that in Mombasa the Kikuyu made up 26%, the Kamba 12%, Luo 13% and Luhya 8% of the total population. Such diversity is not repeated everywhere throughout East Africa and in Addis Ababa for example the Amhara made up half of the population.

The importance of these ethnic differences may be reflected in a variety of ways in the urban areas. Migration to urban places may be encouraged or discouraged by the ethnic composition of particular towns since many migrants prefer to move to join members of their own group. Towns with diverse populations have witnessed the emergence of ethnically based associations (Banton 1965, Southall 1975). The associations assist migrants to adapt to urban living. Peil (1977) looked upon the associations as a means of protecting minority interests and as important in providing support for the home areas from which the group come. Peil (1977) has also suggested that the new migrants to the cities depend upon family ties and informal contacts. Friendship ties are important for migrants and co-ethnic linkages are significant in the establishment and maintenance of migrants in the urban setting (Ross 1975, Parkin 1969). Marriage patterns also indicate the importance of ethnic identity and Grillo (1973) has shown that the majority of marriages in Kampala were between partners from the same ethnic group. Grillo found that only 8% of marriages in Kampala involved different ethnic groups. Peil (1972) for Ghana showed that marriages across ethnic divides were rare.

The role of language in identifying ethnic differences cannot be over-emphasized. Language patterns and language use provide basic discriminators between not only major grouping but between sub-groups, dialect differences stressing the origins of individuals. The range of languages varies considerably from city to city with perhaps 20 languages in use in Nairobi (Parkin 1974) and two dominant languages in Harare, but almost everywhere the metropolitan language of the ex-colonial power is used. In some cases, French or English is the lingua franca and, as with Swahili in East Africa, provides the only means by which diverse

groups can find common linguistic ground. The extent to which a European language is known and used varies between cities but in general French has retained a stronger hold than English. Where the population is more ethnically diverse, as in Abidjan, the metropolitan language is more likely to be retained.

O'Connor (1983) has suggested it is possible to 'exaggerate the importance of ethnicity' (p. 129) and he concludes :

that the extent to which people of diverse ethnic origins live peacefully together challenges the view of ethnicity as essentially a matter of conflict (p. 129).

However, there is little evidence that supra-tribal groups are emerging and, as O'Connor notes, few people consider themselves to be Nairobians or Abidjanais. These arguments appear to be somewhat contradictory. Whilst governments are attempting to inculcate national allegiances, there are questions as to how successfully such feelings have been established. The same question might be asked of the United Kingdom as of any African country and north-south divisions in the UK arguably have been moderated only marginally over recent decades. It is contended here that ethnic differences are of importance and can be related to occupations, place of residence and association membership. Old feuds may have disappeared ostensibly below the surface but this does not necessarily mean that the feuds are ended. In Botswana the status of the baKalaka, a subordinate group among the baNgwato has remained a continuous source of irritation throughout the twentieth century. O'Connor (1983) has however suggested that ethnic identity can be a source of strength providing support for migrants and encouraging a sense of belonging to the towns to which they have moved.

3 (c) Occupational Development

The functions which urban places perform will have a major impact on the types of employment available. Towns which are dependent upon mining or imports and exports will have large percentages of their residents employed in these and related enterprises and in administrative centres, government, either local, central or both will be the main employer. Towns with more diversified functions may offer greater employment opportunities with a greater range of openings in the labour market. Manufacturing has been a major growth area for most cities outside Africa with an emphasis on consumer goods such as food, textiles, clothing, furniture and household equipment. Commerce covers the whole range from imports and exports to wholesale and retail trade with a large element provided by the sale of agricultural produce.

The origin of particular settlements may have influenced their position and development but may or may not be important today. Whereas some cities began as military posts none depend upon that as their major function today. On the other hand, towns established as transport nodes, such as Nairobi or Kabwe, have maintained their importance although that importance may now be more broadly based on manufacturing and administration than just transport. Ports have retained their importance as transport centres for the import and export of produce and manufactured goods. There are, however, at least two notable omissions of settlements dependent upon particular functions. There appear to be no cities except perhaps Sun City in the Republic of South Africa, which are identifiable as tourist or leisure centres although tourism is of major importance in the economy of particular cities such as Mombasa. Secondly there appear to be few settlements where industrial activity predominates. Apart from Jinja in Uganda,

Thika in Kenya, Kaduna in Nigeria and a limited number of other settlements there are no cities truly dependent on industrial complexes outside the Republic of South Africa. There are however throughout Africa many towns where the population is largely engaged in agriculture being either wholly or partially dependent upon their produce for subsistence and income. Some of the towns of Nigeria and Botswana are cases in point.

Writers on African urban systems have suggested that two main sectors of enterprises exist. Small-scale enterprises, often operated by self-employed entrepreneurs, are contrasted with larger-scale enterprises employing a number of workers. The terms 'traditional' and 'modern' have been used for these two areas; so have 'informal sector' (suggested by Hart 1973) and 'formal sector'. McGee (1973) has suggested the distinction should be between peasant and capitalistic forms of production. This dualistic approach is however challenged by others and Santos (1979) has suggested two circuits of the economy, the 'upper' and 'lower' into which the circulation of goods and services are separated. O'Connor (1983) has suggested that whilst a distinction between large-scale and small-scale sectors can be made, there are enough areas of the economy in which there is so wide a range of size of businesses that a third category of intermediate activities should be identified. Some use has been made of 'indigenous' and 'alien' to distinguish between two sets of activities but from the onset of independence this distinction has become less valid as local people have developed more manufacturing capacity and as governments have taken steps to curb expatriate interest and control in industrial development.

The difficulties of classifying enterprises may be well illustrated from the retail trade where every size of business may be found. In the inner city shopping precincts it is usual to find the larger shops of international corporations and those established by foreign capital. Throughout the city there are the more numerous smaller shops, operated by self-employed entrepreneurs with perhaps a few employees mainly members of the shop-owners family. However there are very many shops that are intermediate in size. Together the shops, the markets and the hawkers and vendors provide a full range of services to the customer, the demands of the economy being met by response to perceived and declared needs. Whilst at one end of the spectrum the larger shops represent the modern sector of the economy, the other end of the spectrum may be taken to represent the traditional sector. The informal sector may be represented by the middle size shops which require considerable inputs of capital to establish but also depend upon a form of organisation more reminiscent of the traditional sector. The informal sector may be a broader sector of the African urban economy and include many 'traditional' activities.

The relative importance of the small- and large-scale sectors of the urban economy varies between settlements. Whereas in Nairobi, Lusaka and Harare large-scale enterprises employ a high percentage of the workforce, in the Yoruba towns small and medium-scale firms predominate. Elsewhere, as in Kano and Khartoum intermediate-scale enterprises are of considerable importance. Comparisons can be made between cities using employment data for wage earners and the self employed and Census Reports have shown that the percentage of the workforce which is self-employed varied from 10% in Lusaka (1969) to 34% in Freetown (1963) and that there were significant differences between

cities in the percentage of women who were self-employed. In Kumasi (1960) 91% of women were self employed and only 43% of the men and in Accra (1960) the figures were 84% and 26% respectively. In Dar es Salaam (1967) the respective percentages were 23% and 16% and this may have reflected the predominant Moslem influence which encouraged women to remain within the home. (vide O'Connor, 1983, p. 143).

Within the small scale sector much activity predates the colonial period and this includes the oldest and newest activities. The provision of services may illustrate this division with herbalists, witchdoctors and diviners representing the older category and repairers of shoes, bicycles and tailors representing the newer. Characteristics of this sector of the economy are the low level of capital required to set up a business and the dependence of the customer upon the skill and expertise of the entrepreneur. Incomes on average are poor and below that of the large scale sector although individuals may have a high rate of success. Farming, fishing, handicrafts and construction are all part of this sector. Among the Yoruba weaving and pottery-making are traditional craft industries (Ojo 1966) but tailoring and carpentry now occupy more people (O'Connor 1983). Tailoring, furniture making and brewing are important in Kampala (Obbo 1975). Beer-brewing is also significant in Nairobi and Lusaka. Commerce is also a major source of employment and the Sierra Leone Census of 1963 showed that 65% of the self-employed in Freetown were traders. Women make a greater contribution to this sector in many countries than men usually through trade, petty or on a large scale, through the sale of craft products, beer and of produce from small areas of land cultivated near to the home.

Within the large-scale sector of the urban economy there is a range of activity which may be private or state organised and under either foreign or local control. The characteristics of this sector, apart from its larger scale: 'are more impersonal relationships, greater reliance on qualifications and more standardised wage-rates than in small-scale enterprise' (O'Connor 1983 p. 150). Capital intensive methods have led to incomes being higher in these enterprises with the workforce generally having greater security. The public sector includes central, municipal government and parastatal organisations such as marketing organisations, housing boards and universities. Whilst the importance of this sector varies from country to country its place in African economies has grown. In Nairobi and Mombasa the public sector accounted for 40% of employment in large-scale enterprises in 1979 (Kenya 1981). The private portion of the large-scale sector is largely equivalent to that part of the economy controlled by expatriate groups. In some countries e.g. Nigeria the degree of foreign control has been closely regulated in recent years to ensure a steady transfer of resources to Nigerian nationals with new enterprises having to satisfy strict regulations designed to limit further expatriate investment in Nigeria. However, the degree of control and the exercise of that control varies from country to country. Schatz (1977) and Beveridge and Oberschall (1979) have shown that a wide range of wholly local firms have been established in manufacturing, trade, transport and construction. The total numbers of firms in African cities has tended to grow and not just the average size of firm although examples of pre-eminent enterprises which dominate cities may be quoted, such as cigarette making at Oyo and steel mills at Oshogbo and Katsina.

With regard to the contribution of males and females in African urban economies it is true to say that the females play only a minor role in large-scale business. Hansen (1975) has demonstrated the lack of wage-earning jobs for women in Zambia and shown that employers' attitudes, poorer educational standards among girls, parental and family attitudes have all contributed to the low numbers of women in industry.

A final characteristic of African cities to be reviewed must be the question of unemployment. Migration to the cities continues apace and unemployment must be viewed as the result of the inability of the urban systems to create sufficient jobs to keep up with the level of available labour. One view might be to create such jobs rapidly and so eliminate unemployment. Other views suggest there is such a large labour reserve in the rural areas that were jobs created they would be filled immediately and more unemployment would emerge as more people left the countryside for the towns (Elkan, 1970). Gutkind (1968) suggested that unemployment rates for African towns ranged from 10-35% and Hance (1970) thought the figure for Lagos in 1965 was 34%. Gugler (1976) suggested rates of 12-15% for all adults. In addition there were many others who were under-employed working for short periods or low returns. The ILO (1972) report for Kenya estimated male unemployment at 14% Mombasa, 10% in Nairobi and 8% in Kisumu. The report also suggested that female unemployment might be 20%. Within the countryside there might exist considerable hidden unemployment in that the farming that is undertaken could be carried out with smaller numbers of people. However on migrating to the city migrants find difficulty in locating suitable employment. In some cases it is those with least education who find most difficulty in

obtaining a job (vide ILO Kenya 1972). Elsewhere, it may be those with more education who remain unemployed for long periods (vide Peil 1972).

3 (d) Spatial differentiation

Three models have been developed to account for spatial differentiation in towns. The first model as formulated by Burgess (1925) postulates a series of concentric circles around a central business district (CBD). This is surrounded by a zone of transition and dilapidation, and successively by zones of medium and high income housing and industry. Peil (1984) has provided an adapted Burgess model for African patterns, showing a CBD, including the commercial with residential provision for shopkeepers and craftsmen, and an area for indigenous housing mixed with small-scale industry and marketing. Beyond that are the government institutions and high-income estates followed by a ring of former villages and industrial estates, airports, military bases and educational institutions. The second model is that put forward by Hoyt who considered that sector development was more likely to take place. Hoyt suggested that developments built upon existing land use and therefore areas of the city tended to expand by adding to that already there e.g. new high income housing was attached near to existing high income areas. Potential residents would be attracted to an area because of the social milieu or by its good location e.g. for cool breezes, provided they could afford the costs. Low-income residents would occupy the less attractive sites (De Blij, 1962). Following Hurd, Hoyt suggested that the expansion of cities takes place along the lines of transportation or is contained by physical boundaries i.e. rivers. Primary areas

are filled first and secondary areas only later as demand increases.

Demand and competition are the bases of expansion (Peil 1984).

The third model was offered by Harris and Ullman (1945) who concluded that cities have several centres rather than one centre which provides for all or most urban functions. Multiple centres are commonplace in Africa because earlier settlements which have been incorporated into the cities have retained their individuality and the functions they performed before. In some case centres originally established for different purposes have been brought together under one authority e.g. Khartoum, but the original centres retain the distinctive nature (Pons 1980). Where a single commercial centre expands, separate nuclei may develop and provide functions e.g. educational centres, high income estates, squatter zones, industrial estates and so on. The three models do not describe any one town but may reflect aspects of reality of many settlements. Burgess's emphasis on density and house type, Hoyt's concern with rent and land values reflect socio-economic differences and Harris and Ullman's nuclei indicate historical and ethnic differences. (Vide Abu-Lughod 1969).

Of particular interest is the morphology of pre-colonial cities and the Yoruba towns, included in Chapter II, offer good examples. These towns are very compact with a high density of population in single-storey buildings. The towns were surrounded by a wall and there was a sharp transition to the rural areas. Krapf-Askari (1969) considered they resembled a wheel in plan with the palace of the oba at the centre. The spokes of the wheel divided the town into several wards each with its own identity. Adjacent to the palace was the market and some palaces contained administrative buildings. In recent years, the centre has attracted newer facilities such as post offices

and banks while other services such as schools and hospitals have been located on the periphery of the town. Inside the town there was little differentiation in architecture and the mass of houses were densely packed with only small passageways between. Newer high income houses have been built on the edge of the town.

In sharp contrast are the cities established during the colonial period such as Nairobi and Lusaka. These cities occupy considerable areas and have a low average density of population. The transition to the rural areas is not abrupt and there is a substantial pre-urban fringe. Within the city there are sharply differentiated functional zones for administration, commerce and industry. Residential areas, originally designed with an emphasis on race, are also clearly demarcated. Beyond these areas now lie the squatter areas which have developed in recent years since independence. Within the cities suburbs like those of most western settlements are clearly discernible. This orderly pattern to the design of the cities reflects the approach to town planning adopted within the metropolitan countries from which the colonial rulers came.

A third group of African cities have a dual character being neither wholly indigenous nor colonial, but have a mixture of characteristics. Where both influences lead to physical developments side by side as in Kano a sharp division between the two can still be seen. Within Kano city there are three well defined foci made up of the Emir's palace, the mosque and the market. The city is divided into wards and compounds each of which are occupied by one family. Compound walls have only one entrance and life takes place within the confines of the compound (Schwerdtfeger, 1982) Markets and smaller mosques are scattered throughout the city along with craft work which takes place

in the homes of the work people or immediately nearby. The colonial government developed a new city outside the walls of Kano which reflected contemporary European structure. Elsewhere as in Bamako, Brazzaville, and Niamey a clear separation was maintained between the 'Ville blanche' and the Ville noire'. (Vennetier, 1976). In some cities, as in Ouagadougou this separation is not so obvious. With the coming of independence the clear-cut divisions have become less obvious as restrictions on occupancy have been relaxed and where in some cases integration has been encouraged to achieve social and political goals. In most African cities there is some element of separation of races into different residential areas. Where there are large concentrations of Europeans and Asians, these often occupy separate districts. Since independence there has been a tendency for more integration between the races but only as a result of Africans penetrating the former Europeans areas. The continuance of all Rhodesian towns as segregated settlements was exceptional (Kay and Smout 1977) but with the establishment of independent Zimbabwe these divisions have been eroded.

The earlier racially determined pattern of residence is reflected today in the density of population and O'Connor (1983) noted that in respect of the 1962 Census for Nairobi there were marked variations in population and housing per hectare. From the western sector where there were 3 dwellings and 15 people per hectare, the densities ranged to 11 dwellings and 120 people in the Parklands-Eastleigh sector to 65 dwellings and 320 per hectare in the eastern sector. O'Connor noted that these differences persist and have been increased by the 1000 people per hectare in the squatter area of Mathare Valley and Kibera. In Africa, in general, population densities tend to decline

away from the city centre. Land values also decline and poor communications make it difficult for workers to commute daily. However not all the high cost housing is on the fringes of the towns and in some cases as in Accra it occupies a portion close to the centre originally set aside for Europeans.

Of interest also is the separation among ethnic groups within the African population. In northern Nigeria this is extreme and in Kano and Zaria the divisions were of historical origin. Outside the walls of both cities the Tudun Wada area is occupied almost entirely by people from the north whilst the Sabon Gari area is inhabited by people from the south. Paden (1971) noted that in 1960 the Ibo formed 60% of the population of Sabon Gari and the indigenous Hausa only 1%. In contrast, Wolpe (1974) noted for Port Harcourt, an ex-colonial port established for the exploitation of south-eastern Nigeria, that there were no segregated residential areas. Yet again, at the other extreme, in Addis Ababa the layout of the city is clearly associated with the quarters originally allocated to specific ethnic groups. Shack (1973) has suggested that the city is a collection of sefers (quarters) and that neighbourhoods are occupied by people from one rural locality.

In terms of function and land use, considerations must be given to the location of administration, commerce and industry. In most African colonial cities there is an area in which the government offices are concentrated and which has been added to by horizontal and vertical expansion. As an exception in Freetown the urban administration area has not been expanded because of lack of space and additional capacity has been constructed at some distance from the centre. Elsewhere, as in Abidjan and Dar es Salaam, the administrative zone has expanded and

taken over adjacent houses of former officials. In some cases the houses have been demolished and replaced by office blocks. With regard to the commercial use of land, the pattern is more diffuse than that of administration. Large central markets are a common feature of indigenous cities, perhaps the largest being that of Kumasi, with 10,000 stalls spread over 10 hectares (Garlick 1971). Other markets, (Hodder, 1969) street vendors and kiosks abound.

In addition, most cities have one or more major commercial zones where most of the large businesses are located. In ex-colonial towns the centre may be occupied by banks, largely foreign banks, offices and shops which provide for an elite clientele. In the poorer areas of the towns larger markets are found as in Dakar and Dar es Salaam. Originally at some distance from the town these markets have now been joined to the whole by the infill of housing and other developments. The pattern of distributions of shops may still reflect earlier patterns of settlement which were racially determined and in Nairobi for example, the concentration of Asian retail shops is noteworthy. Most cities have however seen a marked spread of commercial activity. In earlier times it was possible to distinguish two main areas - that of the concentrated commercial area with dense populations, the shops providing an easily accessible service for people without means of carrying goods over a long distance, and that of the less densely settled, high income area which was largely devoid of shops, the occupants depending upon their own transport, for the most part cars, to obtain their supplies. The approach to urban planning which separated residential and commercial areas **now** appears to be inappropriate and impracticable and there has been a marked spread of commercial activity throughout urban areas with or without official sanction. In some cases shops are

emerging despite their being located in illegal squatter areas such as the Mathare Valley in Nairobi.

Finally, in relation to industrial land use, there has been a tendency to concentrate large scale manufacturing in an industrial area and this has arisen because of strong municipal regulation. It has also been made possible because much of this manufacturing has only recently commenced in many cities and there is little or no previous development which planners have to coordinate into development schemes. Small-scale production is generally more dispersed with parts of houses or small areas adapted for production. This aspect of production reflects African traditions more fully than the western industrial estates and it may be that future development may be more diffused throughout the towns. In indigenous cities certainly production related to crafts may be highly scattered as Bray (1969) has shown for Iseyin in Nigeria. Some processes are concentrated within sectors because they are the traditional occupation of specific groups of people.

3 (e) Housing

The extent to which housing is seen as a problem in African settlements may be related to differing perceptions of housing as an indicator of affluence. Many surveys of housing have been published e.g. UN 1976, UNCHS 1981 which have emphasized the desperate plight of the majority living in African towns and cities. However Peil (1981) has reminded us that 'a case can be made that housing is a less important factor in the standard of living and self-image of a West African than of an Englishman or American' (p. 135). Perhaps the nature of family and social life, the climate which permits and encourages

activity out of doors, and the quality of rural dwellings should all be borne in mind in attempting to appreciate African attitudes to housing provision. However, this should not be interpreted either as an excuse for inaction or for lack of concern. A great range of housing is used from large, high quality dwellings to crude shacks made of cardboard and corrugated iron without basic amenities and the impact of housing types on urban growth is of considerable importance to overall development strategies. The appeal of single storey dwellings in Africa has led to the horizontal growth of all settlements despite the long journeys by inadequate transport facilities this may mean for commuters. This does not mean however that densities are low, because as pointed out in Chapter I, multiple occupancy of houses leads to the concentration of population. In 1970, for example, in Kaduna 64% of households occupied only one room and shared cooking and toilet facilities. In Lagos the figure was 72% (Nigeria 1975). Densities are not everywhere as high and within cities there are marked variations especially in the ex-colonial settlements where large plots were set aside for occupation by government officials.

A second area of major concern in urban settlements is the provision of basic services such as water and electricity. Again, the level of provision differs in different parts of cities and hence averages hide a wide range of provision. In 1970, in Port Harcourt 75%, and in Lagos 72% of all dwellings had piped water and these compared very favourably with Ibadan, Kano and Benin with 33%, 26% and 25% respectively (Nigeria 1975). A similar situation existed in East Africa and those without piped water had to depend upon public stand pipes in the local vicinity. In some respects the situation differed between ex-colonial towns, which had had incorporated in their

development plans provisions for basic services, including sewage disposal, and the indigenous towns which were constructed without such services in mind. Evidence suggests that the proportion of dwellings without amenities is rising although the absolute numbers of people served has risen rapidly (Hardoy and Satterthwaite 1981). Generally it would appear that in terms of quality and quantity, housing in African cities falls far below required levels and that the situation is deteriorating.

In terms of home ownership and occupations, it is difficult to make statements which have general applicability. The practice of multiple occupation makes it difficult to classify a house as either owned or occupied since it may be both with the resident owner letting out rooms. Certainly it is not normal for individuals or families in rural areas to own land since that belongs to the community. However, in indigenous cities it is common for families to own the compounds in which they live. Thus, few households may pay rent as in Ogbomosho and Maiduguri. Where new sectors have been added to old towns, such as Kano, the proportions of those who pay rent may have increased whilst in the core of city the situation has remained unchanged. Bedawi (1976) showed that in Zaria 93% households owned their dwellings in the old city whilst only 15% did in Tudun Wada and 5% in Sabon Gari. In ex-colonial cities such as Nairobi the balance may be reversed. Stren (1972) showed that 36% rented city council housing, 13% central government housing, 17% lived in other employer provided housing and only 34% lived in privately owned houses as either owners or tenants. It was the norm for colonial city dwellers to rent accommodation and this is likely to continue to be the case in view of rising prices and the inability of residents to purchase.

All African cities have numbers of substantial properties built for government employees. These are a legacy from colonial days when the government provided for administrators as professionals who were in government service, who were not expected to remain in the country for the whole of their lives and who, also, could be moved to different stations as the needs of the service demanded. Frequently, these houses are at the centre of the city near to the administrative offices or are located in the Government Residential Area (GRA). Similar enclaves of good quality housing are found on university campuses, at schools and colleges and at hospitals. In only a few instances has the stock of government high quality housing been increased since independence. Of greater note is the provision of government housing for the low-income majority. In some ex-colonial cities the use of government housing was encouraged because regulations forbade the building or renting of houses by Africans. Single accommodation or two-room units for families were common in the 'labour lines' of Nairobi until the city council decided to build municipal housing (Stren, 1972).

The provision of housing by private employers has also been a notable feature of African cities and mining companies, large manufacturers and oil companies have been the main providers. In the Zambian copperbelt the high proportion of company-owned houses, 40% in Kitwe, is noteworthy. Not all housing so provided is intended for high level personnel and companies may obtain properties of different qualities in the housing spectrum to be able to house a wide range of staff. However this provision reflects the expectation that both higher and lower-paid staff will not settle permanently in the cities or if they do so they will have to move into alternative, non-company accommodation.

With regards to private housing, a division between high and low quality can also be made. High quality houses, previously occupied almost entirely by Europeans, are now increasingly owned by Africans or Asians. Within the lower quality housing, traditional patterns still exist although these may be changing in response to changing social issues. Among the Yoruba high densities have been noted within the compounds of the extended families and Schwab (1965) found in Oshogbo that these varied from 15 to 450 people. However in Ibadan Mobogunje (1968) has noted a tendency for compounds to disintegrate. As families expand they build and fill the open space in the centre of the compound leading to overcrowding. This stimulates many to purchase land and build at the edge of the town. Similar movements have been suggested for the Ga areas of James Town and Ussher Town. The overcrowding, which had been encouraged by the lack of nearby land for expansion, has led to the deterioration of properties but this has not encouraged the whole of the compound to move. On the contrary, emotional ties to the established location of the extended family and proximity to work have led Ga communities to resist renewal schemes in Accra (Brand 1976) and inner core residents of Lagos have become more politically active to maintain their position (Baker 1974).

Whilst squatter settlements, in general have attracted great attention in the literature on Third World development, few discussions relate to tropical Africa because the incidence of the strictly illegal occupation of land has been lower. This has been because land was available from the chief or people preferred to rent because they did not intend to stay permanently in the urban areas. The more recent development of squatter zones in say Lusaka and Nairobi may reflect a change in attitude to more long-term residence in the towns and

cities. The lack of land to purchase and of accommodation to rent, plus rising costs, must be important conditioning factors too. The status of squatter dwellers in Lusaka is somewhat in doubt. Contrary to general practice, the typical squatter there may not own the dwelling, however temporary, in which he/she lives and may rent it from an owner who has occupied the land illegally. The situation in Nairobi may be somewhat similar. The quality of squatter accommodation varies considerably from cardboard erections to substantial permanent buildings. Most have no water or sanitation whilst others have water, latrines and perhaps a supply of electricity.

Policies towards squatter areas depend very much upon the perceptions that exist of the value of such settlements. Whilst African towns and cities have no low-cost city tenements to receive migrants, as is the pattern in many other situations, e.g. in Europe, the squatter areas could provide places. However, this is unlikely to be the case since it is thought that migrants go first to those areas where they expect to find members of their kingroup. In the squatter areas therefore most of the residents have come from elsewhere in the city. This means that most of the residents are long-term urban residents and pleas to them to return to their rural holdings have gone unheeded. In a similar way schemes for the destruction of squatter settlements have not met with great success since although particular areas have been cleared, the squatters have set up elsewhere within the city. More positive approaches have been needed (Dwyer 1975). In some cities e.g. Dar es Salaam legal rights to occupancy have been granted. In Lusaka, programmes to improve the squatter areas have been initiated (Pasteur 1979), to provide roads, water, schools and clinics. Another approach to the provision of low-cost housing is through the

organisation of site and service schemes under which the government defines the individual plots, provides access roads, water and sewage and the residents provide the houses. This approach has been used in Lusaka and Nairobi. These schemes are not new in conception since similar approaches were used e.g. Mombasa and Blantyre during the colonial period, but they do represent a revitalised attack upon the most resistant of problem of providing adequate housing within a context of limited funds for amenity development.

CHAPTER IV

SEROWE: THE ORIGINS OF THE NUCLEUS AND EARLY HISTORY

1) The Origin of the Nucleus

The currently accepted history of the origins of the tribes of Botswana is based upon tradition and written material is only available for the last 170 years. Missionary records and the writings of such men as MacKenzie, Chapman, Livingstone, Smith, Moffat and Campbell do give clear guidance from about 1810. For earlier periods, tribal tradition has to be relied upon, but must be used with caution. As van Warmelo (1937) has suggested these traditions are :

weak in chronology and scanty in regard for the truth. As a rule three hundred years is the limit of possibly reliable tradition. Beyond that, legend and fairy tales luxuriate. (p. 44).

The traditions are often vague and conflicting, but the process of fission and segmentation which they describe has been repeated sufficiently often within recorded history to make it probable that they are not entirely fictitious. The traditions do contribute to an understanding of inter- and intra-tribal relationships both in the past and in the present.

The chiefs of the modern baTswana (see Appendix A) claim to be descended from Malope who lived in what is now part of the south western Transvaal (Schapera 1952). Malope is said to have been the father or near ancestor of Mohurutse and of Kwena, Ngwato and Ngwaketse who were respectively the direct ancestors of the chiefs now ruling the tribes of these names. It is generally agreed that following Malope's death the tribes split owing to a dispute between Mohurutse and Kwena, either about the succession to the chieftainship or the order of procedure

involved in the ritual eating of the first fruits. The tribes divided into the boHurutse and the baKwena with the baKwena remaining as a united tribe at Mabyanamatshwaana (Swartkoppies) near present day Brits in the western Transvaal. Within the settlement, Ngwato and Ngwaketse became the heads of separate sections of the tribe in accordance with the custom by which the junior sons of a chief were each given servants whose descendants are the hereditary retainers of his own line.

This division laid the foundation for the separation that took place later. In the reign of Mogopa (c1720-30) the greater part of the tribe was driven by famine to Rathateng on the east bank of the R. Crocodile close to its junction with the R. Marico. Later, Mogopa and his personal adherents returned to their former home but his half-brother Kgabo who was the head of a separate village remained behind and henceforth considered himself to be independent. The modern-day baKwena trace their origin from Kgabo. Ngwato, Ngwaketse and their followers remained with Kgabo and acknowledged him as their chief. Later the baNgwaketse broke away following a dispute over the leadership of their section and the baNgwaketse became established as a separate tribe. About the same time the baNgwato under Chief Mathiba also seceded. The story is that some of them had insulted the wives of the baKwena chief and this led to a conflict between the two sections, the outcome of which was the secession of the baNgwato. The time of these divisions cannot be determined with any degree of accuracy but it was probably during the third quarter of the eighteenth century (Schapera 1952).

The baNgwato after leaving the baKwena moved to the north to the area of Shoshong and also became independent. The process of division

was not complete however. In 1795 a dispute arose when Kgama, the heir to the chieftainship (later Kgama I) maintained that Mathiba had been unduly partial to another son Tawana, whose mother was of junior rank. Following upon an incident in which Kgama received an injury to an eye from a mokgalo tree, Tawana seceded with Mathiba and established the baTawana in Ngamiland. Kgama I became chief of the baNgwato probably in 1795 (Sillery 1952). Thus by the end of the eighteenth century the original group under Mogopa had divided into four:- the baKwena, the baNgwaketee, the baNgwato and baTawana in Bechuanaland with a fifth the Mogopa-Kwena in present-day Transvaal.

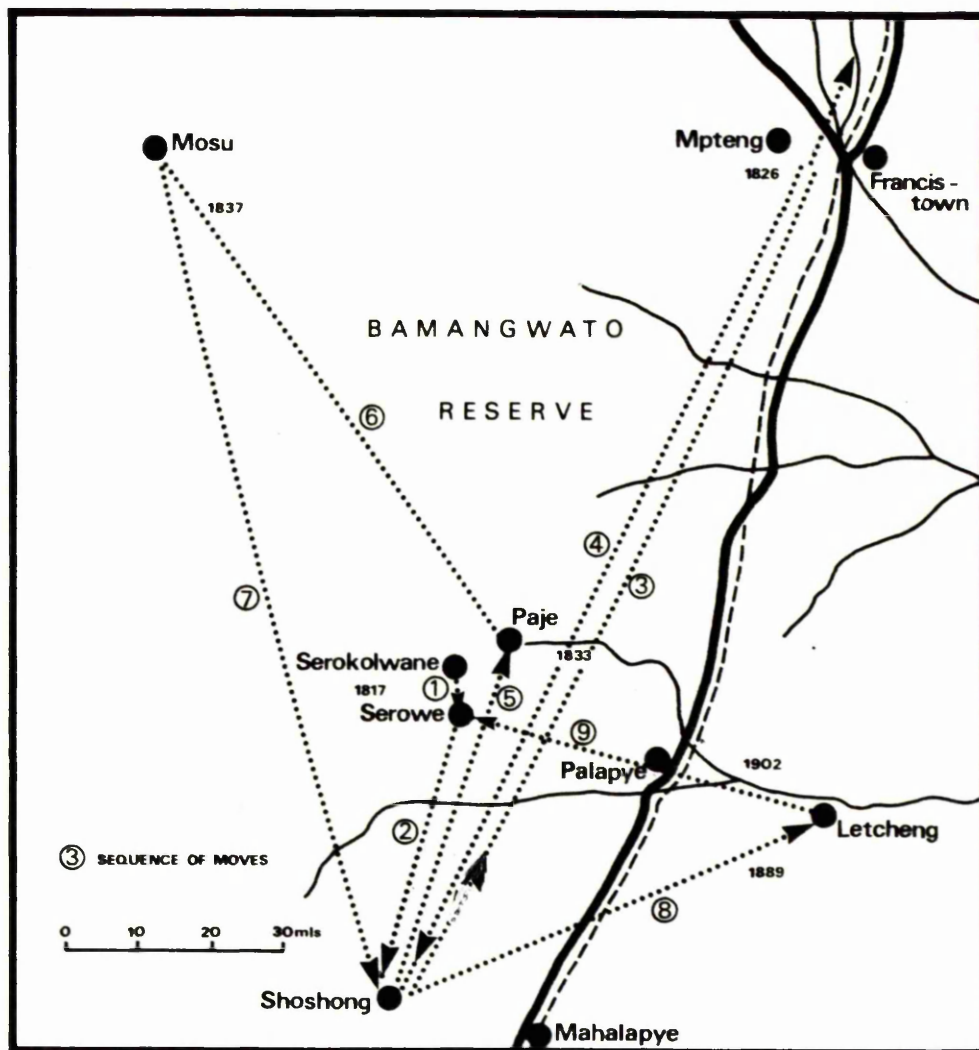
It must not be assumed however that once the divisions had taken place that the tribal nuclei were about to establish themselves easily and remain static. Far from it: and the history of each tribe is full of trials and tribulations which caused the chiefs to move their settlements. During the first four decades of the nineteenth century the baNgwato suffered many reverses which caused them to move the site of their capital on a number of occasions. Kgama I died about 1817 and during the course of his reign had moved his capital several times (Sillery 1952). At the time of his death the tribal capital was at Serokolwane, a few kilometres to the north of Serowe. Kgama was succeeded by his son Kgari who immediately moved the tribe to Serowe, and this may have been the first occupation of Serowe by the baNgwato. Tradition has it that Kgari was buried in his kraal at Serowe. Today, part of Kgari's courtyard fence in Serowe is preserved in the form of the stump of a Motswere tree. This remnant is close to the centre of the present-day settlement and is also close to Serowe hill. This suggests the continued importance of the hill as a factor in the development of the settlement. At Serowe, Kgari was attacked

by the baFokeng and was forced to move to the Khutswe Hills about 40 kilometres to the south where he was again attacked by the baFokeng. The baNgwato were forced to move once more to the north near to Mankgwedi. There the tribe suffered famine and it migrated into the boKalaka area and settled at Mpateng. At this point Kgari decided to attack the Shona of the Matopo Hills in the hope of looting their cattle. However on this expedition Kgari was ambushed and killed. This took place in about 1826. The baNgwato now returned to Khutswe and Sedimo, son of Kgari's brother Molosiwa, became regent. Sedimo passed the chieftainship to Kgama II in about 1833. Kgama II however died without male issue in about 1835 and there arose a dispute between on the one hand Sekgoma, son of Kgari and on the other the mother of Kgama. After a skirmish Kgama's mother and her followers fled to the baKwena and Sekgoma I became chief in about 1835 (Sillery 1952).

At this time the baNgwato were a badly disorganised and scattered tribe and despite his later activities, which led to dynastic troubles, Sekgoma I is remembered as the chief who brought the remnants of the baNgwato together and welded them into a strong tribe. However before Sekgoma I could begin his work of unifying the tribe the baNgwato were further troubled by the ripples of the Mfecane, the period of extreme unrest in southern Africa which followed the establishment of the Zulu empire. The baNgwato were now attacked by the Ndebele on their way north to present-day Zimbabwe after their reverses against the Boers in the western Transvaal. The Ndebele drove the baNgwato first to Paje, 10 kilometres north of Serowe where a fortified camp could be made on the edge of the Kalahari escarpment and then to Mosu on the southern edge of the Makgadikgadi (Sillery 1952). This happened in about 1837 and it was whilst the tribe was at Mosu that

Sekgoma's son Kgama (later to become Kgama III) was born. This period marks the low water of the fortunes of the baNgwato but it also marks the end of the major disturbances of the tribes of Botswana. From that period there have been considerable periods of peace interrupted more by localised inter-tribal disputes and many internal troubles. Shortly after the setbacks of the mid 1830's the baKaa and the baTalaote who had remained in the Khutswe Hills invited the baNgwato to join them at Shoshong (see Appendix A). This the baNgwato did and there followed a period of peace and consolidation until Kgama III moved the capital to Letcheng in 1889 (see Appendix A). The baNgwato remained at Letcheng until 1902 when the tribal capital made its final move to Serowe and the present settlement was established. (Sillery 1952).

The movements of the tribal nucleus set out above are not untypical of the baTswana. Forced either by attack, secession, famine or disease the chief would move the position of his home. For the chief and his people to move his home did not constitute such a difficult task as might initially be presumed. Since all the houses were constructed of dried mud and thatch and there was a plentiful supply of building materials, it was neither costly nor difficult to obtain the requirements to build a house. It was also possible to remove all the thatch and poles for the roof plus any doors that villagers might have and hence reduce the need to undertake the lengthy process of collecting new materials. It must be borne in mind too that traditional houses can and do deteriorate rapidly and all houses needed substantial repair each year. To move house instead of undertaking repairs might therefore require only a little more effort. When the chief moved his followers would also move with him. If some



MAP 2: MOVEMENTS OF THE BAMANGWATO CAPITAL c1812-1902

of his tribespeople were not prepared to move with him, he might attempt to force them to accompany him. If he did not succeed, the dissidents might form a new nucleus or, either at that time or later, place themselves under the control and protection of another chief. The system of allowing the minor sons of chiefs to establish separate sections within the settlement tended to encourage the possibility of fission taking place. In the 40 years before 1864 the baKwena moved their capital no less than 10 times and the baTawana moved theirs five times during the period 1883 - 1916 (Sillery 1952). During the three years of his reign Kgama II moved the tribal capital four times. However during the 48 year reign of Kgama III the capital moved twice only. The reasons for this dramatic change and the increase in stability will be examined later. The movements of the baNgwato capital to 1902 are shown on Map 2.

The foregoing might imply that the tribal nucleus that moved with the chief was a homogeneous one and was solely those who had blood ties with the royal household. Unless secession took place then all the members of the royal house plus those who were related would normally move with the chief. However the tribe as a whole included numbers of groups of people who had attached themselves to the tribe to gain protection and support in the difficult physical and political environment of southern Africa. An understanding of the role of these groupings provides a key to a further appreciation of the unique nature of the social geography of Serowe and will be outlined in Chapter V.

2. The Early History of Serowe

The Serowe (see Appendix A) area provides ample evidence of earlier

occupations prior to the final settlement in 1902. Hill-top sites for settlements were valued because they offered opportunities for defence against attack. Prior to the mid-nineteenth century internecine war was commonplace and on the open plains of the valley of the R. Lotsani, the Tswaneng Hills at Serowe provided obvious places of refuge. The hills are crowned with low dry-stone walling typical of much of the walling found over large areas of Botswana beyond the limits of the Zimbabwe culture. Kgosi (in Head 1981) states that the occupants of the Tswaneng Hills cannot be identified but that on Serowe Hill the ruins date from the occupation of Serowe by the baNgwato under Chief Kgari (1817-26). Local opinion favours the use of the hills for defence with cattle grazing. Local opinion also favours the existence at one time of modest villages and fields at the base of the Tswaneng Hills although no physical evidence of these can be found today.

The prior settlement of Serowe has been detailed above. Before 1902 there had been at least one and possibly two occupations of Serowe itself and there were other periods when the baNgwato were close by at Serokolwane and Paje. Tradition also has it that after the baNgwato left the Serowe area in the 1830's some groups remained behind and their descendants were there when the chief moved back in 1902. Thus in 1902, when Kgama III returned to Serowe, the baNgwato were not unfamiliar with the area, its advantages and disadvantages. Moreover, it is believed that Kgama spent much of his early years at his mothers cattlepost (see Appendix A) which is reported to have been roughly at the site of the present Teachers Training College on the western side of the settlement. It was there that Kgama is said to have met Dr. Livingstone who was journeying in the area. The place is

still known as Borakanelo - 'the meeting place'. Later in the century in 1873 after a dispute with Sekgoma I, then chief, when Kgama moved from Shoshong with his followers, he went first to Serowe and only later to the R. Boteti after deciding that Serowe was too open to attack and too difficult to defend (Marshall Hole 1932).

Shoshong had been chosen for a number of important reasons. It could be defended relatively easily and the hills immediately to the north provided many caves in which people could hide and escape from attacks and the narrow gorge through the hills provided an escape route. During the mid-nineteenth century Shoshong became an important settlement and a major stopping-place on the missionary route from Kuruman to Ngamiland and beyond. The arrival of traders, the frequent calling of travelling traders and then from 1862 the establishment on a permanent basis of missionaries of the London Missionary Society marked its growing importance. MacKenzie (1887) recorded established stores, a number of travelling traders and estimated the population at 20,000 in the 1860's and Harris (1922) placed the population as high as 30,000. A total of 20,000 seems no way improbable and there is substantial evidence that settlements of this size were common among the baTswana. Arising initially perhaps from a need to bond together for defence against attack and later reinforced by chiefs who insisted that everyone lived in the main town, the chief's settlement in recent historic times has been large. Visitors to the baTlhaping in the early nineteenth century noted the extraordinary size of the villages. Burchell (1822) recorded Truter and Somerville visiting Old Lithakoo in 1807 and noting at least 2-3000 huts and a total population of 10-15000. In 1824 Robert Moffat found the baRolong grouped at Pitsane and estimated the total close to 20,000 (Walton 1856). However, the

difficulties of estimating the population accurately must be appreciated. The baTswana consider it improper to count people in the same way as one might cattle and there has always been the question of the use which will be made of the information obtained. Moreover the prevailing custom is for most of the people who live in the villages to spend large portions of the year away from the homestead. The men and women spend the summer months at the family's cultivable lands and may be absent from their home from October to July apart from short visits to attend to urgent business or obtain necessary supplies. Other members of the family spend very long periods at the family's grazing areas. Thus in estimating the number of persons living in a settlement great care has to be taken and this has important implications for the analysis of Serowe in the twentieth century.

The decision to remove from Shoshong in 1889 was an important one. It marked the end of 50 years of established settlement and was forced upon the baNgwato by the rapidly dwindling supplies of water from wells and springs. Marshall Hole (1932) also records that the Shoshong gardens had been worked out. The choice of Letcheng was also influenced by changes that had taken place in the political scene. The Protectorate of Bechuanaland had been declared in 1885 and for Kgama, who after a series of incidents concerning the chieftainship had become chief finally in 1875, could feel more secure that the threat from the Boers in the Transvaal had been contained. Thus he was prepared to move closer to the Transvaal border and he chose Letcheng for his new site. Set amidst the Tswapong Hills some 25 kms to the east of the present-day Palapye, the site was chosen before the coming of the railway and water played an important part in the choice of the site. The existence of a strong spring called 'Photto-Photto' and the availability of ample land for cultivation within easy reach

of the village were deciding factors. Indeed the area became known as 'Serorome' meaning 'Everything is easy'. It was therefore with considerable reluctance that an additional move had to be made after only 13 years. The supply of water proved to be inadequate and after the rinderpest epidemics in 1898 (Mockford 1931), Kgama felt the need to move. Willoughby (1900) stated that the people had to carry water up to 3-4 kms. Kgama complained that the area was unhealthy and although he embarked upon a policy of dispersing the population nearer to good land it had little effect upon the situation. Writing to the High Commissioner Kgama (1901) said :

the town becomes more and more a merely nominal dwelling place. They call it their home but they spend most of their time at their gardens or their cattle posts, or wandering about the country and this is neither good for individuals nor for the tribe.

Their objection to the town consists in its distance from their gardens: it being built in such very heavy sand: and its scarcity of water. But there is also a strong feeling that this place is not healthy. At first it was very unhealthy, but we thought that would pass with the years, and certainly the last five or six years have been better than those that went before them. But my people are not so healthy here as they were at Shoshong. (Mafeking Registry J60 pp. 277 - 278).

The failing water supply and the incidence of disease were only part of a complex of factors urging Kgama to move his capital. There is no doubt that with exploration, additional sources of water could have been found. There were also other good reasons for not moving from Letcheng. Whilst the houses of the villagers could be easily dismantled or destroyed, the cement and brick structures of the church and government could not be dealt with so easily. With the establishment of first missionaries and later government officials at Letcheng a new era had been entered upon. The old styles of building costing

little had given way for the missionaries and officials to more modern styles which represented a heavy investment of capital valued at £15,000 by Major Panzera (Mafeking Registry J60). The Resident Commissioner of the Protectorate at Mafeking and the High Commissioner placed heavy pressure upon Kgama not to move and only agreed when the funds to cover the move were approved by the Secretary of State in London (Sillery 1952).

Other influences however played equally important parts in Kgama's evaluation of the situation. It will be recalled that Kgama had been an early convert to Christianity having been baptised by the Rev. Schulenburg of Hamburg in 1861. It was his conversion and his adoption of new ideas, which were contrary to many tribal customs, that had lead to the dynastic troubles between him and his father Sekgoma I. Kgama developed a fanatical obsession against intoxicating liquor and in particular against brandy. He forbade the importation of liquor and banned the making of corn-beer although this ban was later lifted. Kgama wanted to remove his people from influences which be considered to be promiscuous and many such influences, especially the drinking of strong liquor he associated closely with contact with Europeans who had begun to live with the baNgwato. These contacts increased greatly once the N-S railway line was built in 1896.

Kgama's opposition to the railway illustrates further his suspicion of Europeans. When the railway line was proposed by Rhodes, Kgama refused to allow it to pass through his territory but eventually agreed whilst on a visit to London in 1895 to protest about the proposed handing over of the Protectorate to the British South Africa Company. Initially he, along with other chiefs, agreed to a 16 km wide strip of land on his eastern border being allocated for the railway line.

The land either side of the line was to be leased or sold for private European farms and these eventually became known as the Tuli Block. By agreeing to this Kgama hoped to provide himself with a buffer-zone against possible attack by the Boers in the Transvaal. However, when Rhodes surveyed the proposed route for the railway he realised that a straighter route through the baNgwato territory was needed if the construction and operating costs were to be kept down. Kgama at first resisted the proposed change of route because the realignment would pass through his good cultivable lands at Mahalapye and Palapye and more importantly as far as he was concerned it would bring the railway line within a few kilometres of his capital. Later when the British South Africa Company permitted beer shops to be opened along the line and when the Bechuanaland Protectorate Administration refused to close them, Kgama must have felt that his suspicions of both the British South Africa Company and the British Government were well founded. Marshall Hole (1932) stated that Kgama thought Letcheng to be too close to the white man and the railway.

For Kgama, Serowe had many nostalgic associations from his childhood and youth. It also had the advantages of distance from the railway line and its possible evils for his people and of greater distance from the Boers. On a more practical level there was ample water at Serowe since there were at that time the 3 permanent rivers - R. Sepane, Manonnye and Moletshwane (Head 1981) and Kgama in 1901 in support of his choice of Serowe said that it had an abundant supply of good water and 'that there is good garden ground within easy reach of the town' (Mafeking Registry J60, p. 228). Kgama also stated that if the water failed the men who had been to the Transvaal could dig wells. Panzera (Mafeking Registry J60) had noted the openness of the

Serowe area and the substantial areas without heavy sand. Moreover in view of the collapse of the power of the Ndebele in the late nineteenth century, Kgama could discount the possibility of attack on the plains of the R. Lotsani. Serowe therefore held many attractions and in all his assessments Kgama clearly discounted the restricted western boundary. Between Serowe Hill and the edge of the Kalahari some 7 kilometres to the west the land is deeply etched by tributaries of the R. Sepane and R. Metsemaseu and opportunities for the construction of houses are limited. Thus, in 1902 at an age of approximately 65, Khama who was said to be still extremely vigorous, announced his intention to move to Serowe. The move was completed in 18 months and Mary Benson (1960) records that 17000 people moved to Serowe. When some people were slow and reluctant to leave Letcheng, Khama sent a regiment (see Appendix A) to forcefully move them and burn their huts. By the end of 1903 the tribe was firmly established at Serowe where it remains today. The last great move of the baNgwato was over and the intervening period since 1902 has been one of growth and diversification. This process of change will be the principal focus of this dissertation.

CHAPTER V

SOCIOLOGICAL FACTORS AFFECTING THE ORGANISATION AND

DEVELOPMENT OF SEROWE

1. The Need to establish a terminology

Within the context of Serowe much of the occidental terminology used in the description of urban structures may have little relevance. For example whilst Serowe is sufficiently large for discrete residential areas to exist it would be incorrect to assume that these might be called suburbs. None of the attributes of suburbs such as shops, schools, community centres and social organisations meeting localised needs can be identified. Such services as do exist provide for Serowe as a whole and these will be discussed in Chapter VIII. Even the use of the name New Town for the most recently established part of Serowe does not indicate the emergence of a separate entity although it might be argued that further development of this area may lead to the disintegration of Serowe. Names to identify parts of Serowe do however have relevance and may describe particular physical features such as Palamaokwe, which is a ridge to the west of Serowe Hill, upon which the Government camp was established. More importantly in Serowe and throughout Botswana are indigenous words which describe the social organisation. These words can cause confusion and the nomenclature to be adopted in this dissertation needs to be considered in some detail.

The most important and fundamental of these words is kgotla (pl. dikgotla). The word means a court or meeting place but in common

usage may also refer to a number of families who together form a recognisable unit or alternatively a larger agglomeration of family units. In addition, kgotla can be used to mean the chief's household, area or court. It is desirable therefore to examine the alternative uses of the word kgotla and to substitute definitive words which are unambiguous.

The household is the smallest social unit and it consists basically of a man and his wife (previously, more likely, wives) and their unmarried children, but often including one or more married sons, brothers or even daughters, with their respective families. Every household has its own compound, known as a lolwapa consisting of one or more huts and a granary, originally within a fence of poles but more commonly today within a hedge of Tirucalli Euphorbia (Setswana : Moremotala) (see Appendix A). Each household therefore is a distinct physical entity and is easily distinguishable from its neighbours. The entire settlement of Serowe is built up of an assemblage of households which are associated together in small groups and which typically are arranged in a semi-circular pattern. These associated households may be linked by a common heritage and trace their descent from a common ancestor. The grouping may be coterminous with the extended family and it is the basic patrilineal, non-exogamous unit. However, this pattern may be varied in different groups and the example of Matshego given below illustrates the diversity that can exist within one unit.

Members of the unit accept the leadership of the senior man who occupies an hereditary position and is known as the headman. The headman normally occupies the lolwapa in the centre of the semi-circular pattern of households and located immediately in front of

the entrance to the headman's courtyard are the twin foci of the social and economic life i.e. the cattle pen and the kgotla. The cattle pen, often with an addition for small stock, is made of poles set upright in the ground and it is here that the livestock are kept for the short period for which they are brought into Serowe. More usually the cattle are kept outside the settlement in areas where there is permanent water and grazing. The kgotla is made up of a short, arcuate line, or series of lines, of short poles also set upright in the ground. The kgotla is not covered and a small fire may be kept burning whilst the headman is in residence. The kgotla is used as a meeting place for the members of the group where discussions might be held on matters affecting the group as a whole. It is however more frequently used as a court where the headman would act as the source of primary jurisdiction for disputes emanating from within the group. The origin of the line of poles is obscure but Walton (1956) has shown that under nomadic circumstances a light screen of branches and bushes is constructed to protect travellers from the wind whilst sleeping or cooking. It appears to be probable that the shape of the kgotla has been derived from such screens. Usually the kgotla is located near to a large tree which affords shade against the sun during the day. The pattern of homesteads, all with entrances on the inner side of the arc, towards the kgotla and the cattle pen approximate to the arc-and-point pattern described by Mason (Vide Walton 1956). Together the homesteads, the kgotla and cattle pen form the motse or village although it is often referred to loosely as the kgotla or kgotlayana which is the diminutive form. Campbell (1822) in describing the layout of Old Littakoo used the word 'ward' to describe these collections of associated households and Schapera (1938) adopted 'ward' to emphasize the separateness of

these units and the contribution they make to the government of the entire settlement. It is proposed to follow the precedents set by Campbell and Schapera for the remainder of this dissertation. There were 116 wards in Serowe in 1966 and over 300 in the baNgwato Reserve.

For administrative purposes the wards in Serowe have been grouped into four parallel divisions often called dikgotla (sin.kgotla). The names of these divisions are:- Ditimamodimo, Basimane, Maaloso and Maaloso-a-Ngwana. Where a ward has the same name as a division e.g. Ditimamodimo or Basimane, confusion is avoided by referring to the ward by its name and its headman. Schapera (1938) opted for the word "section" to describe these second tier organisations and it is intended also to follow this precedent. The origin of the section is not entirely clear but it appears to have arisen from the practice of giving the heir to the chieftainship a large area on which to graze his cattle and of creating a new ward to look after the cattle of the heir. On his assumption of the chieftainship the heir would expect to be able to rely very considerably upon the support and loyalty of the retainers thus attached to him. As chief he would then place under this ward any new wards created during his reign: together the wards formed a Section. Ditimamodimo was created by Chief Moleta for his son Mathiba; Basimane was created by Chief Mathiba for Kgama I; Maaloso was created by Kgama I for Kgari and Maaloso-a-Ngwana was created by Kgari for Sekgoma I (father of Kgama III). The creation of new sections was not continued by Sekgoma I and all new wards have been placed by the chief within one or other of the existing sections. Each section has an acknowledged leader who is the headman of the ward after which the section is named.

Finally the word kgotla is used to refer to the Chiefs' court or more loosely to the area where the Chief lives, which is in close proximity to the Chief's court and to the Chief's cattle pen. More correctly the area is described as kgosing ('at the Chief's place'). The word kgotla should be reserved for a court at ward, section or tribal level and it is proposed to restrict the use of kgotla in this way, differentiating between the level referred to as need arises.

The variable use of kgotla underlines the importance attached to the concept implied by the word. Each ward has its own process for the resolution of difficulties or disputes that involve litigation. A complaint originating within a ward would be referred in the first instance to the ward headman who would assess the case in council (i.e. in kgotla), with other ward elders and then would give judgment. If the complainant or defendant subsequently was not prepared to accept the judgment given by the headman, the case could be referred to the section headman who might confirm or amend the judgment of the ward head. Within each section there are wards of different ethnic affiliations (the origins of this will be discussed later) and should the dispute concern two persons within the same ethnic group the case might be heard by an ethnic leader before proceeding to the court of the section head. If after receiving the judgment of the section head the complainant still wished to proceed he might petition the chief to hear the case in kgotla. Few cases would be expected to proceed from the court of the ward to that of the chief, but once such a case had been heard by the chief it would normally be considered to have been resolved. This was certainly the case until recent times when the Administration of the Bechuanaland Protectorate permitted cases to be reopened in the Civil Courts of

the District Administration. The chief's kgotla provided the ultimate source of jurisdiction on all matters pertaining to customary usage and tribal tradition for the residents of both Serowe and the baNgwato Reserve as a whole. It had immense importance for the control of the daily lives of the people.

Yet again, the use of the kgotla, whether at ward, section or tribal level, as a meeting place for the dissemination of information is as important as its use as a court. Whilst in Serowe, residents would normally expect to spend some time each day at the ward kgotla and would make visits to the chief's kgotla to attend meetings. In this way the ordinary resident would be able to keep up-to-date with matters under discussion and perhaps be able to contribute to the formulation of policy by influencing the formation of opinion. It would provide an opportunity for ward heads and the chief to assess opinion within the tribe, thus ensuring that a new law on its promulgation would be acceptable to the majority of the tribesmen. The kgotla provides a focus for the social and political life of the community and the concept of the chief in kgotla is central to the acceptance of the chief as a just and equitable ruler. It is for this reason therefore that it is important to restrict the work kgotla to its legalistic and administrative connotations.

In summary, 'Ward' will be used for the 116 basic units in Serowe and ward names will be followed by (Wd) for ease of reference. 'Section' will be used for the 4 second-tier divisions of Serowe and section names will be followed by (Sec) to assist in differentiating social groups. Kgotla will be used to identify processes of the courts and administration of the tribe as a whole.

2. The Arrangement of wards in sections

The list of wards for Serowe for 1966 is provided in Appendix B and it will be noted that the wards are grouped into categories which are related to their ethnic origins. Wards from different ethnic origins have been placed within each section and there are three main categories, namely :-

- The dikgosana (princes, chieftains) who are related in some way either directly or in the immediate or distant past, to the ruling house. The dikgosana are Ngwato proper.
- The batlhanka (commoners) who are of mixed origins and generally act as servants of the chief. Each of the wards after which the sections are named are found among the batlhanka and are not Ngwato proper. Ditimamodino ward was originally baKwena, Basimane (Wd) was baKgatla, Maaloso (Wd) was boBirwa and Maaloso-a-Ngwana (Wd) was baMaletse. Over time the batlhanka are assimilated with the baNgwato and Schapera (1952) acknowledged this in compiling the list of wards for Serowe in the 1940's. Within the batlhanka are also to be found the batho fêla and the malata who are commoners and hold a position akin to serfs.
- The bafaladi, who were foreigners or refugees who had been accepted by the chief and who had been prepared to pay homage, and at one time tribute, to the baNgwato chief. These wards joined the baNgwato as a result of voluntary submission, perhaps following upon flight from an enemy or secession from another tribe, or as a result of

acquiescence or conquest in war. Most of these groups have retained sufficient corporate life to be regarded as district communities. Some like the Kaa, Phaleng, Kwená, and Khurutshe (see Appendix A) are themselves of baTswana origin. Others are linguistically and culturally different. The baKalaka and the baTalaote are Shona in origin and the baSeleka were Transvaal/Ndebele. The most prominent of the bafaladi are those of baKalaka origin and are represented in wards such as Sebinas and Mfashwa.

Within the sections in Appendix B the categories of dikgosana, batlhanka and bafaladi are arranged hierarchically according to their seniority. Hailey (1953) estimated that of the total of 200,000 people living in the baNgwato Reserve only 20% were of true Ngwato descent. This accords well with the 1946 Census (Bechuanaland Govt. 1946) and with Schapera (1952). Some 22 ethnic groupings were identified in Serowe and the baNgwato Reserve (see Appendix A). However, a house-to-house survey conducted for this dissertation in 1965 showed that 63.7% of the respondents (1253 out of 1956 households) claimed to be Ngwato. This is summarised in Table 8. This considerable growth in the claims to be Ngwato can be explained with some ease. The survey conducted was not for official government purposes although it had been agreed to by the acting Chief. Many respondents may have claimed to be Ngwato less in an attempt to establish a formal claim to such status but more in an expression of solidarity with the Chief's house. Modikwa (in Head 1981) claims that many people claim to be Ngwato and this is accepted practice. Of equal importance may have been the process of assimilation. Schapera (1952) records a number of wards which despite their

TABLE 8Tribal affiliations 1965 survey1956 households surveyed

1)	BAMANGWATO	1,253
2)	MAKALAKA	326
3)	BATALAOTE	198
4)	BAKWENA	65
5)	BAHURUTSHE	21
6)	BAROTSE	20
7)	MAKGALAGADI	7
8)	BAPEDI	5
9)	NDEBELE	4
10)	BATLOKWA	4
11)	MABIRWA	4
12)	BATAWANA	3
13)	BASUTO	3
14)	BAKAA	3
15)	BAKGATLA	2
16)	BOOSELEKA	2
17)	NGWAKETSE	1
18)	MASARWA	1
19)	Others	34

Others include:

BAMALETE, BAPHALENG, BAROLONG, BATETI, DAMARAS,

MAKOBA, MaNAJWA, MaSUBIA and MaTSWAPONG

Source: *House to House Survey, Serowe 1965.*

ethnic origin claimed Ngwato status through assimilation. It is reasonable to assume that this process had continued and more and more groups have lost their original affiliation over time and now class themselves as baNgwato, being accepted as such. It must be remembered also that Hailey's figures were based on the whole of the baNgwato Reserve and this may account for the differences to some extent. Since Serowe is the capital of the baNgwato as a whole, it is probable that a larger proportion of those of pure Ngwato descent would be found close to the chief. Certainly outlying parts of the Reserve would be expected to have a low percentage of Ngwato proper, as for example, in the north-east where the baKalaka predominate. Finally, it is useful to compare the taxpayers for 1966 in relation to their origins as shown in Table 9.

TABLE 9

Allocation of Taxpayers According to Ethnic Origin

<u>Section</u>	<u>Dikgosana</u>	<u>Batlhanka</u>	<u>Batho-fêla</u>	<u>Bafaladi</u>
Ditimamodimo	829	100	144	649
Basimane	404	856	270	477
Maaloso	100	1064	115	1891
Maaloso-a-Ngwana	387	1159	203	191
Totals	1720	3179	732	3208
%	19.46	35.96	8.29	36.29

Source: Tax Registers, Serowe, 1966

The total for the Dikgosana, Batlhanka and Batho-fêla together was 63.71% which matches the results of the house-to-house survey and reflects how the residents perceived their status.

Notwithstanding the substantial percentage differences, the heterogeneity of the population is clearly evident. Appendix B lists the name of the wards, and the totem and probable origin for each ward although in some cases the allocation may be conjecture. Thus the entry for SIKWA (Wd) shows that it is among the batlhanka of the Basimane (sec) and is as follows:

SIKWA (godimo) (Kgomo: Birwa)

SIKWA is the name of the ward and Kgomo, an ox, is the totem of the ward. It is usually from the totem that it is possible to assess the origin of the ward and it is considered that SIKWA had come from the boBirwa who are today found in the area around Bobonohg in north-eastern Botswana. The reference to godimo (upper or west) is to the original location of Sikwa within Serowe. The location of the wards will be dealt with later.

3. Changes in the size and numbers of wards

Appendix B also gives details of taxpayers in 1915, 1943 and 1949. In 1900 and 1904 the Administration of the Bechuanaland Protectorate introduced a Poll Tax for all adult males over the age of 18 years and the tribal authorities were required to collect the tax and lists of taxpayers were drawn up. The Poll Tax superseded a Hut Tax which was levied from 1899 upon the homestead rather than individual huts or upon persons. The numbers of taxpayers for the period before 1943 are not available and the entry for 1915 is intended to indicate whether or not the ward was known to have existed and paid tax in 1915. The entries for 1943 were obtained from Schapera (1953) but those for 1915 and 1949 from the District Commissioners Office, Serowe. Those for 1966 were obtained from the Bamangwato Tribal Administration.

The Poll Tax was replaced in 1966 by a progressive income tax and a local government tax. The entries together provide a means of assessing the development or decline of individual wards.

It is clear that the wards vary considerably in size. BaTalaote (Wd) (batlhanka, Ditimamodimo (Sec)) in 1966 had a record 649 taxpayers and Sebinas (Wd) (bafaladi, Maaloso (Sec)) 515. At the other extreme Motswaiso (Wd) (Maaloso (Sec)) had only 1. As a general rule, the wards have tended to increase in size as could be expected, although in a number of cases, individual wards have decreased in size or have the same recorded number of taxpayers in both 1949 and 1966. Sikwa (Wd) (Basimane (Sec)) is a case in point, only 6 taxpayers being noted for each date. A number of wards have decreased through natural causes such as Makanana (Wd) (Basimane (Sec)) which was said to be weak and dying out; Mmualefhe (Wd) (Basimane (Sec)) is said to have been weakened by internal disputes, whilst the representatives of Motswaiso (Wd) (Maaloso (Sec)) were said to be living at Mahalapye, the headman having died in 1963 and the successors appearing to lack interest in living in Serowe. Further examples can be cited of Tshweu (Wd) (Ditimamodimo (Sec)) where part of the ward left Serowe for unknown reasons, presumed to be internal disputes. In the case of Mere (Wd) (Ditimamodimo (Sec)) the ward divided after many quarrels and some moved to an area on the R. Limpopo. Schism following disputes is a not uncommon feature of the history of individual wards and/or tribes. The effect of the disputes between Tshekedi Kgama and Seretse Kgama in the late 1940's and 1950's will be examined later but it is important to note here that the headmen of some 43 wards accompanied Tshekedi Kgama into voluntary exile at Rametsana in the baKwena Reserve. At a later stage some of these people returned to

Serowe but a large proportion of them settled at Pilikwe, between Palapye and Mahalapye.

Certain wards were listed in 1949 but were not listed in 1966, namely Molebatse (Wd) (Ditimamodimo (Sec)), Mauba (Wd) (Basimane (Sec)), Ramaseka (Wd) (Maaloso (Sec)), Maboledi (Wd) (Maaloso (Sec)), Morongwa (Wd) (Maaloso (Sec)) and Booloso (Wd) (Maaloso-a-Ngwana (Sec)). Few of these wards have disappeared completely and only two, Molebatsi (Wd) and Ramareka (wd), are considered to be extinct. Wards have been required by the chief to leave Serowe to undertake duties upon behalf of the tribe as in the case of Maboledi ward which was sent to Tonota, to assume the responsibilities of the Subordinate African Authority and in particular to control the activities of the boKhurutshe living there. In two other cases the ward has become part of a larger ward and has lost its separate identity. Oral evidence in Serowe stated that Mauba moved from their home because of muddy conditions and at the time of the move, the ward split into two, one portion joining Basimane (Wd) and the other going to Pilikwe. Morongwa (Wd) is said to have joined Makolobjwane I (Wd). In the case of Booloso, the ward has been renamed Bomogaso (Basimane (Sec), 1966). The ward was required to leave Serowe to undertake duties on behalf of the chief but it subsequently returned to Serowe. The ward's new name expresses clearly its reasons for wanting to return to Serowe. Bomogaso means 'those who should not stay away from to Chief.'

A noteworthy feature of the list of wards is the existence of certain double wards. In the case of Basimane (Wd) I & II and Makolobjwane (Wd) I & II (Maaloso (Sec)), the original wards were divided by Kgama III as a mark of appreciation to the younger brothers for services rendered. In other cases the wards were divided following

disagreements but in general these have been reunited as for example, Mothodi (Wd) (Maaloso-a-Ngwana (Sec)), Rakgomo (Wd) (Maaloso (Sec)) and Tshosa (Wd) (Basimane (Sec)).

The placement of wards within sections and subsequent movement between sections has lead to some imbalance in the distribution of wards and taxpayers between the four sections. This is indicated in Table 10.

TABLE 10

Division of Wards and Taxpayers in Serowe 1966

<u>Section</u>	<u>No. of Wards</u>	<u>No. of Taxpayers</u>
Ditimamodimo	20	1722
Basimane	23	2007
Maaloso	39	3170
Maaloso-a-Ngwana	34	1940
	<hr/>	<hr/>
Total	116	8839
	<hr/>	<hr/>

Source: Tax Registers, Serowe, 1966.

These allocations appear to be the result of natural development and do not appear to have any relationship to the status or importance of individual wards or sections.

4. The Original layout of the Settlement

The layout of the tribal capital of the baTswana used to be strictly controlled by a rigid pattern of precedence. In this Serowe was no exception and it is in only recent times that modifications to

the pattern have been permitted. The Rev. John Mackenzie (1871) provided a good description of the pattern adopted. Mackenzie showed that the position of the Chiefs kgotla and the cattle pen were fixed first and that the remainder of the wards were arranged around the chiefs area, kgosing, according to the seniority and status of the individual ward. Mackenzie describes it thus:

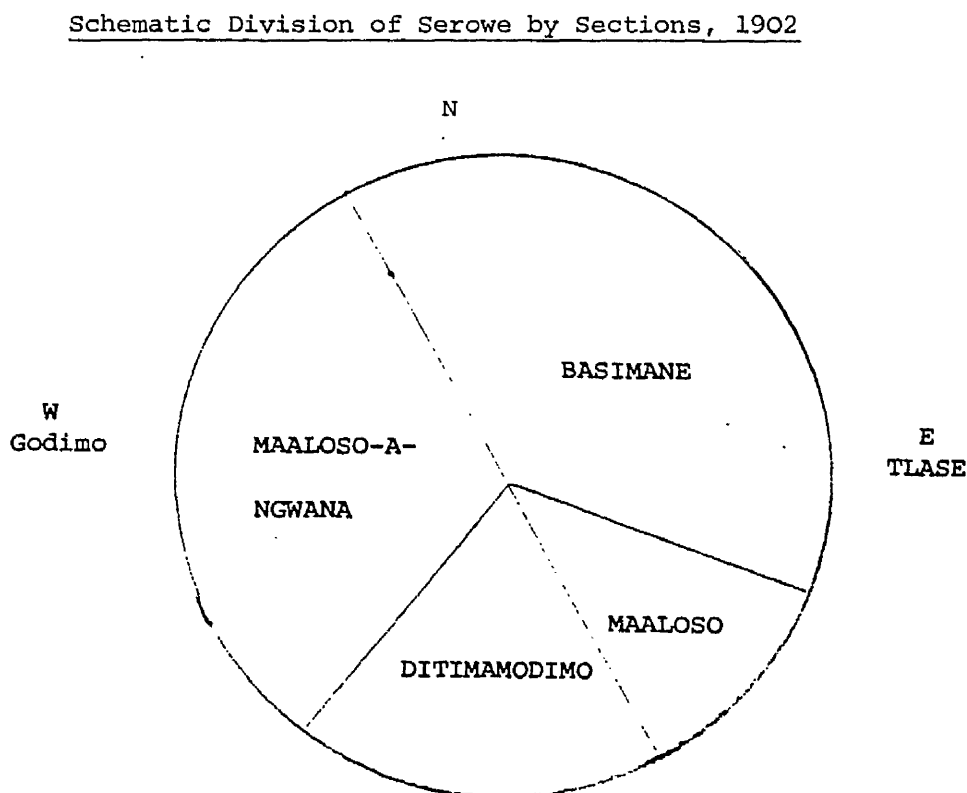
In laying out a Bechuana town, the first thing is to ascertain where the chief's courtyard with the public cattle pen is to be placed. As soon as this is settled the remainder is simple. As after the tabernacle was placed in the wilderness, each one of the twelve tribes (of Israel) knew on which side he had to take up his position, so in the case of a Bechuana Town: as soon as the chief's position is ascertained, one says, 'My place is always next the chief on this side', another adds 'and mine is always next on that side', and so till the whole town is laid out. The chief is umpire in all such matters, and settles all disputes about ground etc. (p. 367).

When the tribal capital moved from place to place, the pattern was preserved and should any ward have grown sufficiently to require additional land, adjustments were made in the area allocated to each ward.

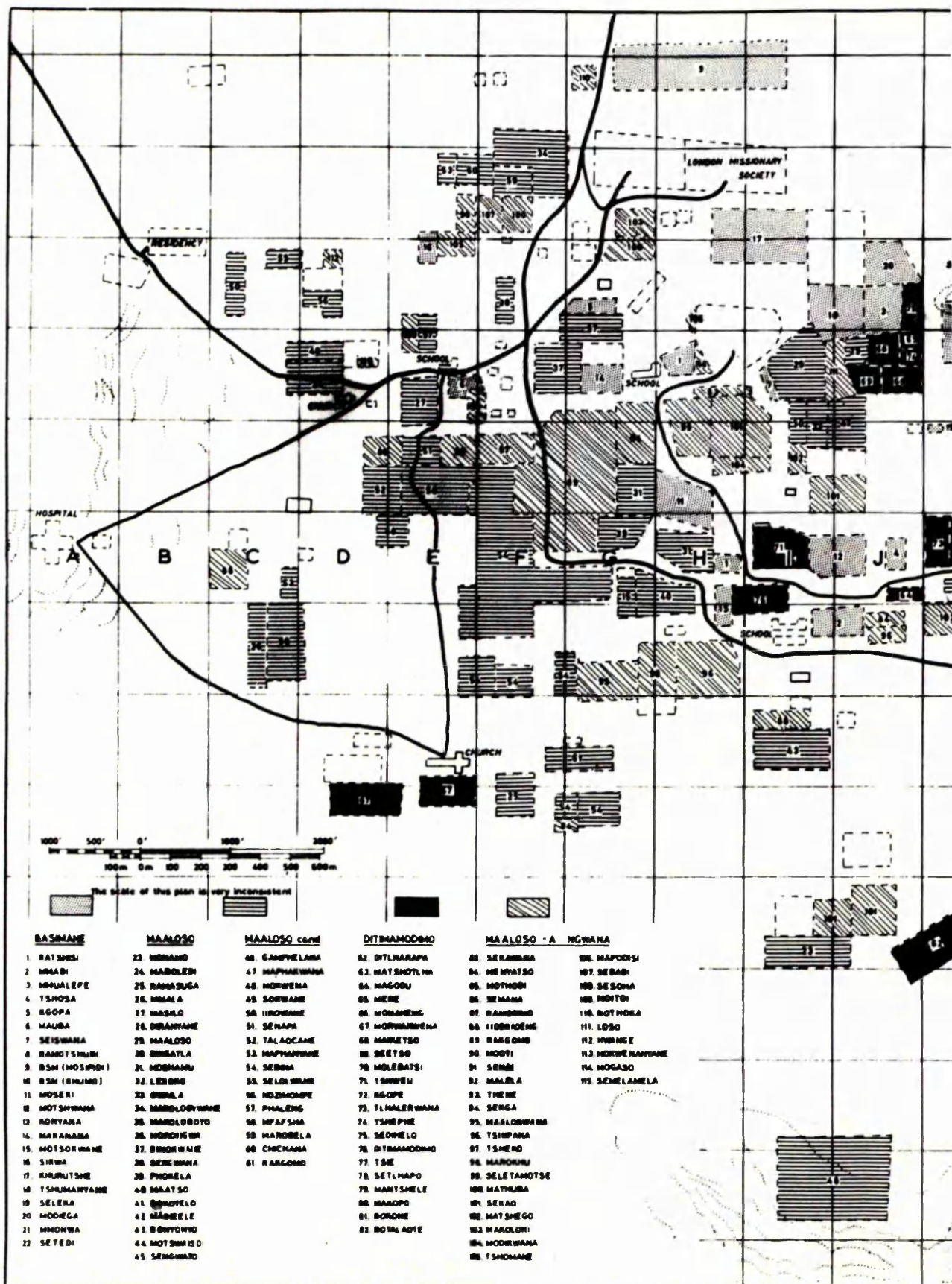
It has been shown above that all the wards were allocated to four sections. Ellenberger (1938) stated that each section occupied its own position in the settlement and that all the wards of one section lived together. This observation was based upon investigations at that time. Within Serowe there was a central area which was usually spoken of as fa gare (in the centre) or kgosing (at the Chief's place). Either side of the centre were two further divisions jointly termed dintlha (sin : ntlha) which were specifically ntlha ya godimo (the upper or right hand side) and ntlha ya tlase (the lower or left hand side). These divisions followed the river valleys which in eastern Botswana

drain to the east. Since the area of kgosing lay to the south of Serowe Hill and the chief kgotla faces to the south and south east, ntlha ya godimo was to the west and ntlha ya tlase to the east. These divisions coincide with the physical shape of the land which rises progressively to the west to the escarpment of the Kalahari. Mallows (1963) has suggested that the eastern side was reserved for the junior members of the ruling house and it was upon them that the shadow of the chief's house fell in the evening. How far this concept is applicable to Serowe it is difficult to assess because of the peculiar distributions of wards and sections. The list of wards in Appendix B gives the location of each ward in the 1940's and for the ward SIKWA, used as an example above, the location was godimo, i.e. the upper side. Ellenberger stated in a letter to Schapera in 1938, that the sections had been distributed in Serowe in 1902 in the following way as shown in Diagram 4.

Diagram 4



Source: Ellenberger to Schapera
1938



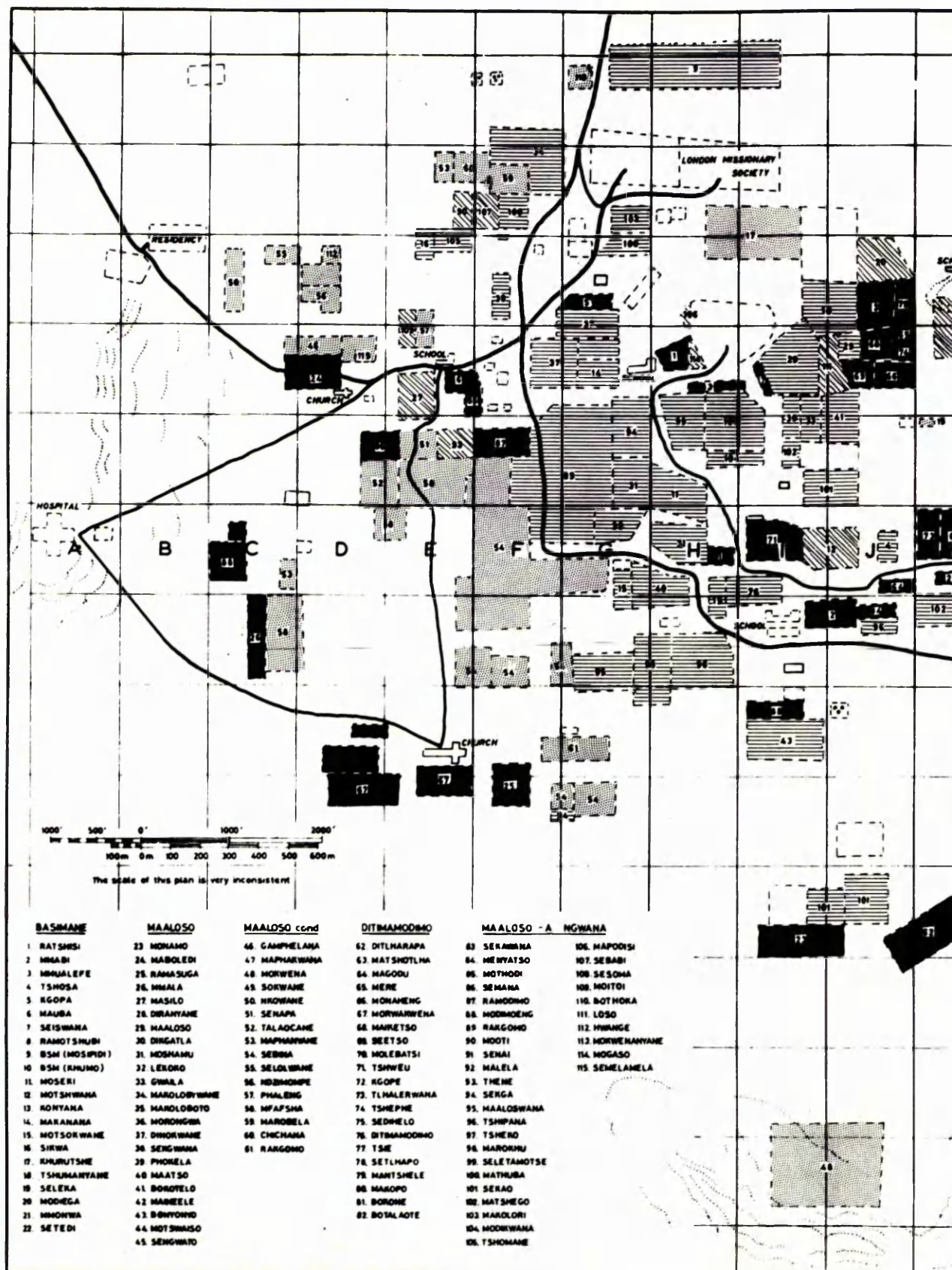
MAP 3: DISTRIBUTION OF WARDS BY SECTIONS, 1940

However as time progressed changes took place and Ellenberger stated, in the same letter to Schapera that :-

In recent times there has been a considerable amount of intermingling and these old divisions are not nearly so well marked or observed. (ibid).

This was certainly the case at the time as can be shown by reference to Map 3, which has been devised from a walking survey undertaken by the police in 1940. The diagrammatic allocation of the wards is, of course, approximate and care must be taken in using the map. However, it is instructive to attempt to assess how far the neat divisions of 1902 had survived by 1940. A quick glance at which Map 3 suggests that the original pattern had indeed been modified substantially. The wards have been ascribed to sections based on Schapera (1953) and Appendix B using the 1943 ward lists: the distribution has then been plotted. It would appear that by 1943 no section occupied an entire portion of the town although it is true that each section has wards both at or near the centre and on the periphery. Between 1902 and 1940 influences had been at work which had caused some dispersion of the wards and the more southerly location of Mokwena (Wd) (Maaloso (Sec)) is a pointer. Yet the relocation and intermingling of wards cannot provide an adequate explanation of this disparity of evidence. From Map 3 all that can be said of the distribution of the sections is that Ditimamodimo was located generally in the eastern portion of Serowe, whilst Maaloso was to a large extent in the west although not entirely so and that Maaloso-a-Ngwana was more generally in the southerly portion. Ellenberger also stated in his letter that in 1902 the cultivable fields for each section lay immediately beyond the respective section. It will be shown later that the arrangement had been substantially modified too between 1902 and 1966.

A more coherent explanation for the distribution of wards can be provided by Map 4. This map has been compiled by grouping the wards according to their ethnic groups, which have already been described above, i.e. the dikgosana, the batlhanka the bafaladi and a sub-group of Malata. It will be seen that only three of the dikgosana wards have been placed close to the chief's Kgotla and two of these wards were from the Basimane section and are No.1 Ratshisi and No.7 Seiswana. No.83 Sekawana from Maaloso-a-Ngwana section is also located centrally. Immediately surrounding the chief and between the chief and a large group of dikgosana wards (Nos. 3, 65, 66, 68, 69, 74 & 75) are a considerable number of batlhanka wards. The majority of the dikgosana wards lie on the edge of Serowe. The bafaladi wards lie beyond the batlhanka wards and towards the periphery. The net effect of this arrangement was for the chief to be surrounded by the batlhanka upon whose loyalty he could expect to depend in times of stress. Moreover, the batlhanka were at hand to carry out the requests of the chief. Proximity to the chief was an important status symbol, the degree of closeness being a mark of respect and seniority among the batlhanka. Any challenges to the chieftainship were likely to come from among the dikgosana and their placement away from the centre ensured that any dissident groups bent upon a coup d'etat would have to pass through the batlhanka before reaching the chief. Usually close to any dikgosana ward was a batlhanka ward which could be relied upon to keep the chief informed of any areas of growing dissent. The juxtaposition of the bafaladi was similar to that of the dikgosana. Thus the wards inhabiting the ntlha ya godimo and the ntlha ya tlase comprise people who were not particularly attached to the chief, although the noble badintlha however were



MAP 4: DISTRIBUTION OF WARDS BY ETHNIC GROUPS, 1940

generally closer to the kgotla than the commoners who lived more on the outskirts of the town (Schapera 1938, 55).

5. Changes to the original layout of Serowe

The placement of wards within a tribal capital it has been shown was based upon identifiable principles and wherever disputes and disagreements arose over the location of individual wards it was the chief who finalised the settlement. The location of each ward therefore required the approval and consent of the chief and it is to be anticipated therefore that any modifications to the original layout of the settlement would also require the approval of the chief. That considerable modifications of the original plan have been made has been demonstrated, but it is illuminating to consider the bases on which petitions for permission to move might be made. It is valuable and of the greatest importance to note that it would be rare for the chief to become involved with the separation of one family from its parent ward and its relocation in another ward. Such a move might follow as the outcome of internal disputes in a ward where the dissidents would apply to another headman for permission to join his ward, the matter being finally resolved by an agreement between the headmen. The chief would, however, have to be consulted over the movement of a ward.

The attitude of a ward moving to another site would to some extent depend upon the social position of the ward. Bafaladi and dikgosana wards might be prepared to move in certain circumstances e.g. overcrowding or at the request of the chief. The decision to move would be made by the ward as a whole with the headman sitting in kgotla and once the chief had agreed in principle to the move and

in particular to the new location of the ward it would be the responsibility of every member of the ward to move. It would not be a partial removal although some members of the ward who were not prepared to settle on the new site might secede from the ward and seek acceptance in another ward. Their connection with their parent ward should then cease to exist. In the new location the arrangements of homesteads would follow the pattern of precedence and seniority that existed in the old location although adjustments could be made.

In the case of the batlhanka different forces might play an important part. The function of the batlhanka is to serve the chief and the ability to serve the chief depends upon closeness to the chief. Thus in the event of it being necessary for batlhanka wards to move, for example to relieve congestion, a batlhanka ward might agree to divide, one portion moving away from the centre, probably under the leadership of a younger brother as headman, whilst the other portion of the ward would remain in site in order to preserve its position and status within the social hierarchy. A case study of Matshego, a batlhanka ward is offered below.

Petitions to remove a ward might arise from the physical conditions of the location of the ward. The wards Magodu and Monamu had been allocated to the area south east of Serowe Hill where there is a large extent of black cotton turf (montmerillonite, Setswana: seloko). This soil is highly impervious and quickly becomes waterlogged in the rainy season. The soil provides a poor basis for the building of traditional houses which founder and collapse. Moreover, the area is very unpleasant to walk in. Magodu moved to the sandy area immediately to the south of the Serowe - Palapye road and Monamu

slightly further south. Today the montmerillonite area is not inhabited except for a portion of Konyana. The remainder of the area carries no permanent structure and is used for recreation, a football field having been enclosed and a race track marked out.

Other petitions might be based on social conditions. For example, Molefe of Moseki ward was allowed to move away from Serowe, because his children had died which he attributed to sorcery. Later he returned to Serowe complaining that he had been badly treated where he had gone. Further, Ntama of Marobela ward and Motiki of Motshwana ward also moved away because they said they had been bewitched (Schapera 1943). Permission to move could be refused and in 1937 when one Tshidiso wanted to move his ward, Mathiba, because he claimed he was being bewitched, the headman refused on the grounds that Tshidiso's troubles were due to jealousy. On appeal, the chief ordered Tshidiso to remain in Serowe. (Tshidiso v Mma Sellela, Chief Tribunal, Serowe, H 13/37).

The chief could instruct wards to move into or away from Serowe for a variety of reasons. Some of these moves were permanent ones but others only temporary, the ward concerned returning to Serowe in due course. For example, Maboledi (Maaloso (Sec)) was sent to Tonota to act as the subordinate African Authority. This took place in 1946 and the ward did not return to Serowe unlike Booloso which returned from Chadibe where it had been sent in 1947 to look after the fruit gardens. In another example the younger brother of the headman of Makolobjwane (Wd) was sent in 1930 to represent the Chief at Mfashwa in the quarrels between Tshekedi Kgama and John Mswazi. Later when the headman became restless he was allowed to return to Serowe and to form a new ward Makolobjwane II.

People might be required to move for disciplinary reasons and many examples can be quoted, the following being but a selection. Between 1937 and 1939 Raseupe of Makolobjwane ward and Setlhong of Maaloso ward were banished from Serowe for practising sorcery (Chief Tribunal, Serowe K 4/171/37 and K 8/174/37) and in 1938 a baKoba headman was found guilty of sorcery and instructed to move into Serowe from the R. Boteti (Benson 1960). In 1902 Kgama III, following traditional practice burnt the huts of people at Letcheng who had disobeyed his order to move to Serowe. In other cases a ward could be moved into Serowe and Ditlharapa (Wd) (Ditimamodimo(Sec)) was moved from Shoshong to Serowe and is now located on the south-eastern edge of the settlement.

The impression should not be given however that all the instructions were given on the basis of disputes or for disciplinary purposes. For example when in 1963 a space was required in the centre of Serowe for the construction of a community centre and library, oral evidence stated that agreement was reached with Mosuga ward for these to be relocated.

6. Important tribal disputes resulting in Migration

The peace of the baNgwato has been disturbed by many disputes and most of the disputes have resulted in changes, some minor, in Serowe itself. Four of these disputes are described in some detail to illustrate their significance. The effect of the disputes was to cause people or whole wards to move into or leave Serowe and all have in one way or another modified the original structure of the settlement.

The Rratshosa Affair

Tshosa ward is listed under the dikgosana of Basimane Section. Under Kgama III, Rratshosa became an important leader, being Kgama's personal secretary and closest confidant. Sekgoma II, heir to the chieftainship, became jealous of the position held by Rratshosa, but during his short reign did little to change the situation. However, when Tshekedi Kgama, brother of Sekgoma and uncle to the infant Seretse Kgama, assumed the Regency of the baNgwato on the death of Sekgoma, he appointed a Mokalaka headman to be his secretary. This the Rratshosa family resented, particularly since the appointee was drawn from among the bafaladi. Rratshosa, who had died, was survived by his three sons Simon, John and Obeditse and the Rratshosa family took every opportunity to insult the Regent. Matters came to a head when Oratile, wife of Rratshosa, complained to the Resident Magistrate at Serowe that Tshekedi had taken away her two Masarwa servants. The Magistrate decided that the case would be heard in kgotla, but neither Oratile nor the Rratshosas attended. Tshekedi then ordered the men to be brought into court and thrashed but during a scuffle the men escaped only to return later to the kgotla to fire their guns at the Regent injuring him slightly. Obeditse and Simon were tried by the Protectorate Administration and sentenced to ten years imprisonment but they were released after four years and banished from the baNgwato Reserve by the Regent. The Regent ordered the destruction of the houses and property of the Rratshosas according to custom and this later led to civil action for damages. The effect upon Serowe was small since only a few households were involved. The area originally occupied by the Rratshosa family, which at that time was claimed to be very beautiful with attractive

gardens and houses, was later occupied by the Bamangwato Tribal (later Central District Council) Garage and is immediately to the east of the Kgama Memorial School.

The Mswazi Affair

In 1930, a dispute arose between Tshekedi Kgama and a baKalala chieftain, John Mswazi and Tshekedi insisted that Mswazi move into Serowe together with his people. Mswazi refused on the grounds that he considered himself to be an independent chief and refused to accept the authority of the Regent. He subsequently moved to Serowe but was allowed to return home in 1932. In 1946, however, he moved to Rhodesia although 6 of his followers and their families moved into Serowe (Sillery 1952).

The dispute between Kgama III and Sekgoma II

This dispute had a much greater effect upon Serowe and its development. The dispute was one of long standing and arose over differences between them concerning Sekgoma's private life. In an attempt to find a solution Kgama III requested the Protectorate Administration to acknowledge Sekgoma as a separate and independent chief (African South, No. 559, 1901). This proposal was declined but Sekgoma was allocated an area of the baNgwato Reserve under the jurisdiction of Kgama (Africa South, No. 574, 1901). This arrangement did not work and in 1907 the Administration removed Sekgoma to the Crown Lands, (see Appendix A), north of the baNgwato Reserve where he was supposed to be recognised as being independent. In all it is thought that some 2000 people migrated with Sekgoma from Serowe and settled with him at Nekati. Sekgoma remained at Nekati

in the Crown Lands until he heard of his father's illness whereupon he returned to Serowe in 1916 and a reconciliation took place. The returnees were placed under the protection of an established ward, Setawane, in Serowe and it was not until 1956 that a separate ward Seosenyeng (Maaloso-a-Ngwana (Sec)) was created.

The dispute between Tshekedi Kgama and Seretse Kgama

A further incident of significance was that associated with Tshekedi and Seretse Kgama following upon the latter's marriage to Ruth Williams (later Lady Kgama). Tshekedi argued that the tribe should have been consulted upon the marriage according to the custom of the baNgwato and particularly so because the bride was a European. The dispute arose in 1949 and in 1950 both Tshekedi and Seretse were banished by the Administration. However, in 1949 Tshekedi had gone into voluntary exile at Rametsana in the baKwena Reserve where he remained until 1952 when his banishment was rescinded. Thereafter, Tshekedi moved with some of his followers to Pilikwe, 28 kms south of Palapye in the baNgwato Reserve. It was not until 1959 that Seretse returned to Serowe and renounced all formal claims to the chieftainship.

The effect of this dispute was considerable. It is difficult to find a reliable estimate of the number of people who followed Tshekedi into exile. There appears to be agreement that 43 headman sided with Tshekedi although this should not suggest solidarity of all their ward members. As Robert Stimson of the BBC noted:

Families are split, with here and there husbands and wives estranged.

(in Benson 1960, p. 218)

This division within families is also confirmed by Mathwase (in Head 1981) who divorced his wife over their differences of opinion on the matter. In an interview with the Bristol Evening Post of 17 December 1951 Seretse Kgama stated that about 1000 people had moved from Serowe to Rametsana. Benson (1960) places the figure at 2000. Yet again, a person who delivered mail regularly to Rametsana placed the figure nearer 4000 and noted that 4 boreholes had been sunk (Benson 1960) implying that the settlement was large. It should perhaps be noted also that prior to the settlement of Tshekedi at Rametsana there were few baKwena living there since the area had a bad reputation because of lions. In view of this it is reasonable to assume the vast majority of those who were living in Rametsana had come from the baNgwato reserve and whilst some baKwena may have joined the migrants to take advantage of availability of water once the boreholes had been sunk, their number may have been small. Whatever the figure of baNgwato who went to Rametsana, and perhaps 2000 is a more reasonable estimate, the effect upon Serowe was considerable. One observer remarked that there was:

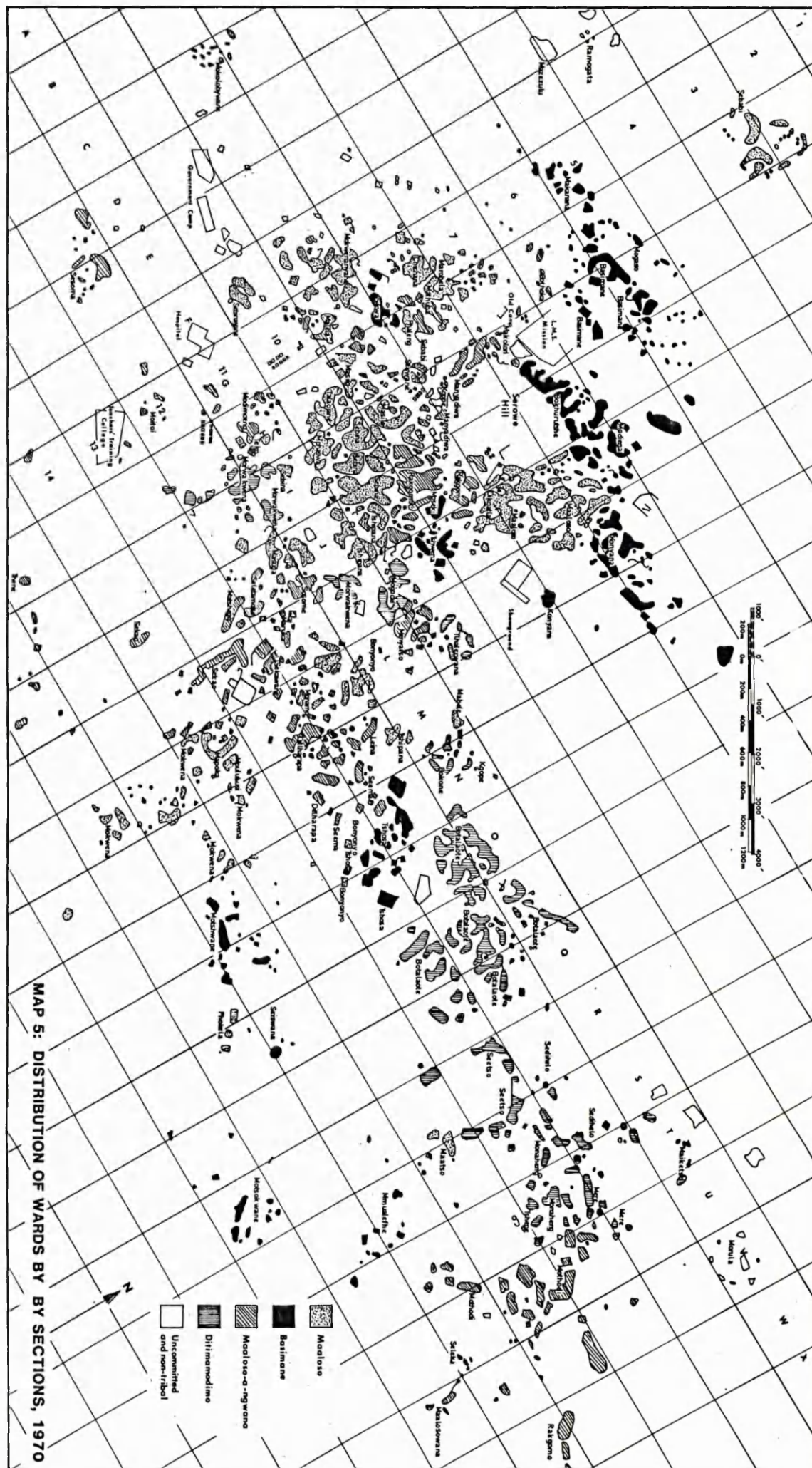
No centre to the town, no formal point for
business, no business going on

(Flavin 1950, p. 50).

Eye witness reports of the period considered the breach to be a major schism and much of the central part of Serowe became very open as people left their homes and the structures fell into disrepair. However, once Tshekedi had been allowed to return to the baNgwato Reserve many of his followers returned to Serowe and rebuilt their homes.

In summary it can be said that the chief has exerted an important influence on the direction and size of movements that have taken place. Regrettably, for only a few of these movements is precise information available. For the most part the disputes and the movements are the subject of conflicting evidence and little can be done to pinpoint the exact location of wards or households that moved. It can be said however that the major disputes have involved large numbers of people, many of whom have not returned to Serowe.

That changes have taken place in the shape of Serowe is obvious from a comparison of Maps 3 & 4 and 5 & 6. There has been a considerable extension of the settlement towards the south and south-south-east but a very limited development towards the west and the north: the settlement has become elongated towards the south-south-east. The main urge for the extension of the settlement came immediately after the Second World War when consequent upon the return of the men who had served in the war as soldiers, it was realised that the centre of Serowe had become severely congested. Tshekedi Kgama in kgotla in 1947 agreed upon the need for wards to move from the centre of the town, and the expansion of the settlement took place quickly after that. The wards that moved migrated to the south-south-east and the area for development became known as New Town. A comparison between Map 4 & Map 6 shows that 24 wards had been relocated between 1940 and 1970. This movement is summarised in Table 11. The precise pattern of sections described by Ellenberger in 1938 by 1970 had become further confused and it is clear from Map 5 that in 1970 the section had no influence upon the location of wards, the wards of any section being generally scattered. However the analysis may not be left there. A further review of the distribution of



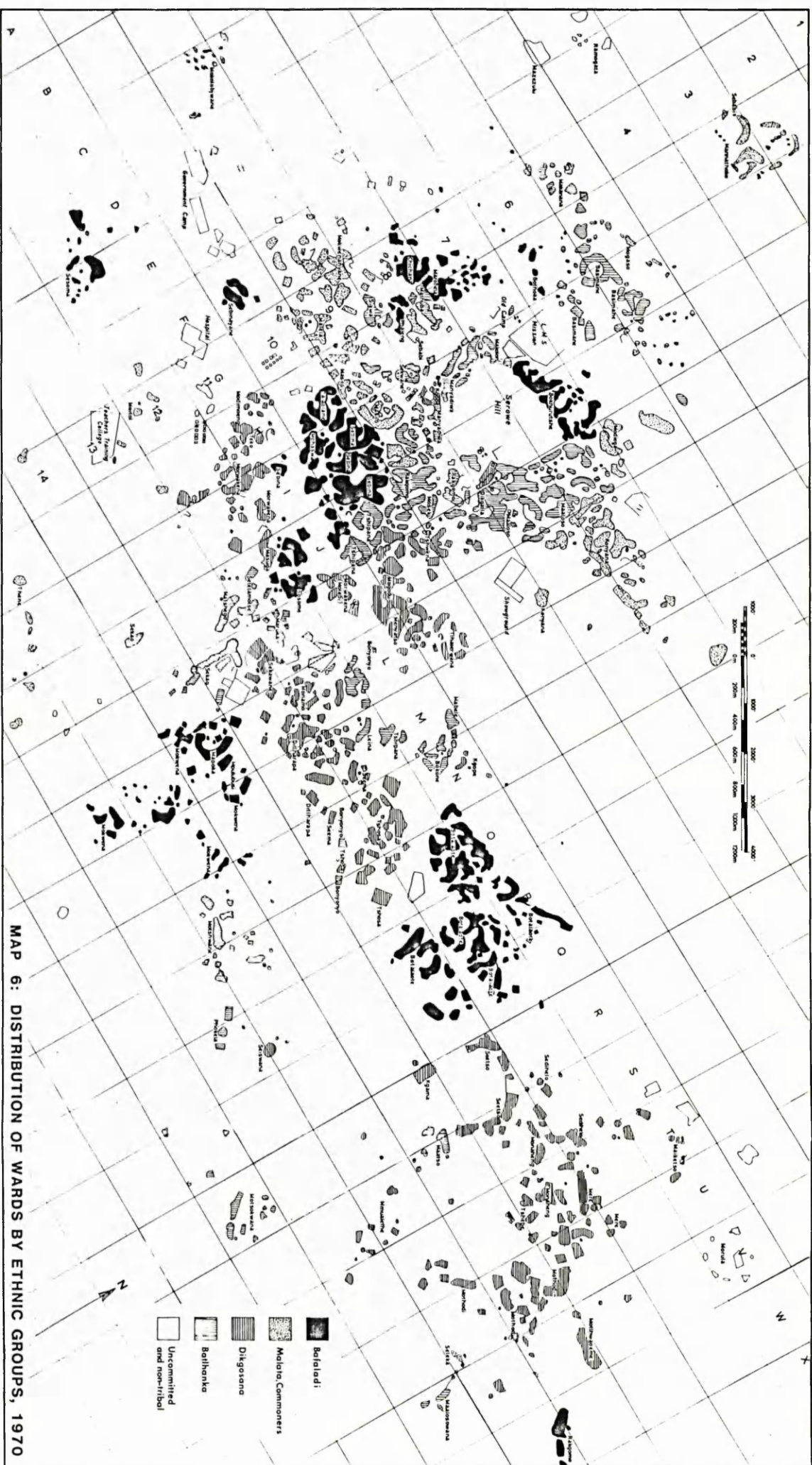


TABLE 11 Movement of Wards 1940 - 1970

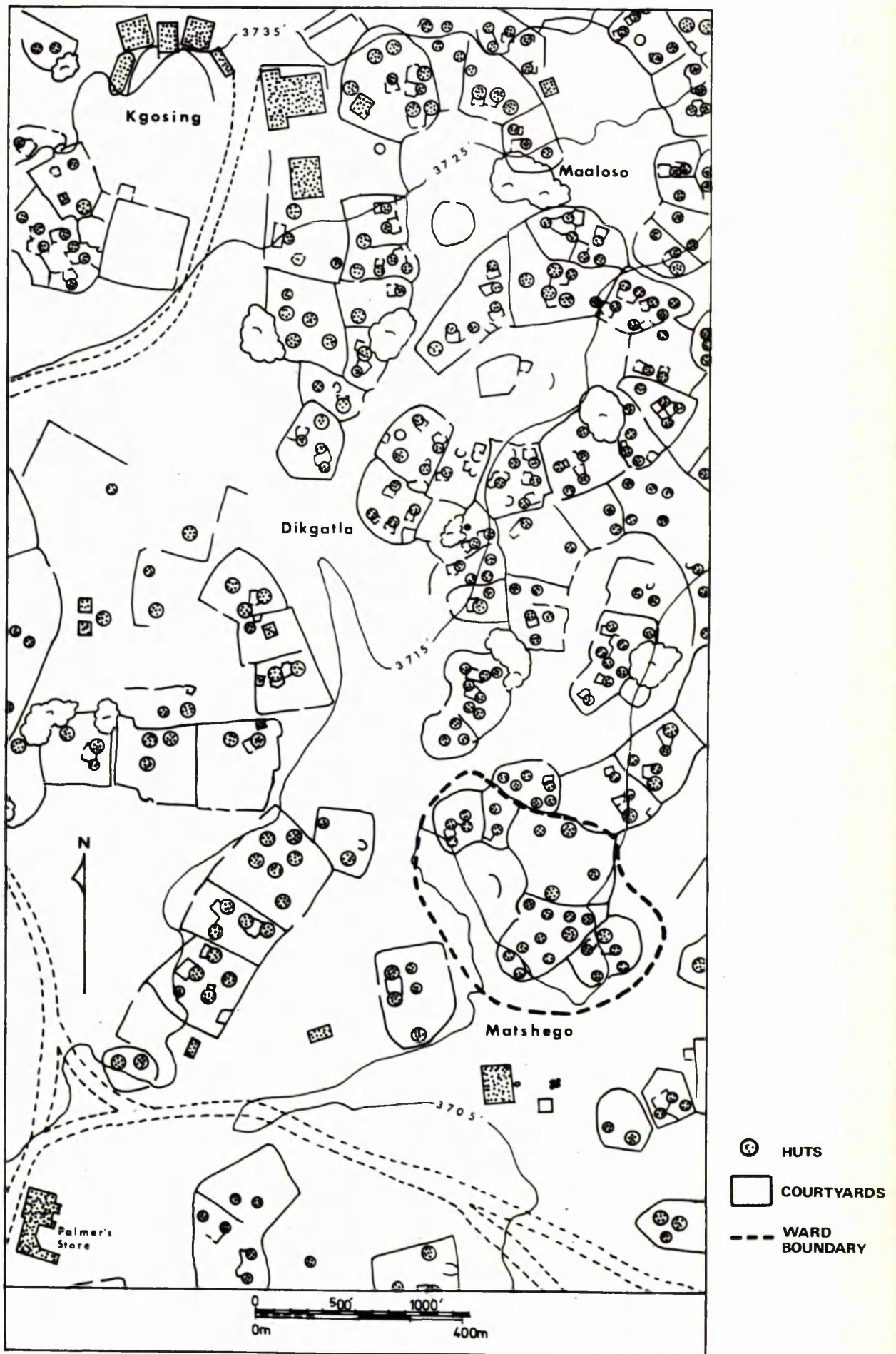
compiled from a comparison of the maps of Serowe
showing the Distribution of Wards in 1940 & 1970

1940	Ward	1970
G6	Motsokwane	R16
F2	Sebabi	H3
I8	Bonyonyo (part)	N13
G8	Rakgomo (part)	W15
E4	Mothodi	U14
H5	Sekao	K13
G6	Phokela	P16
H6	Maatso	S14
J4	Mere	T12
F2	Mokolobyanane	C9
E4	Moitoi	T11
J4	Seetso	R13
J4	Tshepe	T13
J3	Sedihelo	S12
J3	Mmualefhe	S15
G4	Makanana	G5
E5	Thene	H15
H4	Mogaso	H5
I4	Seiswana	P15
J4	Monaheng	T13
J6	Motshwana	N15
G7	Maaloswana	V16

wards based on ethnic groups is imperative and reveals a more consistent explanation of the patterns established in 1970. Map 6 shows the distribution of wards by ethnic groups i.e. the dikgosana, and batlhanka and bafaladi and from this it would appear that the batlhanka have been affected but little by the areal expansion of Serowe and that the batlhanka in large measure still remain close to the chief. The bafaladi also do not appear to have moved. The dikgosana however tended to move to the south-east and are represented by the wards of Seeto, Mere, Sedihelo and Monaheng among others. Therefore the movement of the wards as illustrated by Maps 4 and 6 has served to emphasize the concept of the original plan of Serowe where the chief is surrounded by batlhanka and where the bafaladi and dikgosana are at some distance from the centre.

7. A case study of one Ward - Matshego (batlhanka) (Maaloso-a-Ngwana (Sec))

The ward of Matshego was offered by the chief for study and was a particularly interesting choice since it is a batlhanka ward in the Maaloso-a-Ngwana section. The position of the ward in relation to Serowe Hill and the chiefs kgotla is shown in Map 7. In Appendix B Matshego is shown as being located at the centre of Serowe i.e. fa gare, and with a totem of kgomo (the ox), the ward had originally been composed of baMalete. Matshego ward was of moderate size with 21 registered taxpayers in 1949 and 18 in 1966. The ward is divided into two portions. One portion is located some 200 metres from the chief's kgotla whilst the second portion under the leadership of a younger brother of the headman is located some 3 kms to the south. The second portion had adopted the token of tlou (elephant). This portion is shown on Map 6 in square J 13.



MAP 7: MATSHEGO WARD

The division within the ward illustrates the need for the ward to continue to be represented in the centre of the town close to the chief. In oral evidence the headman stated that any additional households that might be added to the centrally located portion of the ward would be placed on the side nearest to the chief. Such a policy, of placing additions on the side closest to the chief, followed by all the batlhanka wards in the central area will eventually lead to greater overcrowding and a demand for some wards or portions of wards to move away. It remains to be seen in the context of the last decades of the twentieth century whether such social forces will continue to hold sway.

The membership of batlhanka wards is often of mixed origins and this is amply illustrated by Matshego ward. In the senior section there were only 7 households and only 2 of these were of baMalete origin with the totem kgomo. The remainder were :-

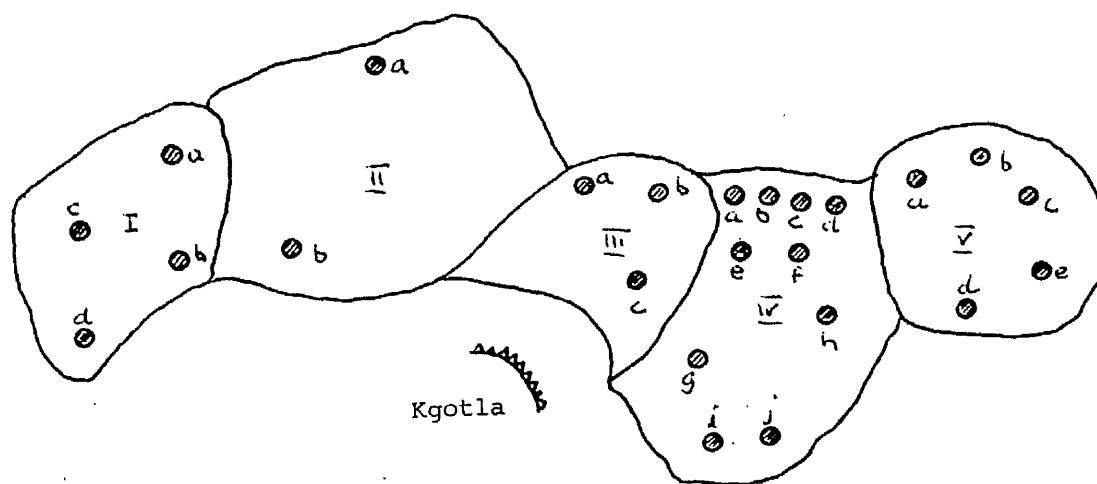
<u>Households</u>	<u>Tribe</u>	<u>Totem</u>
2	baKaa	phuti (duiker)
1	booSeleka	puti (duiker)
1	baKwena	Kwena (crocodile)
1	seNgwato	Kwena (crocodile)

The membership of the ward is shown on Diagram 5.: Courtyards of Matshego ward.

The baKwena household was headed by a sister of the headman who had married a mokwena and upon the death of her husband had returned to her family. The seNgwato household had not been prepared to move when their ward moved and had attached themselves to Matshego ward.

Diagram 5

Courtyards of Matshego Ward



Yard I	II	III	IV	V
a) Molata Kealotswe	a) Gaolathe Opelo Maitumelo	a) Karabo Olaetse	a) Gabonamang	a) Tshireletso Keitshigile Magataleina
b) Keeng Maungo Mmoloki Bontsi	b) Matebele Kebadire Kgomotse	b) Kebosenke Peloenile	b) Balaotlhanyi c) Motgatsakgas wenyane Maithale Lesego Dikeledi Kefakae	b) Boy Gareongote Bontshetshe
c) -		c) Agabo	d) Keithee Motsumi Baitshupile	c) Nkhabe Ramorula Nthepha Goitsemanang Moathodi Keselebale Molakosele Moses
d) Pono Daisy Letlhokwa			e) Kemotho Lekoko Boitumelo	d) Kakua Latelang Boikaego
			f) Mosalagae Matalepula Gasebatho Ntshadi Gasenone Podile Masego	e) Gabatsaswe Lokase Maithamako Kgolagano Baisaraela
			g) Dithokolo Gabolekane Mmaletsaki Tikologo	
			h) Tebelelo	
			i) -	
			j) -	

The baKaa and booSeleka households had been placed under the tutelage of Matshego ward by Kgama III as a result of the settlement of disputes. In all 77 people were living in the senior part of the ward in 1972 and despite the heterogeneity of its members, the ward is now classed as Ngwato. The wards has areas for cultivation (the "lands") at Kgaswe some 8 kms to the south of Serowe and areas for the grazing of cattle (the cattle post) at Nata some 400 kms to the north.

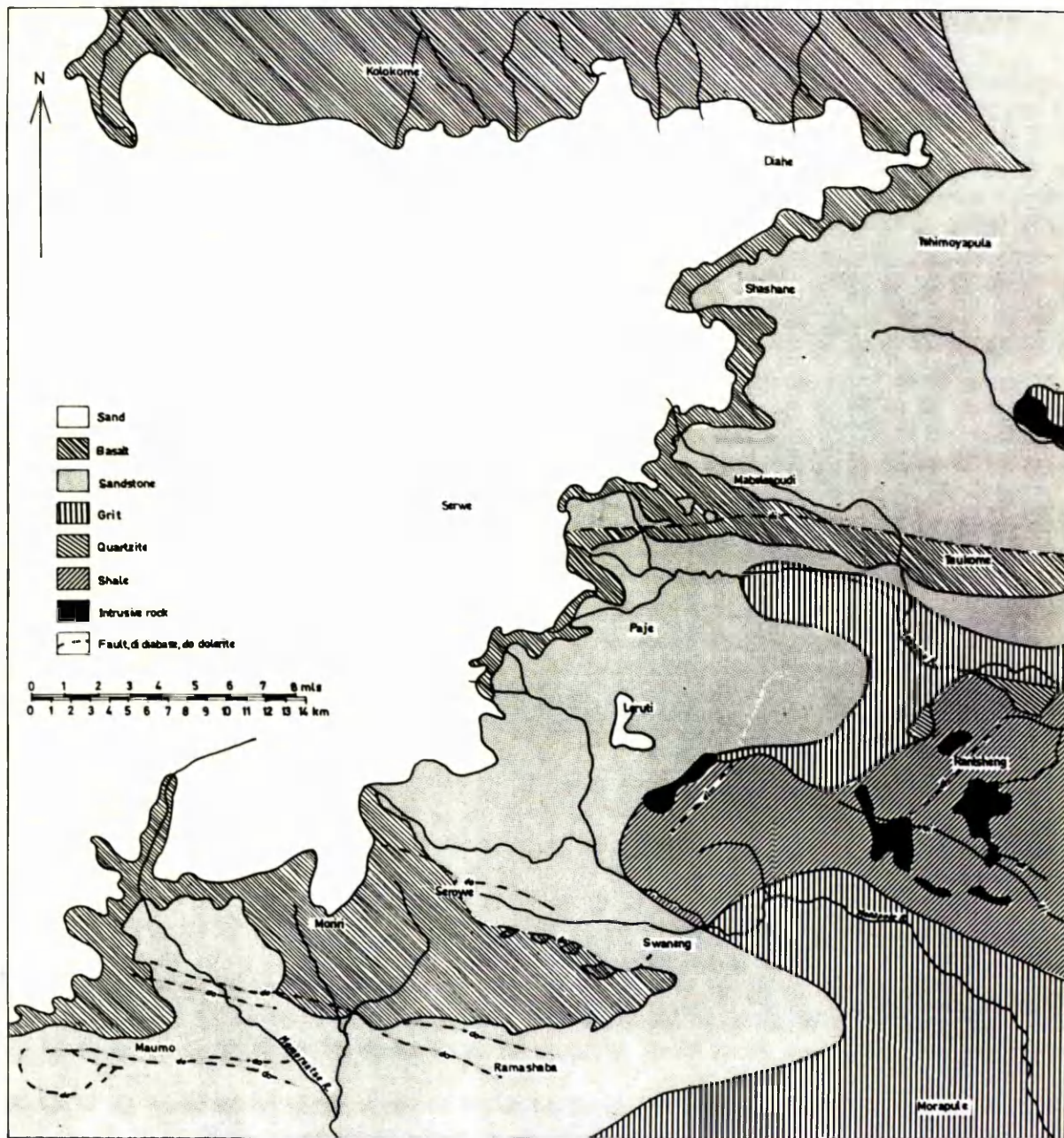
It is reasonable to conclude from this brief description of Matshego ward, that the ward was still a significant force within Serowe in 1972. The ward provided a cohesive framework within which the cultural and social life of its members found expression and the ward retained its functional importance within the context of Serowe. Through its identification with certain areas for grazing and cultivation the ward expressed a corporate existence relevant for economic life. Through the concept of the ward being the repository of traditional authority (i.e. the headman), the ward influenced in a major way the fortunes of its members and maintained an oversight of the general welfare of the individuals and the group.

CHAPTER VI

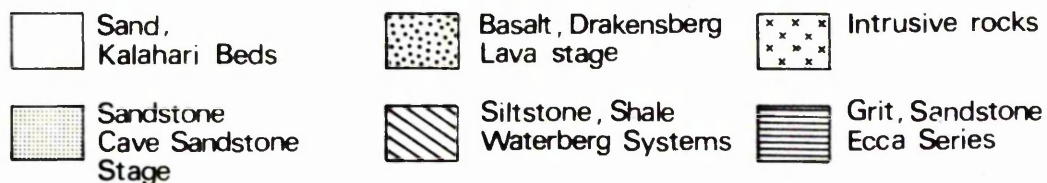
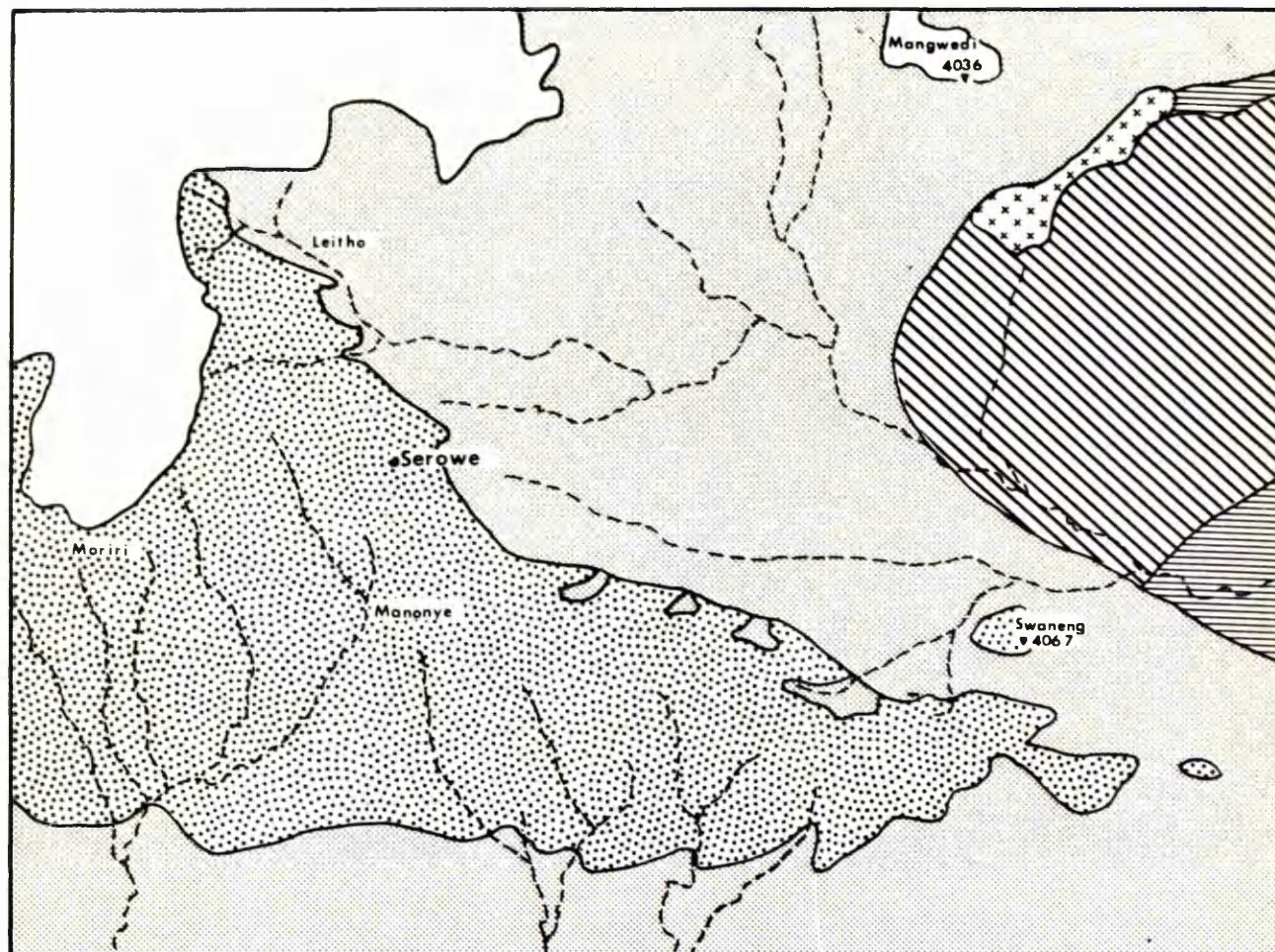
PHYSICAL FACTORS AFFECTING THE GROWTH OF SEROWE

1. The Geology of the Serowe Area

A full description of the geology of the Serowe area is provided in Appendix C. Serowe is located (see Maps 8a & b) at the junction of the basalt of the Drakensberg Lava Stage and the Cave Sandstone both of the Stormberg Series. The basalt at Serowe forms a major spur jutting out from the escarpment as far as Tswaneng and varies in thickness attaining a maximum of 120m in the Serowe area. Sedimentary rocks of the Cave Sandstone Stage are found south and east of the main escarpment and consist of aeolian sandstone with subordinate limestone and marl. The Cave Sandstone in Serowe is found immediately to the north and north east of the fault line from Serowe Hill to Tswaneng which marks the boundary between the basalt and the sandstone. The sandstone varies in colour from white and pink to buff, pale-yellow, brown and greenish-white. It is only feebly cemented and the rock is therefore often extremely friable. A dolerite dyke is aligned with the Serowe Hill to the Tswaneng fault and this has given rise to a line of low hills, the major ones being the Tswaneng Hills (locally known as Rra and Mma - Tswaneng) with a maximum height of 1341m. The down-throw of the fault is to the south and is of the order of 70-80m. The area to the south and east of the Kalahari escarpment is covered by superficial deposits consisting of soil, alluvium, gravel, calcrete and sand. The sands are probably partly redistributed plateau sands from the Kalahari brought down from the escarpment area by the rivers and by



MAP 8a.: GEOLOGY



MAP 8b.: GEOLOGY OF SEROWE

wind action. Of some importance within Serowe itself there is the extensive area of 'black turf' (montmerillonite) which may be 7m thick and which overlies older red calcreted sands and gravels. Table 12 gives the details of the geological formations.

The geology of the Serowe area has been of importance in influencing the direction of the growth of Serowe in a number of ways. From a physiographic viewpoint the settlement at Serowe has been confined to the area east of the main escarpment which has formed the western boundary for the development of the settlement. The deeply etched landscape between Serowe Hill and the escarpment has limited the expansion of Serowe in that direction and the major developments in recent times have been to the east and south of the fault line of the basalt and sandstone contact zone.

The area north and east of the fault is composed of sandstone overlain with superficial deposits and because of the friable nature of this material, the area has become deeply scored by rivers and there is deep sand. This has made settlements to the north of the Serowe-Tswaneng Hills unattractive and wards built there have moved elsewhere. Moreover this area has very little ground water. In contrast, to the south and east of the fault the settlement has expanded considerably despite the lack of surface soil. The basalt outcrops over much of the surface area of Serowe and there are only isolated and limited areas where cultivation is possible within the settlement itself. This has been of limited importance for the baNgwato whose cultivated lands are at some distance from Serowe itself. With the removal of vegetation in Serowe over time there has also been the erosion of surface material and much of the area is stoney and of solid rock. One area of exception to this is the expanse of montmerillonite to the east of the centre of Serowe.

TABLE 12

Table of Geological Formations

Superficial Deposits		Soil, alluvium, sand calcrete, diatomaceous calcrete	
	unconformity		
Kalahari Beds		Sand, Ferricrete, Chalcedonic or opalene silcrete Sandstone, silicified sandstone, limestone, conglomerate, calcareous sandstone or sandy calcrete	
	unconformity		
Karoo System	{Drakensberg {Lava stage	Basaltic lava with minor tuff bands	
	{Stormberg {Series	Sandstone, minor limestone marl and shale	
	unconformity		
	{Ecca {Series	{Upper Ecca {Stage	Mudstone, siltstone and coal
		{Middle Ecca {Stage	Gritty felspathic sandstone
	{Dwyka {Series		Mudstone, Shale, tillite
	unconformity		
Waterberg Systems	Lotsani Shale Formation	{Quartzite {Dark gray, pink, purple, {and Khaki shale and siltstone	
Intrusive Rocks			
Dolerite		Post-Karoo	
Diabase		Post-Waterberg Systems	
		Pre-Karoo	

Source: Jennings, CMH: The Geology of the Serowe Area
Geological Survey of Botswana 1961, Lobatse

Of major importance also in the semi-arid climate of Botswana is the availability of ground water. This is dealt with in more detail below but it should be noted here that the largest and most consistent sources of ground water are found below the basalt and boreholes to the south and east of the fault have demonstrated the capacity of this area of Serowe. The indurated contact zone of the Cave Sandstone and the basalt is one of the most important sources of ground water in this area. It is not coincidental that the settlement has developed towards the south and east where both surface conditions and water supply combined to offer opportunities for development.

On a wider scale Serowe must be seen against the potential that does exist for development both agriculturally and industrially. The original settlement at Serowe was not directly dictated by the agricultural potential of the immediate locality although ample land was available for cultivation. Industrial potential also was not a factor affecting the choice of Serowe. There is no mention in the extant literature of any connection with industry and in the context of Kgama III's views on European infiltration it is probable that if industrial development had been a possibility, Serowe would have been discarded. Surveys of the area by Jennings (1961) Green (1957) and Van Straten (1959) all indicate that in the proximity of Serowe itself no mineral resources have been discovered and any potential development for coal mining, iron ore and limestone extraction are likely to be small in size and would take place at some considerable distance from Serowe proper. Rather than contributing to the growth of Serowe such developments might potentially lead to the migration of workers and a decline in the resident population of Serowe.

2. The Importance of the Supply of Water in Serowe

In 1902 the supply of surface water in Serowe was thought to be adequate for the whole community and oral tradition records the existence of a constant supply in the rivers in and around Serowe. However by 1916 this was no longer the case as the streams dried up and the first boreholes were dug close to Serowe Hill at the chief's kgotla.

(Ramojababo R, in Head 1981). Over time the urgent need for regular supplies of water became more insistent and Table 13 lists the public, government and private boreholes in Serowe in 1966. Regrettably, the records of the boreholes were at that time somewhat incomplete and it was not possible to correlate fully all boreholes and the appropriate records. It was not possible also to establish with any degree of precision the exact consumption from each borehole because of the frequent breakdown of meters and the long intervals between repairs. However, Table 13 does offer a reasonably clear picture of the supply of borehole water in 1966 and it is upon the basis of the information available and upon the records of the Department of Geological Survey that Table 13 and Maps 9 and 10 have been constructed.

Serowe's ability to maintain its size and to expand over the years since its establishment has depended upon the continued availability of underground sources of water. Very little water has been available from the rivers which traverse the area since these are ephemeral, the valleys being dry for the most part of the year. Moreover, it is not common for rain water to be collected and stored for use in the dry season. An examination of the aerial photographs of Serowe for 1966 revealed only approximate 300 houses with corrugated iron roofs which might allow for the collection of run-offs and only 25 rain tanks could be identified. Field work in 1966 again confirmed

TABLE 13

Water Boreholes in Serowe until 1966A. Government

<u>Number</u>	<u>Date</u>	<u>Name</u>	<u>Depth</u> (m)	<u>Yield</u> (gph) (lps)	<u>Remarks</u>
11	Dec 30	Serowe Hosp.	85	600 0.76	See 1945 original yield 1930 0.90
13	Feb 31	Camp	119	450 0.56	720/0.90
14	Jan 31	Tribal (Nr Post office)	46	200 0.25	
17	Mar 31	Tribal	73	Blank	
60	May 37	Camp	115	500 0.63	
70	Jne 37	Tribal	94	900 1.13	
104	May 38	Tribal	76	1500 1.89	
159	Jly 40	(Private)	81	1200 1.51	For A Page-Wood
178		Camp	68	600 0.75	
180		Hospital	84	630 0.79	See 1623
485	Spt 53	Basimane	91	Blank	
489	Oct 53	Basimane	101	200 0.25	
494	Oct 53	Batalaote	91	3000 3.78	
521	Feb 54	Ratshosa	67	3000 3.78	
644	Oct 55			150 0.19	Deepend borehole
650	Nov 55	Hospital			
668	Mar 56	Hospital	81	720 0.90	
670	Mar 56	Hospital	76	3000 3.78	Later dropped to 500/0.63
1049	Feb 57	Palamaokwe	114	1800 2.27	
1054	Feb 59	Mooketsi	80	1200 1.51	
1056	Feb 59	Konyana	58	300 0.37	
1062	Mar 59	Mokwena	91	900 1.13	
1065	Feb 59	Camp (near water tanks)	98	450 0.56	
1087	Apr 59	Kgotla	106	75 0.09	
1373	Nov 61	T.T.C.	61	1600 2.02	
1378	Dec 61	T.T.C.	61	2000 2.52	
1387	Jan 62	Masolola (Ramesamu)	46	1050 1.32	
1509	Apr 63	Secondary Sch.	106	2700 3.40	
1510	May 63	Secondary Sch.	121	800 1.01	
1520	Jne 63	Camp	121	1800 2.27	
1538	Aug 63	Metsemaseu	106	300 0.37	
1539	Aug 66	Anglian Mission	132	1800 2.27	Z342 deepened
1608	Mar 64	Metsemaseu	42	40 0.05	
1622	May 64	Tribal (w.of TTC)	121	2500 3.15	
1623	Mar 64	Hospital	121	2400 3.03	Bhl80 deepened
1643	Jne 64	Hotel Botalaote	91	2700 3.40	
1645	Jne 64	Hospital	121	1400 1.76	Bhl1 deepened
1663	Oct 64	Nr Palmers Hse (for IDA road)	71	3000 3.78	
1684	Nov 64	For Abattoir (Konyana area)	42	1500 1.89	

B. Private Boreholes

Z66	May 57		50	240 0.30	Chakalaba
Z69	May 57		61	15 0.02	
Z94P902	Feb 58		70	60 0.07	For J. Theron
Z96P903	Mar 58		137		For J. Theron
Z98P901	Mar 58		30	720 0.90	For J. Theron

TABLE 13 (contd.)

Private Boreholes (contd.)

<u>Number</u>	<u>Date</u>	<u>Name</u>	<u>Depth</u> (m)	<u>Yield</u> (gph) (lps)	<u>Remarks</u>
Z102	Mar 58		18	1000	1.26 Smit
Z271	Dec 59		88	180-	0.22- Woodford
Z272	Dec 59		88	200	0.25 Woodford Tools lost in bore- holes
Z342	Apr 60		121	800	1.01 St Peter & St Pauls Church
Z343	May 60		45	820	1.03 J. Palmer
Z850	Sep 65		45	1200	1.51 Serowe Hotel
Z852	Sep 65		15	1000	1.26 Ludick
Z954	Feb 66		103	1500	1.89
P18	Mar 47		36		H. Parr
P19	Mar 47		18	450	0.56 H. Parr
P20	Mar 47		24	550	0.69
P21	Mar 47		36	400	0.50 Stoneham
P205	Mar 51		76	525	0.06 E. Blackbeard

C. Private Boreholes without Completion Certificates

<u>Owner</u>	<u>Depth</u>	<u>Yield</u>
Mataboge		
Mataboge		
Wright		
Wright		
Wright		
N.I.D.C.O.	48	1200 1.51
N.I.D.C.O.	42	800 1.0
Swaneng Hill School	60	Strong
Swaneng Hill School	54	Strong
R. Kgamane		
Sells		
Mothusi		
Palmer		
Woodford		

The column for litres per second (lps) has been added for convenience

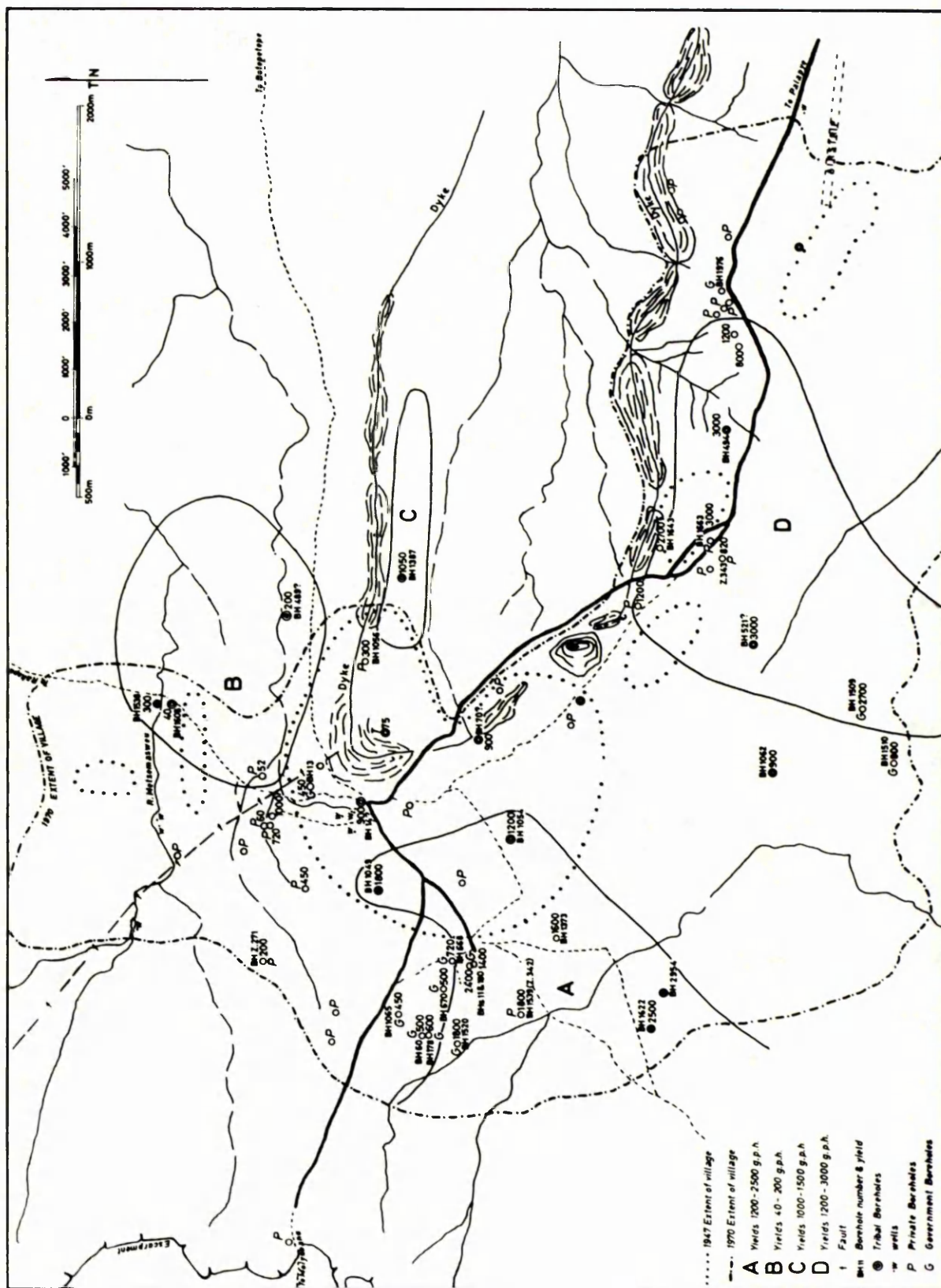
Source: Jennings, CMH: Serowe Water Supply, Botswana Geological Survey, 1966.

the paucity of attempts to conserve the scarce rain water and clearly this provided only minor relief to a serious problem.

Map 9 shows the distribution of successful boreholes in Serowe and distinguishes between boreholes for private, public and government purposes and an immediate inference must be that the successful siting of boreholes has had a major and positive effect upon the growth of the settlement. The yield for each borehole is shown in gallons per hour.* The boreholes may conveniently be grouped into four classes A - D. Boreholes in Area A lie to the west of Serowe Hill and yield between 1200 to 2500 gallons per hour. Area B lies to the north of the Serowe fault and the boreholes in this area have low yields between 40 and 200 gallons per hour. In Area C which includes Bh 1387 with a yield of 1050 gallons per hour, the boreholes have been sited to tap the dipping dolerite dyke. In this Area a further aquifer occurs at depth and it is an area for potential development. The boreholes at Swaneng Hill Secondary School are located in Area C and whilst no yields are available for purposes of comparison, it is noted that these boreholes are considered to be 'strong'. Finally Area D marks the eastern extension of Serowe and it is in this Area that the recorded yields were highest at 1200 to 3000 gallons per hour. Again Area D is one for potential development and future growth.

The yields for the boreholes do therefore suggest an important pattern. However some caution must be taken over their use. It must be remembered that the demands made upon the boreholes varies considerably with the density of population. It may be that with

* The unit of record at the time was gallons per hour and it is proposed to continue to use this measure.



MAP 9: SEROWE BOREHOLES

equal demands being made on all boreholes the yields would be substantially modified. Yet even bearing this consideration in mind it is possible to distinguish a clear and significant pattern of yield which has bearing on the growth and direction of growth of Serowe.

Map 9 also shows the extent of Serowe in 1947 and in 1970 has been based on the available aerial photographs. It is clear from the map that the development of the settlement has been least marked in the northern portion of Serowe either side of the R. Metsemaseu. This is also the area where the supply of water from boreholes is low and least reliable. Only moderate amounts of water can be obtained from the sands of the R. Metsemaseu. It must be concluded that the inadequacy of the supply of water has had a limiting effect upon the growth of Serowe towards the north. The situation to the north of Serowe Hill is in marked contrast with the areas to the south and to the east. Areas A and D contain boreholes that are high yielding and it is in these areas that there has been the greatest expansion of the settlement and it is in this sector of Serowe from Areas A to D, and onto the airstrip, that major development has taken place and continues to take place. It must be concluded therefore that the availability of water in this sector has had a positive and encouraging effect upon growth. The absence of any significant development of Serowe north of the Swaneng Hill is consistent with the lack of water.

It is of interest to note also that the main directions of development of Serowe have not been associated with the main Serowe-Palapye road, the position of which is shown on Map 9. The road whilst providing a major link to the outside world, appears to have had little effect on the siting of houses or indeed industry. Ribbon development along the road might have been anticipated once the road

had been improved. However there is little evidence to confirm this expectation and the availability of ample land for housing plus the accessibility of water appears to have been factors of greater importance.

It must be remembered that in Serowe in 1972 there were only very restricted systems of water reticulation. The only significant systems supplied the government offices and houses (usually referred to as the Government Camp or more simply The Camp) immediately below the escarpment. A similar system linked the Serowe Hospital and the Teachers Training College after 1963 and a further system at the chief's Kgotla served the Central District Council Offices. A smaller system existed in the area of Sebinas Ward and linked a private house (Miss Chiepe) and Steinberg's store. The number of people served by these schemes was small although the volume of water consumed by them was considerable as shown below in Chapter VIII. Private houses of the well-to-do had their own boreholes and storage systems. However the vast majority of the population had no such facilities and were dependent on water drawn from boreholes provided and maintained by the authorities.*

The impact on the daily routine of the people of Serowe of maintaining an adequate supply of water for daily use must be looked at in more detail. Much of the foregoing has considered water in Serowe and its impact on the macrocosm. A microcosmic study involving the

* In 1976 a new reticulated service was introduced which ended the dependence on the operation of individual boreholes. Under the new scheme water was pumped to storage tanks on the escarpment to the west and then gravity-fed to the existing water supply points. The people were no longer dependent upon water from a particular borehole although the pattern of supply points within Serowe remained approximately the same. No immediate steps were taken to introduce piped water to the houses and the pattern of life which demanded that water be collected from the supply points as required continued.

individual household is equally revealing. The needs of the household for water have to be met by individuals of the household fetching water from the supply point. Access to the water points is unrestricted and the amount of water used by the household depends entirely upon the ability and the willingness of the user to transport the water to the homestead. Usually the water was carried in 4 gallon buckets although some people used drums which can contain 44 gallons. The use of the bucket is more common and meeting the daily needs of the household can be a time consuming, laborious and demanding task especially since the bucket was usually carried on the head. It is perhaps not surprising therefore to discover that the amount of water consumed per person per day was limited. Table 14 suggests that in April 1965 approximately 2 gallons of water were collected for each member of the household. This may appear to be a low figure although it should be remembered that the uses to which water would be devoted would be somewhat restricted in comparison with other major settlements. Since none of the households dependent on carried water would have had flush toilets for example, the volume of water required for daily use would be considerably lower than in western settings. Making direct comparisons with other users of water outside of Serowe therefore is difficult in estimating whether the 2 gallons per person was realistic. Even without such a comparison it is certain that the provision of enough water to manage the household demanded substantial inputs of time and energy on the part of those designated to fetch water. This is normally undertaken by the women and girls.

The volume of water required daily is however only one aspect of this important part of the daily routine. The distance over which the

TABLE 14

Estimates of time taken, distance walked and consumption per person per day at four boreholes in Serowe in April 1965

Ward	1 Distance in metres	2 Time taken to and from home (mins)	3 Visits for day	4 Total daily (gallons)	5 People in family	6 Average consumption (in gall's. pe person per day)
<u>Mokwena Borehole (No.1062)</u>						
Mokwena	1500	30	4	16	11	1.45
Mapoka	400	12	4	16	12	1.33
Sekao	400	12	5	20	14	1.42
Mpulabusi	800	15	5	20	15	1.33
Thene	1500	30	3	12	18	0.66
Ramodimo	1500	30	3	12	12	1
Kgaimena	100	4	8	32	16	2
<u>Mokobaesi Borehole (No.1054)</u>						
Phaleng	400	20	3	12	-	-
Selobile	100	10	2	8	-	-
Dinokwane	800	30	6	24	20	1.2
Masilo	25	4	6	24	-	-
Sekgwa	200	10	6	24	-	-
Makolori	1500	45	4	16	-	-
Sebina	200	15	10	40	7	5.7
Talaojane	400	20	4	16	-	-
Malela	400	20	3	12	-	-
Maruleng	200	10	3	12	-	-
Mathuba	800	30	5	20	-	161

TABLE 14 (contd.)

	1	2	3	4	5	6
Maphakwana	100	7	2	8	-	-
Selobile	3000	90	3	12	4	3
<u>Bidibidi Borehole</u>						
Matshotla	400	10	4	16	-	-
Bokone	3000	60	3	12	-	-
Menyatso	400	8	3	12	9	1.3
Tshipana	800	20	5	20	7	2.85
Goontshe	400	5	3	12	8	1.5
Gookgope	1500	30	Many	-	-	-
Maaloso I	200	5	Many	-	6	-
Maaloso II	600	15	Many	-	6	-
Leinanyane	500	6	Many	-	-	-
Matshotla	100	4	Many	-	-	-
Matshotla	200	5	Many	-	5	-
Ditmamodimo	2000	45	4	16	12	1.3
Menyatso	200	5	Many	-	8	-
Matshotla	200	5	Many	-	9	-
Tshipana	800	20	4	-	-	-
<u>Tsiledikae Borehole (No 1087)</u>						
Bokotelo	-	-	3	12	4	3
Maaloso	-	-	4	16	5	3.1
Makolobjwane	-	-	6	24	7	3.4
Raleina	-	-	2	8	2	4

TABLE 14 (contd.)

	1	2	3	4	5	6
Maaloso	-	-	6	24	3	8
Dinokwaneng	-	-	4	16	8	2
Bokotelo	-	-	8	32	10	3.2
Konyana	-	-	2	8	4	2
Matshego	-	-	8	32	5	6.4
Kgosing	-	-	3	12	20	0.6
Dinokwaneng	-	-	2	8	6	1.3
Dikgatla	-	-	5	20	9	2.2
Mepako	-	-	6	24	8	3
Rakgomo	-	-	3	12	8	1.5
Bokotelo	-	-	2	8	8	1
Senkwato	-	-	3	12	12	1
Matshego	-	-	3	12	10	1.2
Bokotelo	-	-	3	12	10	1.2

Notes

1. Calculations made on the distance walked and time taken as perceived by the person collecting the water.
2. Calculations of time do not include delays at the wells.
3. Calculations based solely on head portorage of a 4 gallon bucket. Water collected by barrels not included.
4. The small number of entries for Mokwena Borehole arose from a breakdown of the borehole pump during the period of the survey.

TABLE 15

Product Movement Correlations of Water Supplies,
April 1966

Based on Table 14

Correlations xy, xz, yz where x = 1st variable
y = 2nd "
z = 3rd "

$$\text{Formula: } r = \frac{\sum xy - \frac{\sum x \sum y}{n}}{\sqrt{\sum x^2 - \frac{(\sum x)^2}{n}} \times \sqrt{\sum y^2 - \frac{(\sum y)^2}{n}}}$$

1. Variable 1 and 2 (Distance and Time taken)

Mean - X = 726.4287
Mean - Y = 19.6286
Coeff of Correlation = 0.9357
Degrees of Freedom = 35.

2. Variable 2 and 3 (Time taken and Visits to the borehole per day)

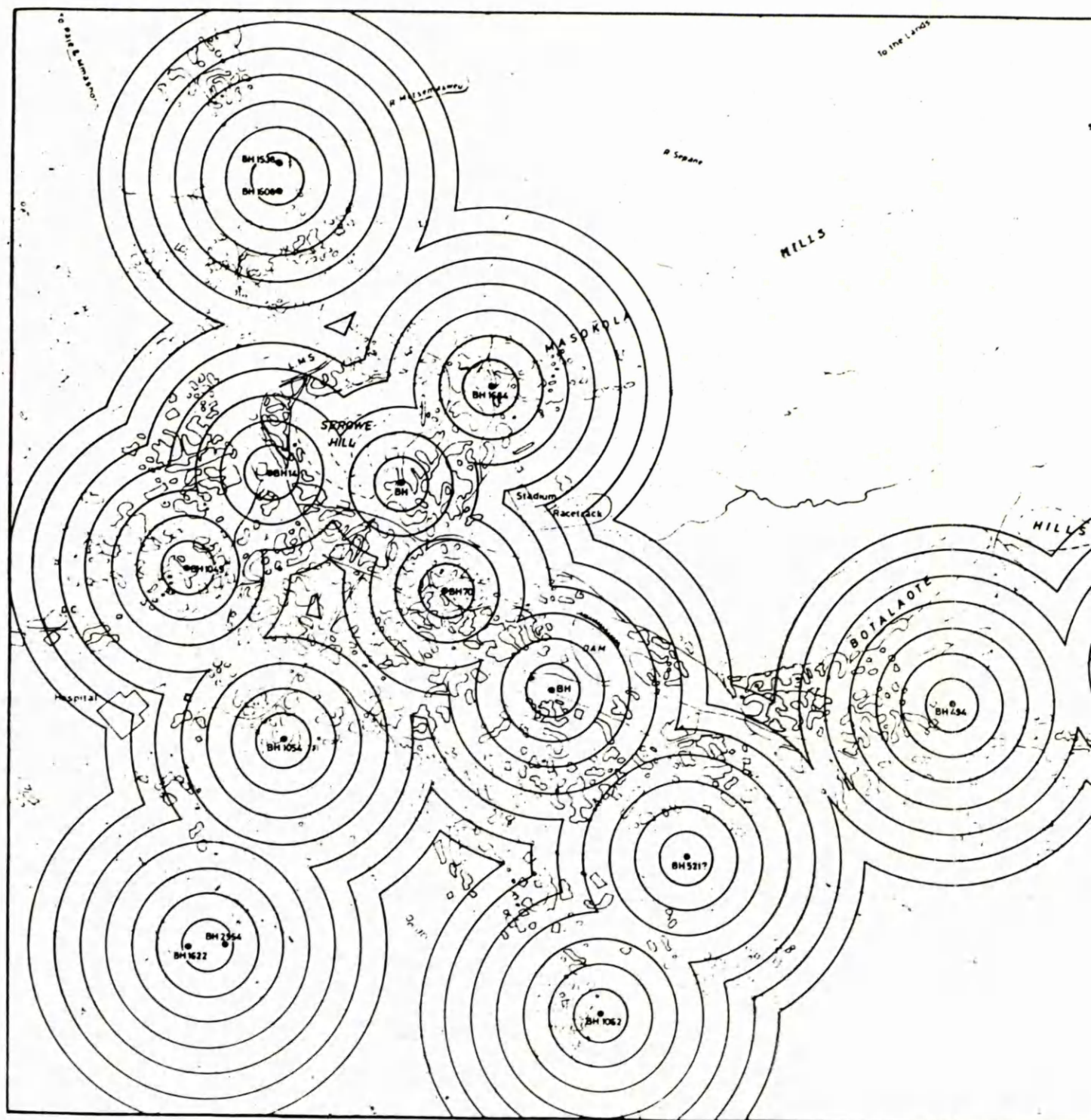
Mean - Y = 22.67
Mean - z = 4.259
Coeff of Correlation = 0.57
Degrees of Freedom = 27.

3. Variable 1 and 3 (Distance and Visits per day)

Mean - X = 819.44
Mean - z = 4.259
Coeff of Correlation = 0.275
Degrees of Freedom = 27.

water has to be carried is of equal importance. Table 15 shows the product movement correlations of the variables of this small scale survey. The results show a valuable degree of correlation particularly between the distance walked and the time taken. It is useful to note also that both these figures were estimated by the people surveyed and the fact that most respondents did not have watches does not appear to have been a limiting factor. There are also significant correlations between the time taken and the number of visits to the boreholes each day and between the distance walked and the number of visits each day. It is possible therefore to use the results of the survey to draw the reasonable conclusions that people who live furthest away from the boreholes do take longer to collect their water and do so less frequently than those who live nearer the boreholes. However, that statement implies that all behaviour in obtaining water is rational and based solely on the minimal expenditure of time and effort. This may not however be the case as will be explained below.

To attempt to obtain a further assessment of the effort required to satisfy minimal needs for water, the position of the water supply points were plotted and isopleths drawn at intervals of 150 metres. The results are shown on Map 10. In drawing the isopleths it was assumed that all public boreholes were functioning fully and that supplies did not fail. It will be seen that the public water points do serve the whole of Serowe. Where a number of boreholes are clustered together, as in the centre of Serowe, the householder has a number of supply points from which to choose, all within easy reach of the home. Towards the edge of Serowe the number of boreholds is limited and the boreholes are more widely separated. In consequence the distance over which some householders must carry water is consider-



MAP 10: SEROWE PUBLIC WATER SUPPLY, 1970

able and distances in excess of 2 km were not uncommon. Moreover, in 1965 and until the introduction of a reticulated service, the supply of water from any borehole was uncertain, particularly in the Basimane-Metsemaseu area north of Serowe Hill. When supplies failed in this area residents had to walk over 1.5 kms to boreholes near to the kgotla or immediately west of Serowe Hill. It must be emphasized however that Map 10 shows only the official public water supply points. There are many private boreholes and individuals might be permitted on a casual or regular basis to draw water from them. No attempt has been made to assess the potential for this source of supply but it is thought to be of little importance.

The use to which Map 10 may be put requires careful thought. It appears to presume that householders will draw their supplies from the boreholes nearest to their homes to ensure economy of time and effort. Oral evidence suggested however that this is not always true and individuals may draw from a more distant supply point for a variety of reasons. There may be differences in the taste of the water, or the water may have properties, which may make it more desirable for particular purposes, for example, the brewing of beer. Individuals may wish to avoid certain boreholes or use others for social reasons. The survey of boreholes summarised in Table 14 shows that the distances walked varied from a few yards to 1.5 kms and not all the large distances walked could be justified by claims that the persons concerned were obtaining water from the water supply point nearest to their houses. Despite official agreement by the Chief to the surveys, there was some resistance to the questions asked and few people were prepared to discuss their use of a particular water supply. Whilst Table 14 shows wide variations in distances walked and the time taken to collect water, it

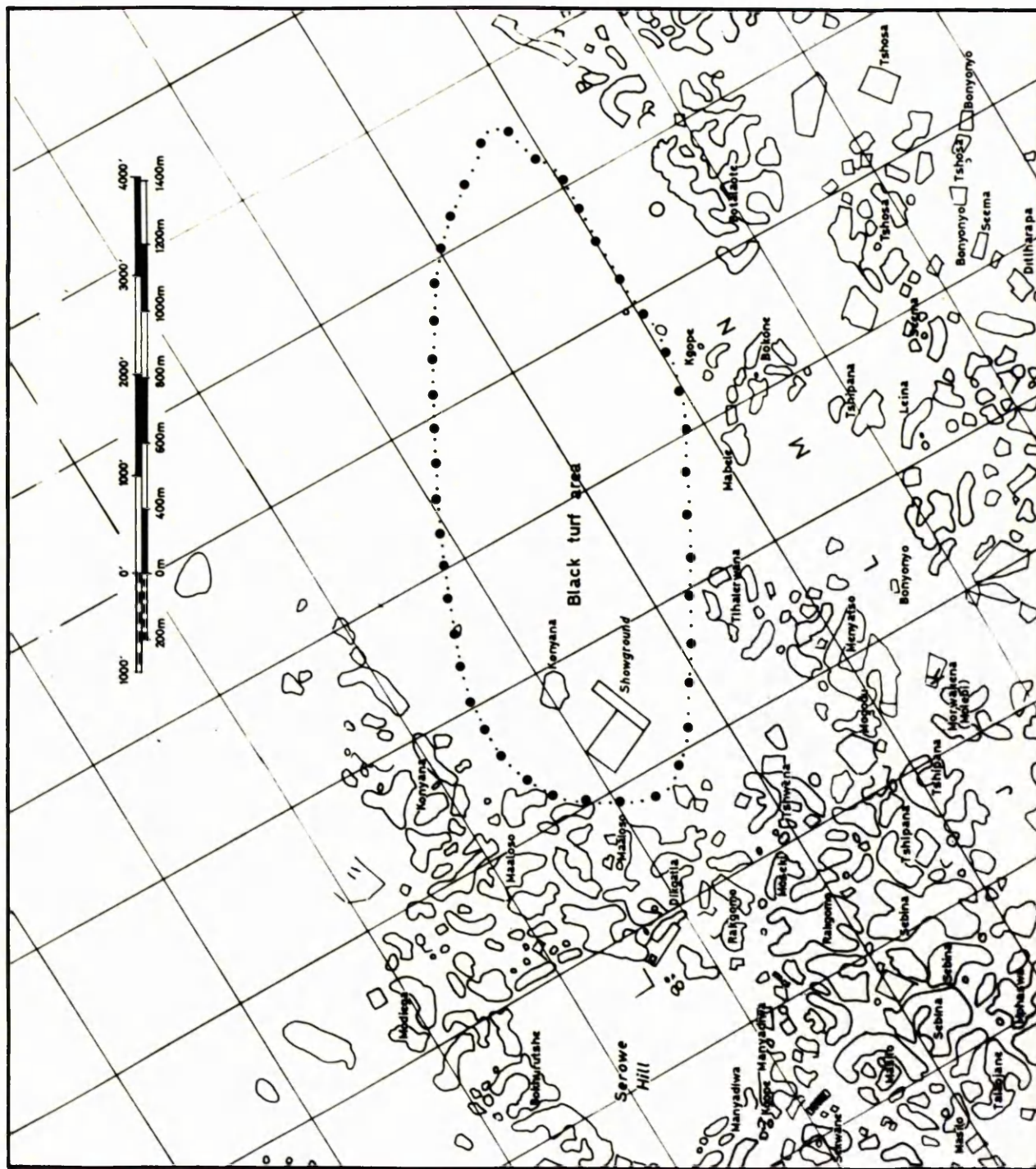
is true to say that few people questioned spent less than half an hour each day and some spent up to 3 hours. This did not include delays at the boreholes.

In summary of this section on water supply in Serowe it can be stated that the location of successful boreholes is closely linked to the underlying geology and that borehole water is of the greatest importance in meeting the needs of the residents. High yielding boreholes have encouraged the expansion of Serowe towards the south and south-east despite this direction of growth being away from the main Palapye-Serowe road. Finally, the willingness of the residents to spend time and energy on the daily task of collecting water has contributed to the areal expansion of Serowe. If the residents had not been prepared to carry the water over the long distances required Serowe would consist of a more densely populated area close to Serowe Hill much as it had been until the late 1940's.

3. Other Factors Affecting the Growth of Serowe

a) The distribution of black turf soil

It has been noted above that wards obtained permission to remove from the area immediately to the east of Serowe Hill because of the unsuitability of the soil. There is as much as 7 m of black turf soil overlying older calcreted sands and gravels. The soil is unsuitable for the construction of houses and becomes impassable when wet. The distribution of black turf soil is shown on Map 11 and it can be seen that this is an area which has been avoided by settlement. In recent times, light industrial enterprises have skirted this area and the only shop located there being Smit's Trading Store established in 1902.



MAP 11: EXTENT OF BLACK TURF SOIL

b) The distribution of sand

Note has been made already of the movement of Basimane ward from the area to the north of Masokola School because of the deep sand. The area to the north of the Serowe Hill-Tswaneng Hills fault is deeply dissected by rivers and there is deep sand which makes it difficult for both people and vehicles to negotiate the area. It has been suggested above also that this area is avoided because of the poor supplies of water to be found here. It is suggested now that even if there were good supplies of water, the area would still not be an attractive one because of the presence of sand.

c) The river valleys

Houses are usually built away from the river valleys despite the possibility of obtaining water from the river beds. The rivers are ephemeral and are subject to flash floods which may contain very considerable quantities of water. The dangers of locating a house close to a river bed are a major consideration. The houses avoid the area of possible flooding and are situated on the interfluvies.

d) The main Serowe-Palapye road

It cannot be said that the location of the main road joining Serowe and Palapye has had any important effect upon the direction of growth of the settlement. The direction of the road is NW- SE but the main developments of Serowe have taken place towards the south and south-south-east. Constructed only in 1925 for the Prince of Wales' visit to Serowe, the position of the road has been realigned twice since 1957. In 1957 it was constructed closer to the Tswaneng Hills

and whilst some development took place along the road the scale of development was small. Swaneng Hill School, the only secondary school in Serowe during the period covered by this dissertation was a major development which was started in 1962 but it has been stated in oral evidence (Van Rensburg) that the choice of the site had less to do with the position of the road and much more to do with access to cultivable land and the possibility of constructing a dam between the Tswaneng Hills to provide water for stock. It cannot be said therefore that in this case "Les routes ont fait les villes" as Vidal de la Blache (1926) would have us believe. If this were so, a greater development along or near the main road would have been expected. This was not the case up to 1972 and the expansion of the settlement to the south away from the main road has depended upon access by minor routeways, often ungraded and rocky, for movement to and from the centre of Serowe.

e) The choice of a site for a house

The qualities of an ideal site for a house for a motswana may well be different from those normally accepted by occidental standards. The soil was of importance and the presence of too much sand, mud or too many stones was a deterrent. The dominant mode of transport up to 1972 was also an important factor and ample space was needed to allow ox wagons to be drawn to the individual yards. Preferably the area needed to be flat or slightly sloping to allow for an easy approach and for the construction of the houses, the cattle kraal and the kgotla. It is probable that proximity to the chiefs kgotla was of the greatest significance and the distribution of wards within Serowe has been examined elsewhere.

Convenience to services may also have had little effect on the choice of a site. The availability of water would have been a consideration. However, in deciding upon a location considered suitable it is probable that the headman and other elders in kgotla would have paid less attention to the distance from a regular supply of water. Oral evidence has suggested that since the women were expected to carry the water, other factors in the choice of a site were given perhaps greater emphasis. Similarly, proximity to shops, social services, entertainment facilities may also have had little to do with choice of a site and it is also probable that main lines of communication were of minor significance.

CHAPTER VII

THE RATE OF GROWTH OF SEROWE

1. Difficulties in using the available data

Although Censuses have been held in Botswana since 1904, the first really comprehensive census in the Protectorate was taken in 1946 and it is possible to place reliance only upon the results of the Censuses of 1946, 1964 and 1971. The methods in all other enumerations involved a great margin of error and the results are generally considered to be valueless. Thus in attempting to assess the rate of growth of Serowe there is little reliable data upon which to base calculations. Estimates of the numbers of people moving from Letcheng to Serowe were made and Benson (1960) has accepted a figure of 17000. The records of the London Missionary Society at Serowe often contained estimates of the population and the figure of 20,000 is frequently used. However, the basis upon which this total was calculated varied from report to report of the London Missionary Society and on occasions included the district around Serowe as well as the settlement itself.*

In 1946 the population of Serowe was recorded as 15,935 (Bechuanaland Protectorate Govt., 1946) and in 1964 as 34,182 (Bechuanaland Govt., 1964). The validity of these figures is also

* These comments are based on a detailed examination of the London Missionary Society records held at the Serowe mission.

open to question and an explanation of the semi-nomadic way of life of the baNgwato as well as other baTswana tribes will serve to explain how confusion may have arisen.

By tradition the baNgwato live in nucleated settlements which are made up of a large number of families as has been explained above. Arising from a heritage of unrest partly as a result of attacks by marauding tribes, the baNgwato chief insisted that the tribe lived together in one place in order to preserve the unity of the tribal nucleus. In view of the many incidents of internal dissension the chief continued to require all the families to maintain a house in the tribal capital and reside in the house for a period each year. A direct result of this regulation, common to the baTswana, was the development of large tribal capitals of which Serowe was the largest. Yet for most of the year the people did not live in the capital. Each family was entitled to the use of available land for cultivation and for the grazing of livestock. These areas are usually at some distance from the capital and the members of the family spent a considerable portion of the year at their cultivable lands (which are known as 'the lands') or at the grazing areas (which are known as 'the cattle posts'). In 1964 the people were counted where they were found at the time of the Census but they were asked to state the place to which they had allegiance i.e. the place to which they would go first to seek redress for grievances or to obtain assistance. In the compilation of the total population of Serowe, those who had been found in other places but who claimed allegiance to Serowe were added to the number of actually found in Serowe. A total population, both present and absent was thus produced and for 1964 was 34,182. However Campbell (Bechuanaland

Govt., 1964) showed that this approach to population assessment might be inappropriate in the context of changing social patterns.

Campbell noted that the people were tending to build more permanent houses at their lands and cattle posts and to remain away from tribal capitals for longer periods of time including living away on a permanent basis.

In the Census of 1971 Crone (1972) took the argument a stage further and considered that the practice of living in large communities was dying out owing to a number of factors, not the least of which had been the pressure of increasing population. It was felt that the population of central settlements, such as Serowe, had been exaggerated previously whilst that of the outlying areas had been correspondingly understated. It was decided by the Government of Botswana that the people should be counted on a *de facto* basis, that is the people were to be enumerated according to where they were found at the time of the Census. This was in contrast to the *de jure* approach used previously which had been founded on the principle that where people were at the time of the Census was only incidental and that their true home as laid down under tribal law was more important. The 1971 Census did however collect statistics of the allegiance of the people to villages and the Census Report (Crone 1972) compared the *de jure* and *de facto* returns. The characteristics of the larger settlements are compared in Table 16. For Serowe, Kanye, Molepolole and Mochudi the difference between the *de facto* and *de jure* figures is much greater than the *de facto* population itself and there were many unoccupied dwellings, only 2593 out of 4444 buildings being occupied in Serowe (Bots. Govt. 1973). In the case of other settlements the differences were much smaller. This may be explained by differences

in the degree of internal migration, of rainfall, in the ploughing, planting and harvesting dates, upon the availability of water at the lands and the distance between the lands and the settlements. The 1971 Census took place in August when the majority of the people traditionally would have been at their parent settlement. However, many had been delayed by a late harvest and were still at the lands. Thus the situation shown in Table 16 may not have been typical for all years.

It can be seen that to rely on the de facto population above is likely to be as misleading as to rely on the de jure population. However, despite the difficulties associated with the de jure figures it is felt necessary to adopt these as a basis for further discussion in order to be able to provide a comparable basis for the consideration of the rate of growth of Serowe. The de jure population for Serowe in 1971 was 45,560 although this total includes a proportion of those absent from Botswana and who were presumed to be absent temporarily only. The total for Serowe for 1971 represented an increase of 11,378 over the 7 years from 1964. For the Central District,* the total de jure increase for the same period was 25,263 included within this total were those who had migrated to Orapa and Selibe-Pikwe where mining activities had begun during the period under review. The rate of growth of Serowe over the period 1964-71 was extremely high and the factors affecting this growth need further investigation.

* In 1966 the tribal administrations were reorganised into new local authorities. The baNgwato Tribal Administration became the Central District Council and included the Tuli Block which had previously been outside the baNgwato reserve.

TABLE 16De facto and de jure populations, 1971

	<u>de facto</u>	<u>de jure</u>
MAUN	9 614	12 728
GHANZI	1 198	3 353
TONOTA	4 494	12 199
BOBONONG	2 184	10 946
SEROWE	15 723	45 560
PALAPYE	5 217	5 052
MAHALAPYE	12 056	15 463
MOCHUDI	6 945	22 938
MOLEPOLOLE	9 448	34 711
KANYE	10 664	43 379
RAMOTSWA	7 991	13 099
FRANCISTOWN	18 613	19 903
GABORONE	17 718	18 436
LOBATSE	11 936	12 920

Source: Census Report 1971

Botswana Government , Government Printer, Gaborone

2. Historical and Demographic factors affecting rate of growth

It is clear that Serowe up to 1971 continued to increase in size and to maintain its pre-eminent position among settlements in Botswana. Serowe had, however, been affected by a number of incidents of both national and local significance. The influenza epidemic of 1919 was of worldwide proportions and although no official figures are available for the numbers who died in Serowe as a result of the epidemic, estimates by eye-witnesses placed the death roll at 25% of the total population. Bathoka ward (Basimane), which was located on the north-east side of Serowe Hill, was said to have been greatly affected by the epidemic. In general, however, epidemics have not affected Serowe. Despite the dense concentration of houses in central Serowe and the almost complete absence of any form of sanitation, except for government houses and a limited number of private houses, the incidence of infectious diseases is low. This may be associated with the strong sunlight throughout much of the year or with the annual migrations to and from the lands and cattle posts. Oral evidence of the doctor at the Sekgoma Memorial Hospital in Serowe suggested that usually at the onset of the rains in October there is a marked increase in infant mortality due to severe outbreaks of gastric enteritis. Regrettably figures are not available to support this assertion.

The introduction of the Hut Tax in 1899 was a measure common to the Rhodesians and to the Bechuanaland Protectorate and was designed to improve the flow of labour to the mines by making regular demands for money on all adult males (Schapera 1938). Many people had no cattle or too few to permit of regular sales, a practice actively discouraged by Kgama III, and there were few opportunities for wage

employment within the country. The men were then forced to seek employment in South Africa. Schapera (1938), showed that this had become an increasingly important feature of life in the Bechuanaland Protectorate and estimated that just over 40% of the baKgatla were likely to have been absent in any one year and that the same was true of the other tribes of south-eastern Bechuanaland. Schapera made no estimate for the period for the baNgwato but later in 1947 (Schapera 1947) he thought that 83.9% of the baNgwato males had worked away from home and he concluded that employment outside the Protectorate brought in 42.9% of the total income of the African population in the years 1938/42. Whilst most of the migrant labourers returned to their homes at the end of their contracts some of the more enterprising element remained in the Republic of South Africa. It is estimated that between 5% & 6% of the migrants did not return (Schapera 1944). A proportion of these migrants may have come from Serowe and the effect of their migration must have been to reduce the rate of growth of the settlement.

The sources of disputes within the baNgwato have been examined above and the spatial effects of these disputes have been suggested. The movement in and out of Serowe of dissident groups has had an influence upon its growth and not the least of these movements were those associated with the dynastic dispute between Tshekedi and Seretse Kgama. As has been indicated no reasonable estimate can be placed upon the net loss of people from Serowe resulting from Tshekedi's period of voluntary exile and consequent resettlement at Pilikwe. The 1964 Census records a population for Pilikwe of 2,600 whereas the settlement was not recorded at all in 1946 but this may not be taken as conclusive evidence since the 1946 Census only recorded villages

with populations of 1,000 and more. Oral evidence suggests that there were residents at Pilikwe before Tshekedi and his followers moved there, but no estimate of the numbers are available.

An examination of the Census returns for settlements within the baNgwato Reserve for both 1946 and 1964 show that certain settlements made considerable gains. Noteworthy of such settlements were Palapye and Mahalapye which over the period recorded increases of 4,095 and 10,746, being 393% and 438% respectively. Both settlements are located on the railway line and are distribution points, Mahalapye serving the southern baNgwato and the freehold farms of the Tuli Block. Mahalapye also developed as a service point for the railways. Until 1968 the railways were operated jointly by the Rhodesia Railways and the South African Railways, the train crews handing over at Mahalapye and Mahalapye became an important coaling point for the trains. The possibility of greater work opportunities must have attracted settlement at Mahalapye. The headquarters of the Department of Agriculture were also located at Mahalapye. Palapye also developed as a service centre for the baNgwato east and west of the railway line and grew up at the meeting point of the roads from north to south through Botswana and from the Republic of South Africa through Martin's Drift. Palapye also became the major service point for supplies for Serowe. From Table 17 it may be seen that the annual average growth rate for Mahalapye and Palapye were more than double that of Serowe and considerably above the national average of 3.4%

TABLE 17

The Growth of Selected Settlements in Botswana,
1946-64

	<u>1946</u>	<u>1964</u>	<u>Difference</u>	<u>Annual Average Growth Rate</u>
Bechuanaland Prot.	296175	549510	+ 246930	3.4
Serowe	15936	34182	+ 18246	4.3
Mahalapye	2453	13199	+ 10746	9.8
Palapye	1042	5137	+ 4095	9.2
Pilikwe	----	2600	+ 2600	?

Source: Census Report 1946 & 1964 Bechuanaland Govt.

Villages near to Serowe also showed significant increases during the period 1946 and 1964 and other villages were recorded in 1964 that were not included in the 1946 Census. However, since the 1946 Census only included special note of settlements over 1000, the inclusion of a village in the 1964 Census should not be taken to mean that no settlement existed in 1946. For example both Mabeleapudi and Paje were not listed for 1946 but in 1964 had recorded totals of 1414 and 1223 respectively. In 1936 Mabeleapudi had 67 registered taxpayers and Paje 232 (Schapera 1938). In estimating total populations on the basis of taxpayers lists the rule of thumb of 5 people per taxpayers had been used on many occasions by government officials. If this were applied to Mabeleapudi and Paje there would have been approximately 335 and 1160 people in the two villages in 1936. Over the period 1936 to 1964 therefore the annual average growth rates would have been 5.2% and 0.2% respectively.

TABLE 18

The Growth of Selected Villages near to
Serowe, 1946 - 1964

	<u>1946</u>	<u>1964</u>	<u>Difference</u>	<u>Annual Average Growth Rate</u>
Tlhabala	1075	3447	+ 2372	6.6
Moiyababe	1002	2532	+ 1530	5.2
Letlhakane	1216	2053	+ 837	2.9

Source: Census Report 1946 & 1964 Bechuanaland Govt.

Each of these villages lies within close proximity to Serowe itself and whilst no precise information is available to ascribe the origin of the increases in population described it is reasonable to assert that a proportion of the people had migrated from Serowe or had commenced to live permanently at their holdings in the villages away from Serowe as suggested by Campbell (Bechuanaland Govt. 1964).

Despite these probable losses of population, Serowe increased by 114% between 1946 and 1964 at an average annual rate of 4.3%. The 1946 Census does not make allowances for the possible absence of adult males who might not have returned to Serowe from active service in the allied armed forces at the time of the Census. If these had been included the total for 1946 might have been higher but perhaps might have made little significant difference. The number of such absentees would probably have been quite small since the total baNgwato population who were on active service was small. The 114% increase does require explanation but the 1964 Census does not help in this matter. However, a review of the population of smaller

settlements in the baNgwato Reserve indicates either very small increases or actual decreases of population. This may be attributed to migration from the remoter settlements to the larger and more central ones and towards the railway line. It is to be expected that a proportion of the migrants would have settled in Serowe.

TABLE 19

Changes in population of remote settlements in
the baNgwato, 1946/64 Reserve

	<u>1946</u>	<u>1964</u>	<u>Difference</u>	<u>Annual Average % Growth Rate</u>
Sefhare	2821	2864	+ 43	0.08
Maunatlala	3670	2474	- 1196	- 2.2
Rakops	1909	1878	- 31	- 0.09
Makalamabedi	1478	1318	- 160	- 0.63
Mopipi	1737	1322	- 415	- 1.5

Finally certain individuals or groups have moved into Serowe for the purpose of trade. Of these the most notable were the Mashona (Mazazulu), who practise as craftsmen, particularly as tinkers and carpenters, who began to enter Serowe in 1954. The Mashona constitute a vigorous commercial group whose settlement pattern is in marked contrast to that of the baNgwato as shown in Map 12. They were allocated a separate area to the North of the R. Metsemaseu.

So far comparisons have been drawn between 1946 and 1964. To make similar comparisons with 1971 can be only partially successful because the 1971 Census report does not provide de jure figures for the smaller settlements. In line with the approach adopted for the



MAP 12: MASHONA SETTLEMENT

1971 Census report most de facto population figures are published for Botswana although de jure figures are available for only certain of the larger settlements.

TABLE 20

The Growth of Population of Selected Settlements
in Botswana, 1946-1971

	<u>1946</u>	<u>1964</u>	<u>1971</u>	<u>Differences</u>		<u>Annual Average Growth Rate</u>	
				<u>1946-71</u>	<u>1946-71</u>	<u>1964-71</u>	<u>1964-71</u>
Bechuanaland/ Botswana	296175	549510	630379	+334204	+80869	3.06	1.9
Serowe	15936	34182	45560	+ 29624	+11378	4.2	4.2
Mahalapye	2453	13199	15463	+ 13010	+ 2264	7.6	2.2
Palapye	1042	5137	5052	+ 4010	- 75	5.8	- 0.2
Rakops	1909	1878	4065	+ 2156	+ 2187	3.0	11.2
Maunatlala	3670	2474	3331	- 339	+ 857	- 0.3	4.3

Source: Census Report 1946, 64 & 71 Bechuanaland/Botswana Govt.

For the smaller settlements used in Tables 18 & 19 above it is not possible to offer de jure figures and the use of de facto figures is not suggested. The difference can be quite substantial as the figures for Maunatlala indicate. The de jure figures for Maunatlala was 3331 but the de facto was only 882 and there appears to be no simple way of estimating what factors should be added to the totals to reach appropriate totals for comparison purposes.

From Table 20 the growth at Rakops needs explanation in view of its decline before 1964. Near to Rakops at Orapa there was established a major diamond extraction facility and it is thought

that the increase in population at Rakops may be associated with the ripple effort of that development. How far this argument can be sustained is difficult to judge. The supply lines for Orapa do not pass through Rakops (nor indeed through Serowe) and it may be that the 11.6% annual increases for 1964-71 may be more associated with underestimates at previous censuses.

3. Conclusions as to the potential for the future growth of Serowe

	<u>Population Growth: National & Serowe</u>			<u>Annual</u>	<u>Annual</u>	<u>Annual</u>
				<u>Average</u>	<u>Average</u>	<u>Average</u>
	1946	1964	1971	<u>Growth</u>	<u>Growth</u>	<u>Growth</u>
				<u>Rate</u>	<u>Rate</u>	<u>Rate</u>
				<u>1946-64</u>	<u>1964-71</u>	<u>1946-71</u>
National	296310	549510	630379	3.4	1.98	3.06
Serowe	15936	34182	45560	4.3	4.2	4.2

Throughout the period the rates of growth for Serowe were consistently higher than the national averages and this was equally true of the 1964-71 period when the overall growth of Serowe was more than double that of the whole country. Throughout 1964-71 the annual growth rate of Serowe was 4.2% as compared with 1.98% for Botswana and this rate was achieved despite the more rapid growth of towns along the railway line as mentioned above. To Mahalapye and Palapye must be added Gaborone which increased from 3855 in 1964 to 18436 in 1971. This increase of 14581 (25% per year) was brought about by the removal of the old administrative capital of the Bechuanaland Protectorate at Mafeking (Mafikeng) to Gaborone from 1965. Francistown and Lobatse also experienced growth rates of and respectively 11.1% and 7.8% for the period 1964-71. Those were also far above the national average and were associated partly with the development of manufacturing.

Moreover, the growth of Serowe appears to be in direct conflict with the evidence presented by the Census (Crone 1972) Report that the baTswana no longer tend to live in large settlements:

It was noted in 1964 that villages were becoming less centralised as there was a tendency for people to make their permanent homes at the cattle posts and lands and that smaller villages were beginning to appear. This process has continued. 43,293 persons or 7.5% of the de facto population claimed allegiance to villages which had not been listed in 1964. It has been remarked that the de jure approach masked this development and led to an exaggeration of the population of the central villages. It was reported in 1964 that 18% of the total population belonged to villages of more than 20,000 persons and although the statement was qualified in the text, the idea of 'belonging to' was synonymous with 'living in' took firm hold and the misconception persisted. In Botswana this is not true, and the idea that people live in large central villages needs to be modified. No village with a de facto population of 20,000 persons at the time of the Census was recorded. At the other end of the scale it was reported in 1964 that 4% of the population was living in settlements of less than 500 persons, while in 1971 the figure was 52% (p. 98).

It must be accepted that there was continued migration from the rural areas into the larger settlements and Serowe must have gained from such migration. Serowe had many attractions for migrants and the development of services in Serowe continued to attract those who wished to improve the quality of their life. As in most developing countries, education in Botswana offers the prospect of escape from the land and the hard, unremitting toil of traditional agriculture. Serowe must be placed among the better endowed centres for education in Botswana. With twelve large primary schools in 1971, a secondary school and a teachers training college, a night school and 11 brigades (Botswana Govt. 1973), Serowe provided the opportunities for the acquisition of the skills and knowledge that it was hoped would lead to a better economic life. Serowe also provided medical and welfare

services through its hospital and health clinics. In addition, the shopping facilities in Serowe compared favourably with other settlements in the Central District. Finally, Serowe also provided some opportunities for paid employment and in times of stress and shortage the hope of assistance from the traditional tribal authorities. Thus whilst doubts may exist over the true dimension of the population of Serowe it is probable that sufficient migration had taken place to more than replace those lost to other settlements and that there had been a substantial net increase in population.

The future growth of Serowe is however more problematic. Agriculture in Botswana is persistently marginal and should there be a failure of crops in the baNgwato area those who have opted to live more permanently out of Serowe may decide to return to their old homes in the expectation of help being made available in the larger centres of populations. In a time of crisis it may be reasoned that those who could claim allegiance to Serowe might substantiate their claims by a physical presence. It may be that the prolonged drought from 1961-66 had some impact on migration to larger centres (Botswana Govt., 1966).

Yet again, the requirement by the chief of all members of the tribe to belong to a village and to actually live in that village for a period of the year is no longer rigidly enforced. It is more than doubtful whether in an increasingly democratic society, such as Botswana, the requirement could be enforced again. With the increased use of motorised vehicles providing greater mobility and easier and quicker access to the facilities of Serowe, it is to be anticipated that more Serowe residents will consider spending long periods away from Serowe thus reinforcing the already established

practice. Before a final definitive opinion could be given upon the future growth of Serowe a detailed investigation would have to be made of the exact nature of the differences between the de facto and de jure populations of Serowe and to assess the peculiar effects of the variations of climate have upon occupancy in Serowe. On the basis of a subjective assessment of the factors of migration, changing social norms and the overall population growth it is felt possible to anticipate that in the future Serowe will experience a slower growth rate of its de jure and de facto populations.

4. Phases in the Growth of Serowe

A chronology for the period 1902 - 1972 is provided in Appendix D.

a) 1902 - 1947

This phase is bounded in time by the move of the baNgwato to Serowe and by the decision in kgotla by Tshekedi Kgama for wards to be allowed to move away from the congested area around Serowe Hill. This period in the history of Serowe was one of a considerable increase in the concentration of the population around the chief's Kgotla and one in which there was an expansion of the range of services available within the settlement. The extent of Serowe during this period may be gauged by the position of the houses previously owned and occupied by Europeans. These may be seen on Map 3, and they form a partial ring of isolated homesteads. In general the European occupied houses were at some distance from the centre.

The period under review saw the expansion of social services in both education and medical care. Schools had been commenced by missionaries of the London Missionary Society (LMS) whilst the baNgwato had been at both Shoshong and Letcheng and immediately on

arrival in Serowe the LMS undertook the organisation of primary schools. The schools were close to the kgotla, Central School being the oldest, construction having started in 1902. The Kgama Memorial School was started in 1904 although it was subsequently housed in new building constructed between 1916 and 1921. Western School, located immediately to the west of Serowe Hill occupied buildings which have at different times been used as a tribal maternity centre and an elementary teacher training college. The growing pressure for education led eventually to the opening of Masokola School (1939) and the Simon Rratshosa School (formerly the Middle School) in 1947.

Another development of importance during the period 1902-1947 was the introduction of medical care by the government of the Bechuanaland Protectorate. Within Serowe tribal doctors abounded but it was not until the 1920's that formal plans were made for the construction of what eventually became the Sekgoma Memorial Hospital. Whilst on a visit to Serowe in 1925 to attend the unveiling of the duiker monument to Kgama III, the Prince of Wales was given £700 by Sekgoma II to defray his expenses. This the Prince of Wales returned to Sekgoma together with an additional £300 for the construction of the hospital. There were no other government medical facilities in Serowe throughout the period 1902-1947.

With regard to other services, it is worth noting that although the telegraph had reached Palapye in 1890 (Hepburn 1895), and was extended to Serowe early in the twentieth century, it was not until 1927 that a Post Office was opened in temporary buildings and later moved to permanent buildings in 1940.

In the business world there were many developments throughout this phase of growth. All the shops were located in the centre of Serowe and up to the end of the period considered by this dissertation some of the original buildings such as Smit's Store, Theron's, etc. were still in their original locations, still constructed of wood and corrugated iron as demanded by Kgama III. Kgama insisted that all European shops should be of a temporary nature so that the traders could be easily expelled from Serowe should they transgress his rules. The traders paid no rents but had no security of tenure and their continued pressure in Serowe was dependent upon not upsetting the tribal authorities.

From the point of view of transport, the period saw the introduction of the motor car and the lorry but it was not until 1943 that the Tribal Garage was opened. For most of the residents of Serowe the main means of travel were the wagon and the scotch-cart which had been introduced to the baNgwato during the nineteenth century though contact with the Europeans, missionaries and traders. Wagon repair works were established in Serowe in 1911 and later in 1935. The Palapye - Serowe road was constructed by regimental labourers in 1925 for the visit of the Prince of Wales.

In 1941 another event took place which was to have an important effect upon Serowe. On January 1941 the Nature Recruiting Corporation (NRC) opened its office in Serowe and from that time baNgwato men from Serowe could be recruited for work in the mines in the known of Section Africa. Prior to this baNgwato had been contracted for minework from the NRC offices at Palapye. From 1941 the flow of baNgwato from Serowe to the mines was made easier.

In respect of baNgwato tribal matters the period was marked by many disputes and dynastic disturbances some of which have been discussed above. However, other events were of importance and are worth noting. In 1931 the Serowe dam was constructed by regimental labour. There had been earlier dams constructed on the R. Metsemaseu and in the Tswaneng Hills but there had fallen into disuse, in the former case because the dam had silted and there was a loss of water into the Cave Sandstone. In 1938 Tshekedi Kgama inaugurated the storing of grain for sale at low prices during periods of poor yields and high prices. The Tribal Granaries were filled with the produce of special fields which were cultivated by the ~~wards~~ and continued to be an important social facility until 1949 (Sebina, in Head 1981). Finally, by 1916 the supplies of surface water in Serowe had dried-up and the first wells were sunk.

In 1915, the Church of the London Missionary Society was opened. Throughout the period 1902-1947 the London Missionary Society was the only church which was permitted to preach in the baNgwato Reserve.

b1 1947-1972

This period marks the rapid expansion of Serowe following upon a decision by Tshekedi Kgama in kgolta in 1947 to allow wards to move away from the congested central area. The movement of wards commenced in 1947 soon after a borehole was sunk in the area which generally became known as New Town. Subsequently in 1951 a shop, a subsidiary of Watson's Store in the centre of Serowe, and a sub-post office were opened. No other post offices were opened throughout Serowe although the main Post Office did move into larger premises in 1967.

With regard to social services, the period saw considerable growth in education but only limited and hesitant expansion in medical care. For primary education New Town School was opened in 1953, and Riverside School in 1956 near to the prison to provide for the overflow of pupils from the Central and Western schools, the Tshekedi Memorial School in 1959 on the western side of Serowe close to the hospital, St Gabriel's in 1970 attached to the Roman Catholic Church and Mannonye School in 1971. Finally in 1972 a further primary school was opened to the east of the Simon Rratshosa School to relieve pressure upon the demand for school places in the southern part of Serowe. In addition, 1962 saw the opening of the Swaneng Hill school which was the only secondary school in Serowe upto 1972. This school is situated on the eastern edge of Serowe close to the Tswaneng Hill from which it takes its name. The school has attracted attention because of the original nature of its courses which combined academic and practical work. By 1972 however the character of the school had changed (Van Rensburg 1974) and it was indistinguishable from other secondary schools in Botswana. However, a parallel development initiated by the school for those who could not gain entry to secondary school gained strength. The pupils were enrolled in brigades and spent upto 80% of their time on practical work. A light textile Brigade was established immediately north of the dam and a retail cooperative was opened in 1965. By 1972 there were 11 brigades in operation in Serowe.

On the religious front, major developments took place once Tshekedi Kgama, Seretse Kgama and Rasebolai Kgamane (Acting Chief) decided in kgotla to allow churches of different denominations to open in the baNgwato Reserve provided the churches also established schools

and/or hospitals and clinics (Benson 1960). As already noted the Roman Catholic Church opened St Gabriels School, although not until 1970. None of the other churches had opened schools by 1972 and no clinics had been established either. However there had been a considerable proliferation of churches in Serowe during the period from 1956 to 1972 and in addition to the London Missionary Society (later renamed the United Congregationalist Church of Southern Africa, UCCSA) there were churches and meeting-places for the Roman Catholic, Anglican, Dutch Reformed, Seventh Day Adventists, Apostolic, Penticostal and Zionist faiths. A notable feature was also the growth and interest in Faith Healing Churches and the Ngwato Land Board (established under the Tribal Land Act, 1968) in 1972 received 117 applications from such organisations (Head 1981). All new religious buildings were sited close to the centre of Serowe and no new church was constructed on the periphery.

With regard to other services in Serowe, 1967 saw the opening of new, larger premises for the Post Office although no additional sub-offices were opened. Telegrams were delivered within only 5 kms of the Post Office and there was only one public call box in the centre of Serowe. However, the increase in the number of private and government telephone lines was such that a maintenance engineer was stationed at Serowe whereas previously all repairs had been undertaken from Palapye. Few changes however took place in medical services. Although the staff of the Sekgoma Memorial Hospital did commence the holding of clinics in many of the outlying villages, little change took place at the Hospital itself. The number of beds remained at 164 for Serowe and the surrounding area and there were only 2 doctors in residence at any time and more usually only 1 (Dr Moor, Oral

evidence). However, some tentative steps were taken to improve facilities at the clinics. The Tribal Maternity Clinic which was opened in 1949 was closed in 1950 (Bechuanaland Protectorate, Annual Report, 1950), and it was not until 1958 that a full-time welfare worker was appointed with funds from the Rowntree Fund (Ann Rep. 1959). At the same time a Health Centre was established under the leadership of Mrs Watts with £8,600 from Oxfam. In 1969 Marit Kromberg became the full-time administrator for maternity and child health services with particular interest in family planning. This initiative was supported by the International Planned Parenthood Federation (Kromberg in Head 1981).

On the social side, the period saw an increase in activities for all age ranges and the annual reports of the Bechuanaland Protectorate bear witness to this. For the young Scouts and Guide groups were formed (Vide Chiepe to the District Commissioner, 1953) and there was an active Red Cross Group. Indeed the District Commissioner in 1964 in considering the need for further groups decided against the establishment of a St Johns Ambulance Brigade since in his view it was not needed. (Annual Report 1964). The Annual Report of 1949 recorded the existence of a Rifle Club and a Recreation Club and the Bamangwato Agricultural Show, started in 1937 (Annual Report 1937) continued until 1965 when it lapsed due to the poor rains of that year. The focus for much activity in Serowe was the Social Centre which when combined with the Health Centre was renamed the Community Centre in 1964 under the chairmanship of Seretse Kgama. A small public library was provided at the Centre.

The period 1947 to 1972 was marked by a considerable increases in both transport and commerce. The records show a rapid increase in

road transport particularly during the late 1950's with traders' lorries providing passenger services to the larger villages throughout the baNgwato Reserve and beyond. Such was the increase in traffic that a 50 kph speed limit was introduced in 1961 (Annual Report 1961) and modern garages were opened in 1956 and 1960. Two further refuelling stations were opened along the Palapye road. Air transport also became marginally more important, the airstrip to the east (noted in the Annual Report 1954) being lengthened to 300 m in 1961 (Serowe Files C3/A) although there were no scheduled flights to Serowe upto 1972.

In commerce, the Serowe and District Chamber of Commerce, of which the African Authority was a member, was active and in 1956 the traders were able to obtain a minimum degree of security of tenure of one month. From 1948 stand rents were introduced at £15 per year and later increased to £30 in 1950 and £35 in 1958. The Licensing Board noted that in 1954-55 there were 15 stores in Serowe and refused an application on the grounds that there were already enough licences. However, new applications were approved in 1955 and 1957 and the 1972 list of traders is included in Appendix E. The increased number of visitors to Serowe led to the question of the need for a hotel but in 1951 the baNgwato in kgolta decided against a hotel and it was not until 1965 that Serowe Hotel was constructed close to Serowe dam. From 1959 Barclays Bank and later in 1960 the Standard Bank commenced mobile operations on Fridays from 0900-1200 (Annual Report 1960). Later this was increased to Mondays, Wednesdays and Fridays from 0830 to 1100 and finally both banks opened permanent establishments offering full-time services in 1967.

The period 1947-72 saw the physical spread of the settlement and the gradual development of its commercial and social life. However, most of the development that did take place was located in the centre of Serowe. Few shops of any size were opened away from the centre and most of the social events were concentrated also at the centre. From an administrative point of view Serowe was served by the District Commissioners Office, which included the Police Office and court located at the new Camp area in 1940 in the west of Serowe. In 1966 the Bamangwato Tribal Administration became the Central District Council as a result of the introduction of new local government organisations. Serowe was divided into 4 geographical zones, i.e. north and south of the main Serowe - Palapye Road and East and West of Serowe Hill. These local government areas bare no relation to the existing sections as outlined above and by 1972 had contributed little to the organisation and development of Serowe.

CHAPTER VIIISEROWE IN 19721. The Settlement as a whole

The exceptional nature of the settlement at Serowe has been demonstrated above and it is in complete contrast to settlements in other areas such as among the baKalaka in the northern portion of the baNgwato reserve. The baKalaka pattern of settlements approximate more closely to pre-European patterns in Africa south of the Sahara as noted by Mallows (1963). Whilst confirming great variations in size Mallows noted that settlements were generally smaller comprising some 50-100 households on average. These small settlements were dispersed over the countryside in order to stop overgrazing. Moreover the incidence of areas of open land between the settlements permitted the cultivation of plots of land and the close proximity of these plots reduced the time taken by the women in travelling to and from the home. Kay (1964) noted a similar relationship between homestead and cultivated areas among the Ushi of N. Rhodesia. This diffuse pattern of settlement, cultivation and grazing is without comparison in the Serowe area and the relative isolation of agricultural activities from the main settlement is a dominant feature of the economy which will be fully explored when dealing with peri-urban factors.

Serowe may be said to have some affinity with the cities of Latin America as described by Violich (1944). The siting and structure of Cuzco, under the leadership of King Manco Copac, was dominated by the Inca view of the world. The city was divided into four sections

representing the subdivisions of the Empire and the suburbs were divided by the four main roads of the city which extended to the limited of Inca domination :

In each section of the city lived the people of the race of the corresponding quadrant and the title of the Inca 'Tahuantisuya' or 'Lord of the Four Corners of the Earth' carried out this same concept. (p. 23).

Within the section each block belonged to one family, its distance from the centre reflecting its relationship to the Inca ruler. Each block contained only one opening in the wall surrounding it, indicating that life turned inward to the family unit. Whilst Serowe was not developed from a cosmogonic plan, it did nevertheless have a structure which represented the order and organisation that mirrored the hierarchies within baNgwato society. With an established nucleus, a sense of civic form and a history that could be said to have clothed the organisation of wards with dignity, Serowe clearly has an inheritance that has moulded its pattern of growth and which is still of significance. The development of Serowe has been shown above and the role of the wards and sections has been outlined. This social infrastructure provided a basis for the collection and dissemination of information and provided a framework for the efficient regulation for the minutiae of tribal and traditional life.

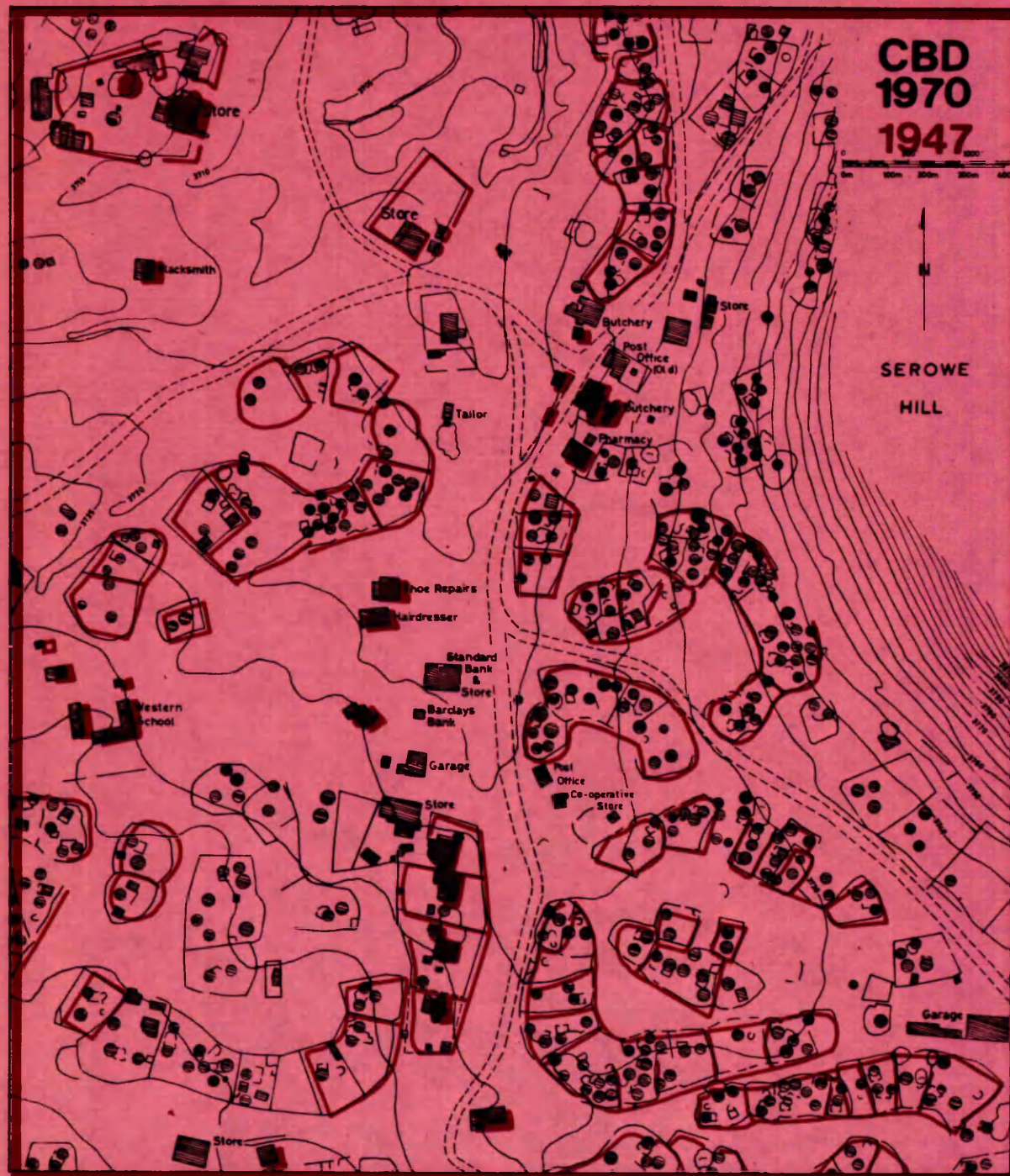
Whilst the range of functions performed by the central government through its administrative and departmental offices has increased over the years, the established tribal courts based on the ward, still provided in 1972 in many instances the only opportunity for redress and remedy. It is clear from the Distribution of Wards 1970 Map 5, that the mingling of wards already demonstrated by Schapera in 1940 had continued and the clear-cut divisions of the early settlement no longer apply. Yet despite the apparent difficulties of administering a widely scattered populace the section still retained its value. This requires

explanation. It is useful to remember that the occasions on which a section would be called together would be rare and a meeting of all ward heads in a section would only be called to deal with matters of great importance. The original function of the sections, to look after the chief's cattle and support the chief in the defence of his chieftainship, have fallen into disuse, but the section, however, still provides the last resort before the chief's kgotla, for the settlement of disputes between individuals, families or wards within a section. Further, the section can and does act as a clearing house for information from the chief and the section head would superintend the execution of orders from the chief. Thus in 1972 when the chief instructed the householders to clean-up their yards and trim their hedges, it was in fact the section heads who through the ward headmen made sure that the work was carried out. Similarly the section head acts as a focus for opinion within his section. Acting through the headmen, the section head is able to obtain the reaction of the people to proposals under consideration by the chief and more rarely to receive suggestions for laws and regulations.

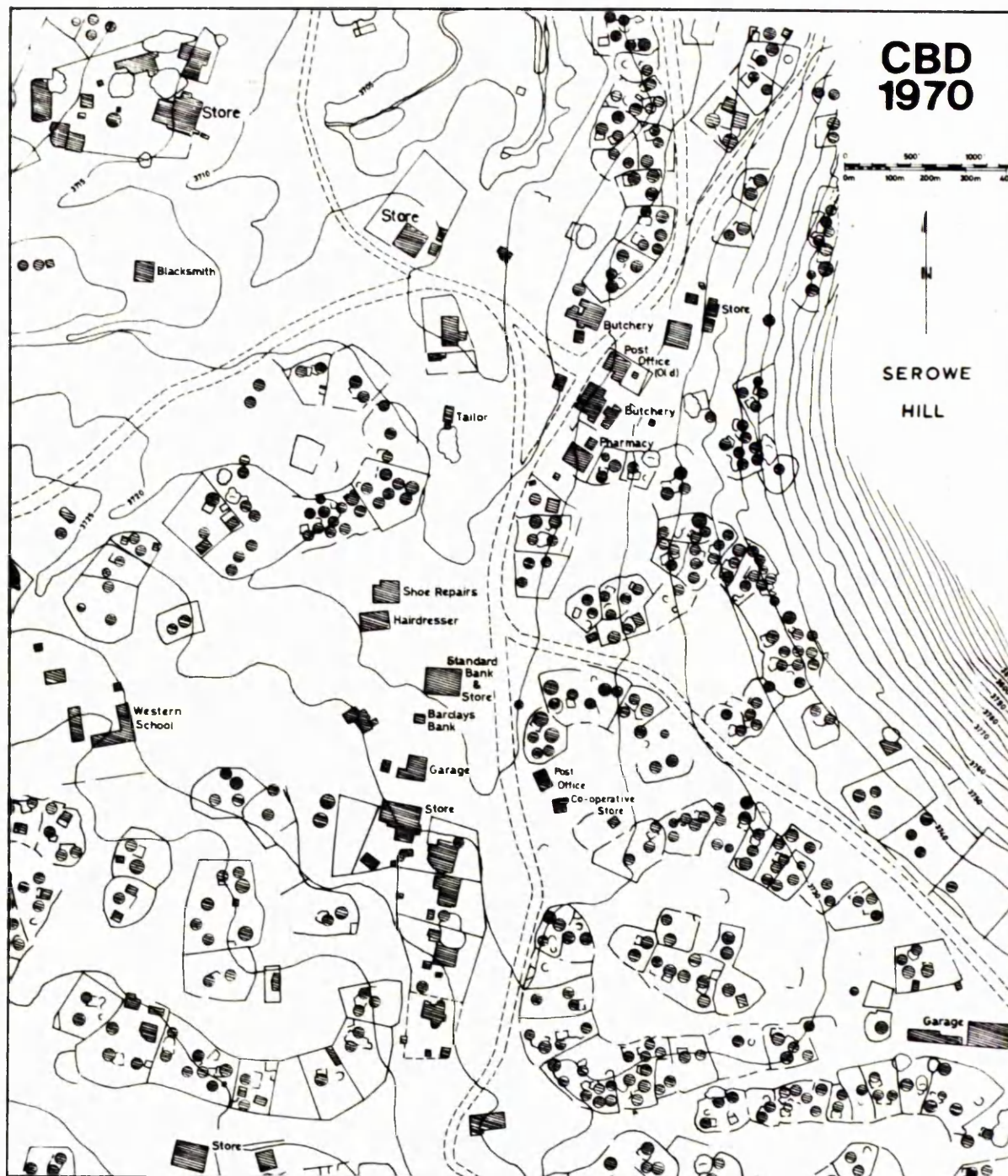
2. The distribution of services

a) The Emergence of Service Centres

A Central concentrated Business District (CBD) emerged in Serowe immediately to the west of Serowe Hill in an area designated by Chief Kgama III and is shown on Map 13. This area was considered too poor for housing development. It was also away from the chief's kgotla. The individual development of buildings was undertaken without relation to other buildings and little pattern existed until recent times. The shops were constructed near to a shallow stream and in 1972 formed discernible broken lines either side of a thoroughfare some 100 metres long. In addition, other shops were found immediately to the west of the central area (Watson's Store), to the east of Serowe Hill (East End



MAP 13: CENTRAL BUSINESS DISTRICT



MAP 13: CENTRAL BUSINESS DISTRICT

Store) and to the south east of the kgotla (Smit's and Palmer's Stores). All of these establishments were within 400 m of the kgotla and there were no additional outlying businesses. The overlay for Map 13 shows the buildings in existence in 1947 taken from aerial photographs. The overlay and map show that from 1947 to 1970 there had been little change in the CBD with only a few buildings having been added. It was not until the 1973-78 National Development Plan PT III (Ministry of Finance and Local Govt., 1973) that plans were suggested for the establishment of a shopping mall in the CBD to encourage shopping and to provide facilities for entertainment. This area was included in plan PW 41 to be provided with bitumen roads as part of a scheme to improve roads in the centre of Serowe. Thus the centralised nature of the retail life of Serowe had been perpetuated and whilst some businesses were created in the outlying areas these were relatively few. The paucity of peripheral development is noteworthy and requires further explanation.

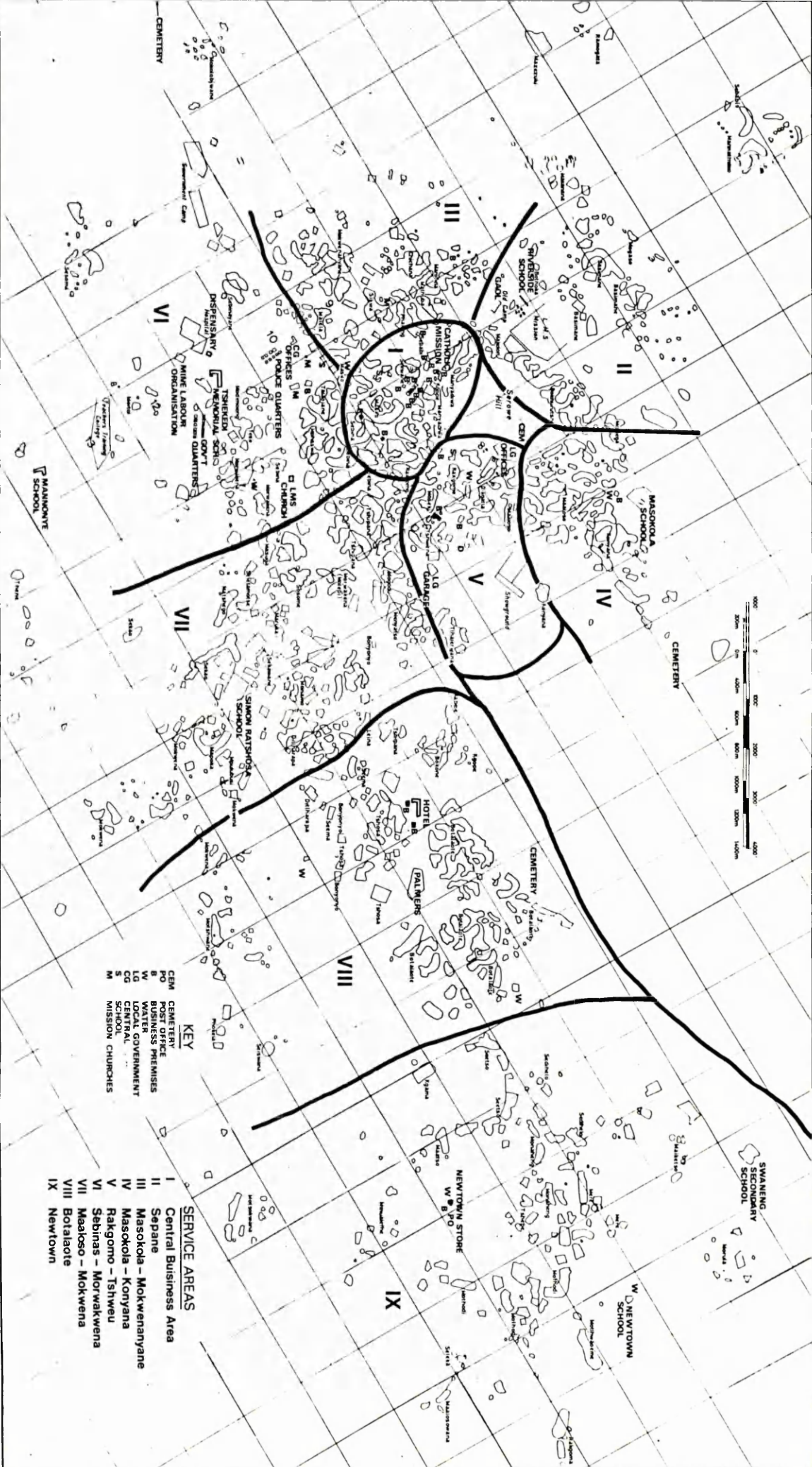
With a registered de jure population of over 45000 spread over 18-19 sq kms and with a distance of some 6-7 kms from Serowe Hill to the centre of New Town a more extensive proliferation of retail organisations could have been expected. Yet again the demands of the populace traditionally have been relatively few and simple being limited to the bulk purchase of mealie meal, the staple diet, and, more frequently, the purchase of sugar, salt, matches and kerosene. This obviated the need for very frequent shopping expeditions. Moreover the long period of absences from Serowe for many reduced the time spent on purchasing to a very low figure. These factors might account for the limited development of retailing outlets. However if an explanation is required for the concentration of the outlets an alternative more psychological one may be appropriate. The baTswana retain a very strong regard and respect for the traditional seats of authority

and the relationship of individuals and wards to the chief, both ethnically and geographically are basic determinants of status. Whilst the overcrowding at the centre required the unprecedented removal of wards to the open areas to the east, it did not follow that the links, both sentimental and real, between the centre and the periphery were broken. Thus a shopping expedition to the centre had associated with it the additional satisfaction of being near to the seat of power for at least a short period. Thus shopkeepers in the central area often recorded sales to people from the outer area of Serowe of items that could have been bought at similar prices in branches close to their homes (Personal communication). No doubt the hope of obtaining a bargain in the centre, where more competitive prices might be anticipated, played some part in decision-making. The CBD also provided a meeting place for friends from all parts of Serowe and a source of information, written and oral, of what had happened or was projected. Thus a visit to the centre of Serowe was a regular, and perhaps necessary part of the life of the residents. It is significant that despite the obvious disadvantages and delays that are likely to follow from it, there was still in 1972 only one major post office, located in the CBD with a sub-post office in New Town. Parcels had to be collected from the centre and this may have been of some importance since many of the people purchased clothes through mail order systems. There was only one public call box which was located in the centre of Serowe at the Post Office. However, this centrilocal force must be placed in its contemporary context and not over sentimentalised. With the gradual decline of tribal authority, centralising agents must decline and in time decentralising agents may prove of greater potential. It is contended here that by 1972

these agents had started to exert their influence on the structure and cohesion of the settlement.

Notwithstanding the foregoing it is suggested that service areas can be delimited in Serowe and these are shown on Map 14. It is a matter of considerable regret that an attempt could not be made to quantify the criteria for the delimitation of the service areas. Thus the boundaries are to a great extent arbitrary and subjective being based on observation and verbal testimony of residents and shopkeepers in Serowe. Against a background of diverse ethnic and ward affiliations, service areas in Serowe appear to have little uniformity. An examination of the distribution of primary schools provides little correlation and with less than 50% of the children of school-going age in primary schools in 1972, there seemed little point in using the schools as indicators of service areas. Attempts by the Central District Council Education Committee to define catchment areas for individual schools had been only partially successful and the location of new schools in the late 1960's and early 1970's had more to do with meeting the immediate needs of over-crowding than a desire to contribute to any plan for the orderly expansion of Serowe as a whole.

A further factor in the identification of service centres is the provision of health services. With the Sekgoma Memorial Hospital on the western side of Serowe on slightly higher ground where good supplies of water could be obtained, the major medical facility of Serowe was situated at some distance from the majority of the population. It is noteworthy perhaps that this area was considered too remote in 1963 for the construction of the secondary school (Serowe Files E 23) which was eventually located on the eastern



edge of Serowe at Tswaneng. The only other dispensary was located in close proximity to the hospital. The Health Centre was located more centrally in the Community Centre but only in the early 1970's was an attempt made to open a second clinic in New Town. The Medical Department of the Government of Botswana provided an ambulance service within Serowe but at a cost of R0.05 cts per kilometre this represented a major cost to many people living in Serowe. Registered witchdoctors and herbalists were available throughout the whole of Serowe and provided an alternative service to that provided by government. The continued importance of traditional medicine is indicated by the large number of registered doctors listed in Appendix F.

The religious orders in Serowe also offered little help in the identification of service areas. The United Congregation Church of South Africa (UCCSA), formerly the London Missionary Society, (LMS) provided another example of the lack of response to the expansion of Serowe to the east. Built on the southern boundary of Serowe and completed in 1915, the UCCSA church was fortunately placed to serve the spiritual needs of those living in the expanding portion of Serowe. With the restricted northern and western developments of Serowe, the UCCSA was able to maintain to some extent its dominant position although its pre-eminence was challenged progressively by the increasing number of religious communities in Serowe. The UCCSA however made no attempt to establish an off-shoot in the eastern section of Serowe and some observers claimed that UCCSA support in New Town was considerably lower than in other parts of the settlement (Head 1981). Being some 6-7 kms from the centre of New Town and with access being mainly on foot, a low attendance of New Town residents at UCCSA services is understandable. In like manner, the

Roman Catholic Church, established in 1956 in central Serowe immediately west of the Central Business District, also showed no inclination to decentralise. These churches were chosen for consideration because both had resident ministers and substantial congregations. Because of the centralised nature of these two religious organisations it was felt inappropriate to use religious provision as an indicator of service areas. This conclusion was reached despite the proliferation, as indicated in Appendix G, of religious groups throughout Serowe. No evidence could be collected that suggested that the establishment of religious groups could be correlated with physical or ethnic boundaries. As such, therefore the location of religious meeting places was considered to be coincidental to the existence of any service areas which might be delineated.

The Botswana Government offices, the Magistrate Court and the Police office were all located on the western fringe of Serowe. The Government administration had been removed from a central position to the west of Serowe Hill in 1940 to its present site, the stables of the original offices being converted into a prison capable of holding 20 prisoners at a time. The administration of the Central District Council was located at the chief's kgotla at the base of Serowe Hill and shared the accommodation originally provided for the Tribal Administration. Despite the obvious continuing inconvenience for many residents of the location of those administrative organisations, no attempt had been made nor was projected in 1972 to establish branch offices in the west or south of Serowe. Again, these organisations had to be discarded for the purposes of criteria for service areas.

A further indicator of zones or areas in Serowe might have been the placement and use of cemeteries. In 1972 there were three public

cemeteries in Serowe, the main one being immediately above the Kalahari escarpment. A second cemetery was found to the west of the Batalaote Hills and a third in the area of Masokola to the east of Serowe Hill. Broadly speaking, the Batalaote and Masokola cemeteries were used by the wards close by whilst the cemetery to the west was in more general use. A Royal Cemetery situated on the eastern end of Serowe Hill is reserved entirely for the ruling house. The use of data of the number of burials in the cemeteries presents difficulties. Despite oral evidence (Father Docherty) that when deaths occur at the lands or cattleposts the body is brought into Serowe for burial and hence all deaths of Serowe residents should result in burial in Serowe, it proved impossible to correlate deaths and burials. Without the need to register deaths, gaining an accurate measure of the number of deaths was impossible. Oral evidence suggested that not all were buried in the official cemeteries in Serowe and many interments may have taken place in the hut or yard of the deceased. This may have been the case in some ethnic groups especially in the case of the burial of a young child. This practice was a carry-over from earlier concern over the potential robbing and dismemberment of the body for use in magic to increase the fertility of fields and cattle. The body once buried in the hut would be difficult to locate, the floor of the hut being freshly smeared with cow dung as soon as the burial was completed. The hut would continue to be used and the interment had no influence on the future geographical mobility of the homesteads. In 1972 Serowe was gazetted as an area for the compulsory registration of births and deaths and no doubt future research will be able to draw upon the new information that will become available.

Dewey (1964) considered the concept of a service area embodied the need to reduce undue expenditure of time and energy. Clearly parallels with service areas in western settlements with schools, shopping complexes and government branch offices including post offices, et al cannot be applied to Serowe. The most important criterion in Serowe is water and the prime consideration used in the drawing of boundaries between the service areas was that of equal distances between public water supplies. This however was fraught with difficulties since water itself is highly variable in both supply and quality. The breakdown of supplies at one point may require the carriage of water over some considerable distances for a long period of time. With a low level of technical expertise and the vagaries of supplies of essential spare parts, any item of equipment might be out of commission for long periods. This applied in particular to borehole equipment which was subject to heavy usage. Moreover the assessment of the quality of water is subjective and supplies at one point may be rejected by individuals and cases were recorded of individuals walking distances of up to 3 kms beyond the nearest watering point in order to obtain supplies which were considered to be more acceptable. Attempts by the Central District Council to allocate households to particular waterpoints proved only partially successful.

On the assumption that residents do use the small shops far away from the centre of Serowe for small-scale routine purchases and for urgent needs, these retail outlets were accepted as evidence of the existence of a service area, no matter how embryonic. Where a public water supply and a shop could be noted to be in close proximity it was felt that a service area could be defined. In large measure, the work of the self-employed person while in Serowe (and this in itself

represents a low percentage of the year) would be concerned with the running of a home demanding the essentials of water and food supplies. It is upon these dual criteria of the availability of water and shops that the service areas have been defined. It must be noted however that the service areas delimited have no relationship to employment opportunities. The numbers of residents of Serowe who worked for cash were limited and the vast majority of Serowe residents were self-employed as subsistence farmers. Few factories or workshops employing baTswana existed and in the choice of location for a factory the supply of water and land have been of greater importance than the proximity to a potential labour force.

b) Service Centres

i) The Central Business District

Located immediately to the west of Serowe Hill this service area contained the majority of businesses and had the parent companies of branches serving the periphery. Few retail organisations provided delivery services and the majority were general dealers who stocked a considerable range of goods and often possessed also an arms and ammunition licence. In this area are also the Post Office, the representatives of the Standard and Barclays Banks and the two garages in Serowe that undertake repairs. This is an old established service area and it is to this portion that most of the people look for bulk supplies, agricultural equipment and a range of facilities provided by butcheries, a pharmacy, a hair-dresser, a tailor, a cooperative retail marketing organisation and a wagon repair and blacksmiths shop. Within this area are three primary schools and two of the more important boreholes in Serowe.

ii) The Sepane Area

This area lay to the north of Serowe Hill between the Hill itself and the Metsemasweu river. Within this area lay the UCCSA mission which nestles immediately below the rock outcrop, Thataganyane. The mission also houses a church hall used from time to time for a variety of functions such as church meetings, scouts and guides. The Sepane area also had the gaol and a primary school (Riverside). It was serviced also by a branch of Watson's Store. Water supplies in this area are generally poor and wells and boreholes have proved to be low-yielding or blank. Very limited supplies of water were available from the sands of the rivers Sepane and Metsemasweu.

iii) Marobela-Mokwenanyane

This area lay to the west of Serowe hill immediately adjacent to the Central Business District. The area offered few amenities there being no shops or schools located there. However the Central Business District nearby supplied the needs of the residents. A part of this area was originally designated for settlement by people of Euro-African descent and it was here also that the Dutch Reformed Church was located. On the western periphery lay the Serowe Tennis Club and several large households occupied by European traders of long standing. Very little expansion of settlement had taken place in this area and little was anticipated owing to the nature of the terrain which in places was deeply eroded.

iv) Masokola-Konyana

This area lay immediately to the east of Serowe hill and to the

north of the Masokola hills which form part of the arcuate fault from Tswaneng through Serowe hill. The area was serviced by one store (East End Store), a school (Masokola School) and by two significant boreholes. This was one of the earliest areas of occupation of Serowe but in size the area of settlement has increased but little. Hedged in by montmerillonite on the south-east and deep sand to the north-east and with poor water potential north of the Masokola hills the area had had limited opportunities and it was from this area that many wards have migrated. The area contained one of the cemeteries of Serowe.

v) Rakgomo-Tshweu

This area lay immediately to the south east of the chief's kgotla which for convenience is included in it. The area was small in size and crowded. It was one of the earlier areas of settlement in Serowe and like the Masokola-Konyana area had been subject to loss through the migration of wards. The area was serviced by boreholes the most important of which, Tsiledikae, was located near to the kgotla. The Central School was the oldest school in Serowe and the area had a number of shops, the most noteworthy being B.P. Trading the original structure having been erected in 1902.

vi) Sebinas-Morwakena

This area marked the transition from the crowded inner portion of the town to the more open, more thinly populated portions to the south and east. Lying immediately to the south west of the Central Business District, Sebinas-Morwakena called upon the Central area for

many of its needs. It was however serviced by its own water supply at Mokobaesi and by Steinberg's store. It had two schools widely separated from one another. The Tshekedi Memorial School close to the hospital was well situated to serve the needs of Sebinas, Teko, Sebinyane and other wards. The second school, Mannonye, was situated south of the Teachers Training College and used by the College for teaching practice by the teachers in training. The Sebinas-Morwakena area housed most of the government services in Serowe including the District Commissioners office, the Magistrates Court, the local offices of the Ministry of Education and Agriculture. It also housed the central Police station and there were quarters for the police, government officials and the staff of the Teachers Training College.

vii) Maaloso-Mokwena

This area lay to the south east of Rakgomo-Tshweu and to the east of Sebinas-Morwakwena. It was amply supplied with water. There were a number of small stores and two schools, the more important being the Simon Rratshosa. It was in this area that plans were made at one time to establish a government secondary school. However, the establishment of a privately-funded secondary school further to the east caused the Mokwena plans to be held over. It will have been noted that Mokwena ward was one of the first to move from the centre to its southerly position.

viii) Batalaote

This was a very diffuse area and little cohesion could be expected

between the settlements of Batalaote north of the main Palapye road and those to the south of it: the area could be subdivided with good reason. However in view of the highly subjective nature of the divisions attempted so far, further subdivisions might be untenable. The area was amply supplied with water from boreholes and there was a number of small stores and restaurants. In addition, the Serowe Hotel was constructed in 1966 immediately opposite to the entrance to the Batalaote ward. The northern boundary of this area was marked by the Batalaote hills and the Batalaote cemetery on the western side of those hills.

ix) New Town

This area was the most diffusely populated area of Serowe and the settlement dates from the late 1940's. Served by one borehole, a school (New Town school) and a shop with the only sub-post office in Serowe, the area may truly be said to possess some nodality. The area is bounded on the north by the Tswaneng Hills, below which were situated the Swaneng Hill Secondary School and several large households. These buildings lay between the Tswaneng Hills and the main Palapye road and again a sub-division could be made between the areas north and south of the road. Along the road some industrial development had taken place with the Ngwato Industrial Development Company. A petrol filling station was also opened. On the extreme east of the New Town area was the airstrip. This was the second airstrip for Serowe, the original strip, then disused, having being located to the west of the town on the Kalahari escarpment.

What is accepted is that this division of Serowe into 9 service areas is largely arbitrary and subjective. However it is felt that

the divisions do have some significance in analysing the structure of Serowe. Greater emphasis however may be placed on a consideration of the future function of these service areas in the future development of the settlement as a whole.

3. Water Supply

From the foregoing the importance of water has been demonstrated and it has been shown in Chapter VI that the direction of growth of the town has been dominated by the availability of a reliable and plentiful supply of water. Concern was expressed in the Annual Report for the Bechuanaland Protectorate in 1954 over the supply of water for Serowe. Investigations carried out later by the Department of Geological Survey between 1965-69 showed that 50 good yielding boreholes in Serowe had been drilled without regard to an even distribution or to obtain maximum development of the Cave Sandstone aquifer. An example of the haphazard and uncontrolled development of groundwater supplies has occurred in the New Town area where there are now 14 boreholes within an area of approx. 2.5 square kms. Jennings (1966) showed that the combined total yield of all the government boreholes was 42,570 gallons per hour while the estimated yield of private boreholes was 13,000 gallons per hour. Whilst expressing reservations on the reliability of supplies pending a thorough investigation of rest levels under sustained pumping, Jennings concluded that the approx. safe yield (2/3 of the tested yield for a 10 hour pumping day) of 283,800 gallons per day of government boreholes or a combined safe yield of 370,500 gallons per day or 11,115,000 gallons per month (7.5 mill gallons from government) could be expected. The estimated monthly consumption of water in Serowe is summarised in

Table 22 and Jennings concluded that an average consumption of 3,700,000 gallons with a maximum of 6 million gallons would be appropriate. After making due allowance for the demands for new facilities (e.g. Constructing the New Palapye - Serowe road, NIDCO) developed since Jennings' estimates were made, a total estimated consumption in 1972 would be 6 million gallons per month. This was still well within the safe yield of government supplies and it is probable that Jennings' assurances, which confirmed earlier conclusions by C. Boocock, Director of Geological Survey, Bechuanaland that Serowe water supplies would be adequate for at least 10 years, were justified.

However, it is interesting to note that 73% of the water was consumed by 3% of the population (Jennings 1966). This 3% (government and council officials, teachers, schools, traders etc.) all had a considerably higher standard of living than the general populace and had a far greater per capita consumption of water. Should the average standard of living rise to that of the present 3% higher water-usage bracket, then it could be confidently expected that ground water supplies would be overtaxed and hence Serowe would probably require an additional source of surface water. On an assumption that the average monthly consumption from public boreholes was 1,500,000 gallons, the average monthly consumption per person can be calculated. With a population of 45,000 the average monthly usage would be 33 gallons or approx. 1 gallon per day. If the de facto population of 15935 of August 1971 is accepted the approx. daily consumption would have been approx. 3 gallons. However if an average population is accepted and by general consensus of opinion some 20,000 people are thought to be in Serowe at any one time, monthly and daily figures of 75 gallons and

TABLE 22 Estimated monthly consumption of water in Serowe
in gallons in 1966

	<u>Average</u>	<u>Max. consumption</u>
Tribal Boreholes	1,017,000	1,250,000
Government Camp	473,000	640,000
Hospital	472,000	504,000
Teachers Training College	599,000	641,000
Swaneng Hill School	108,000	216,000
N.I.D.C.O. Factory	105,000	150,000
Private Boreholes (estimated)	400,000	500,000
Unmetered tribal boreholes (estimated)	501,000	750,000
Serowe Hotel (estimated)	100,000	150,000
Present average consumption	3,775,000	
Present maximum consumption		4,801,000

Meter readings on tribal boreholes 1966

<u>Name</u>	<u>Average monthly water pumped</u>
Newtown	53,542
Botalaote	63,300
Ratshosa	57,700
Borehole 3	113,000
" 2	296,000
" 1	79,700
Palamaokwe	234,000
Mooketse	120,000
Total Average monthly consumption	1,017,200

Tribal boreholes used but not metered 1966

	<u>Estimated monthly water pumped</u>
Near T.T.C.	127,000
Mokwena	127,000
Konyana	127,000
Metsemasweu	60,000
Ramesamu	60,000
Estimated total monthly av.	501,000

Source: Jennings CM4 (1966) Serowe Water Supply

Unpublished Paper, Geological Survey of
Botswana

2.5 gallons respectively are indicated.*

Clearly there was no shortage of water in Serowe. The cause of short supplies in various parts of the town was the result of inadequate or non-existent reticulation systems. Supply tanks were located at the Kgama Memorial School and at the District Commissioners office and fed reticulation services. Further pipes were used in the area of Sebinas. Yet reticulation in 1972 was in its infancy. The dynamic effect of a rationalisation of the supply of water, through reticulation, upon the future development of Serowe could be dramatic and lead to a total reassessment of the potential for development.

4. Licenses

a) Trading and Services

In Appendix E the licences for Serowe are listed according to type and Appendix F provides a list of licence holders by category, 1966. Appendix G lists all services and licence holders noted in the 1971 Census.

It must not be assumed from the total of licences for 1966 (Appendix E) that 129 separate establishments could be identified. It was common practice for a trader to hold a number of licences and use the same premises for all his transactions. Thus Woodford, although using two premises, offered a similar range of goods at each store and held licences as a General Dealer and for the sale of arms and ammunition.

* These figures do not appear to be unrealistic and compare favourably with 18 gallons per capita, 21 gallons in 1945 in Lagos, 30 gallons in 1955 in Dakar, 21 gallons in Conakry in 1956, 13 gallons in Abjidan and 12 gallons in Bamako. (ECA 1962).

Similarly Steinberg conducting business through Serowe Trading Stores Nos. 1 and 2 held licences as a General Dealer, an Insurance Agent, a Buyer of Livestock, an agent for the sales of livestock and a dealer in Green Hides. It was not surprising therefore to find that much of the trade of Serowe was confined to a relatively small group of businesses. The businesses of B.W. Woodford, G. Watson, B. Steinberg, C. Blackbeard, Y. Theron, B.P. Trading and Palmer provided the majority of the services of Serowe and between them held 39 licences or 30%. The majority of these establishments were based upon the original licences granted by Kgama III and occupied buildings which represented a considerable investment in capital.

With certain exceptions such as the garages and the banks the remaining licences required very modest or low scale investment of capital. The restaurants, butcheries and bakeries which comprised 28 licences or 21.7% were subject to control by the government Health Inspector and the Health Regulations required minimal standards of lighting, ventilation and hygiene to be maintained. Moreover the butcheries were usually required to have cold rooms for storage. Yet many of these establishments provided a low range of limited services.

The hammer mills were spread throughout the town providing localised services for the crushing of grain. The mill was usually housed in a specially constructed building capable of withstanding the continuous movement of the mill. The blacksmith shops were close to the centre of the town and the value of the business depended as much upon the expertise of the blacksmith as upon the provision of equipment and buildings.

For the most part, the remaining licences depended upon the general acceptance of the competence of the licence holder and upon the continued demand for their services. In this group may be placed the thatcher, the shoemaker or repairer, the tailor, the basket maker, the carpenter and the tribal doctor. Usually operating from his/her own house or in some cases e.g. the shoemaker or tailor, from a separate building usually of mud and thatch (or with a corrugated roof), this class of entrepreneur required little or no investment. The tribal doctors who were witch doctors or more usually herbalists, should not be confused with the medical services provided by the State. The adherence to traditional medical remedies was a feature of most settlements of Botswana and it is noteworthy that the 12 licences for Serowe represent 9.3% of the total.

b) Miscellaneous licences and non-licence holders

The Serowe Hotel was an off shoot of the Chase-Me-Inn at Mahalapye and was opened in 1966. Its placement away from the congested area near to Serowe Hill was significant, its position being approximately central to the entire settlement. It was located on the main Palapye road and in an open part of the town immediately opposite the open, undeveloped area to the west of the Batalaote hills.

The licence for the labour agency was first granted to the Native Recruitment Corporation (NRC) in 1941. The name was changed to Mine Labour Organisation (MLO) and was managed from the Palapye office. The agency acted as a recruiting and repatriation centre for mine workers and provided a collecting point for recruits from villages to the north and west of Serowe.

Certain important trading activities were exempt from licence requirements. The Serowe Cooperative was opened in 1966 as a retailing organisation and as an off-shoot of the Swaneng Hill Secondary School group of enterprises. Further to the north west of Serowe Hill on the banks of the Metsemasweu river was a settlement of Mashona who are Seventh Day Adventists and who specialised in craft work, basically carpentry and tinsmithing. The products of this highly organised community were sold in Serowe and at stations along the railway line. The Mazezulu settled in Serowe in 1954 and had no right to land for ploughing or grazing. They took no part in the government of Serowe and whilst their children were eligible for school places few Mazezulu children remained at school for long, their services being required in the retailing of the community's products.

The absence of liquor licences except for the Hotel may be explained by the high value placed on home brewed beverages, or their equivalent Chibukoo, manufactured at Francistown. The brewing of sorghum beer is part of the family ritual and the operation of illegal beer shops marketing sorghum beer is a regular feature of social and economic life of Serowe.

c) Vehicle Licences

In 1966, 191 vehicle licences were issued for Serowe residents. These are listed in Appendix E. Of these, 28 were for tractors and 17 for trailers, a total of 45 or 23.5%. However, when it is noted that a further 93 licences (48.6) were issued for trucks, vanettes, pick ups, jeeps and a ranch wagon, a clearer picture of the type of vehicle most commonly used can be seen. There was a very high incidence of vehicles with over 1 ton capacity and a high dependence

on vehicles suited to the rigorous demands of the roads of the area. There was a low incidence of light weight vehicles, 48 licences or 25.1%. Until 1971 there was no regular bus service between Palapye and Serowe but goods and passengers were carried by the traders when collecting merchandise. There was no municipal bus service in Serowe, but as Table 23 shows there were a number of traders who provided regular services to nearby settlements.

TABLE 23

Traders operating goods and passenger services,
showing the date of commencement and settlements
served

<u>Date</u>	<u>Contractor</u>	<u>Destination</u>
1956	Modise	Seruli
1956	Kebailele	Mabeleapudi
1958	Gaylord	Francistown
1959	Ndaba	Mahalapye
1959	Maphanyane	Palapye
1961	Muir	Khumaga
1963	Watson	Mahalapye
1963	Wright	Rakops
1963	Walebowa	Palapye
1964	Fane	Mashoro

Source: District Commissioner Files (1966).

The organisation of trading in Serowe was controlled by the Licensing Committee of the Central District Council, liquor licences being issued by the Magistrate. There was a Chamber of Commerce.

5. Social provision in Serowe

Little attempt was made to provide entertainment in Serowe, except at the Community Centre which provided a meeting place for local and national organisations such as the Red Cross, Botswana Council of Women, the Botswana Democratic Party and the Youth Club. In addition the Community Centre also housed a branch of the National Library and a Health Clinic which provided a child welfare service and advice to mothers. Film shows were given in the Community Centre hall. A full list of activities for Serowe is given in Appendix G.

The Bamangwato Agricultural Show was a major event in the year. Started before the Second World War, the Show lapsed until 1961 when a new constitution was adopted. The Show was held annually except during the very severe droughts of 1962 and 65. The principal objects of the Show were to promote interest and activity in agricultural matters and to stimulate and encourage progressive farming methods and techniques among farmers. In 1966 a new large, attractive and permanent showground was enclosed on the montmerillonite area to the east of Serowe hill. The Show was one of a series that formed a coordinated programme held throughout Botswana during the winter season. The interest in agriculture was also evident from the existence of a 4B club in Serowe.

6. Peri-Urban Influences

a) Arable farming

It may be perhaps incorrect to discuss the relationship between Serowe and its environs under the title of "peri-urban influence".

It would be correct to recognise that there exists around Serowe a noticeable belt of countryside in which little or no farming activity is to be found. Apart from minor areas of cultivated land on the western extremity of the town there is a noteworthy break between the town and the onset of large-scale arable farming. Generally, apart from periodic visits to the town, the cattle and small stock are kept further away from Serowe in order to reduce the demands upon water supply and to prevent serious denudation of the vegetation. Considerable concern over soil erosion in parts of the town has encouraged the authorities to take a serious view over the loss of topsoil and to restrict access to the town for animals. The area around Serowe is looked upon as a useful source of supply of firewood and much of the tree cover has been removed allowing a secondary regeneration of thorn bush.

Agriculture is of great importance in the economy of the residents of Serowe. No precise figures are available for Serowe but national figures may to some extent be used as a proxy. The 1946 Census (Bechuanaland Govt. 1946) showed that 83% of the active labour force was engaged in peasant agriculture (Table 24) and that for the baNgwato reserve there was a slightly higher figure of 84.4%. In 1964 (Bechuanaland Govt. 1964) and 1971 (Crone, 72) the national figures were 90.8% and 86% respectively and for 1964 the baNgwato figure was 94%. No figures are available for 1971. The results of the house-to-house survey conducted for this dissertation also demonstrated the stress on agriculture and despite duplications which arise because many baNgwato engage in both agriculture and paid employment, the survey figures do have validity. Of the 1956 households surveyed

TABLE 24

Labour and Employment, 1946

	Bechuanaland Protectorate		baNgwato Reserve	
	<u>Total</u>	<u>%</u>	<u>Total</u>	<u>%</u>
Peasants	215014	83	72832	84.4
Labourers, Farm.	2010	0.7	143	0.1
Mine	4727	1.8	835	1.0
Other	2889	1.2	314	0.3
Domestic servants	1018	0.4	62	0.08
Teachers	351	0.1	113	0.09
Ministers & Preachers	61	0.02	15	0.02
Clerks	171	0.06	29	0.04
Carpenters	87	0.03	29	0.04
Bricklayers	95	0.04	20	0.02
Mechanics	36	0.01	12	0.01
Housewives	4819	1.92	258	0.30
Others	3426	1.3	1075	1.3
Scholars (over 10 years)	16366	6.4	6554	7.6
Head boy	181	0.07	5	0.00
Police boy	153	0.05	1	0.00
Drivers, vehicle	67	0.02	---	---
Unspecified	7341	2.88	4041	4.7
Totals		100	86332	100

Source: Bechuanaland Protectorate (1946): Census

NOTE The Census report Table IV (J): Occupations-Africans included children below the age of 10. These have been excluded from the above table to provide a basis of comparison with the 1964 and 1971 Census figures.

in 1965, 1416 (72,5%) stated they had both fields to cultivate (lands) and separate areas to graze their cattle (cattle posts) as shown in Table 25. Only 64 or 3,3% stated they had neither lands nor cattle posts. 23 or 1,3% stated they had no lands and 477 or 22,9% stated they had no cattle posts. The commitment to agriculture is amply illustrated by those figures. The Agriculture Survey conducted by the Ministry of Agriculture in 1969 (Ministry of Agriculture 1969) showed that nationally some 25% of the baTswana had cattle but no land, 18% had crops but no cattle, and 17% had neither cattle nor crops. An immediate comparison between the two sets of figures is made difficult by the different bases used for the computation. The 1969 Survey recorded actual area under cultivation. Since many farmers were unable to cultivate in 1969 because of the poor season, they were placed under the heading of no cultivation. Whilst a person may decide not to cultivate for a year or more he still retains the usufruct of the land and would have been included in the 1965 survey. Similarly a person who might not have had cattle in 1969 would have been included in the 18% yet he would still retain the right to use his cattle posts. Moreover the 1969 survey refers only to cattle and not to small stock. The 1965 survey in referring to usage of land included cattle and small stock. However despite the different bases of calculation the involvement of Serowe residents in agriculture is above the national average.

The distribution of agricultural holdings among the baNgwato is very different from that found elsewhere. Dr Schlippe (1956) has shown that among the Azande of southern Sudan the pattern is for small-scale fields to be cultivated within 50 metres of the homestead. This is not the case with the baNgwato at Serowe where the fields are

TABLE 25Survey of 1956 Households: Lands and Cattle Posts

Households with lands and cattle posts	1418	72.5%
Households without lands or cattle posts	64	3.3
Households without lands	27	1.3
Households without cattle posts	447	22.9
		<hr/>
		100

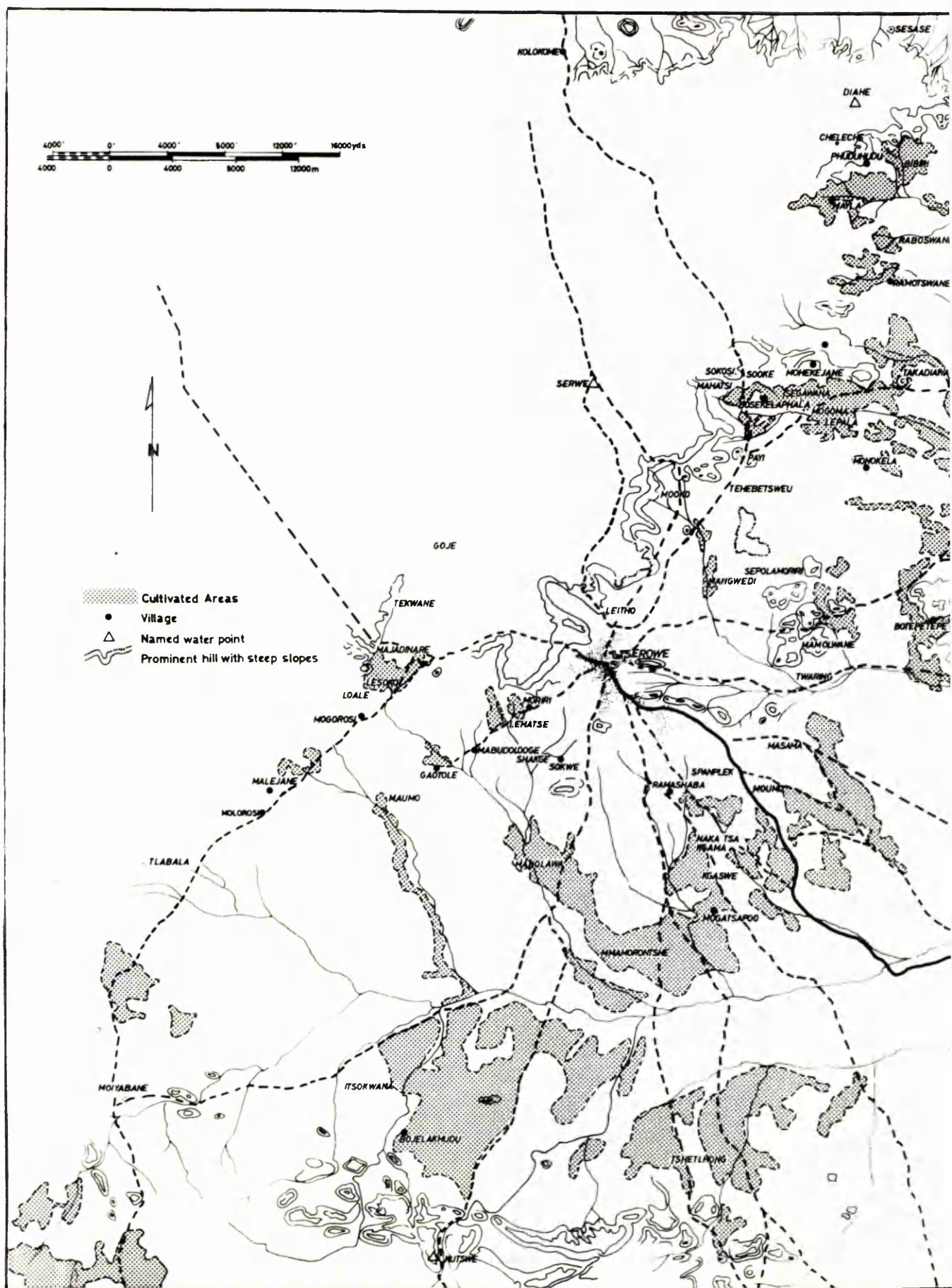
Most households had their lands and cattle posts at different locations. Only 221 or 11.3% stated that their lands and cattle posts were at the same location.

Source: Household Survey, 1966.

generally from 2 to 60 hectares and are found sufficiently far from the homestead to require additional huts, usually of poor quality to be built. Breutz (1941) noted a similar pattern among the baKgatla where the holdings of 2 to 5 fields were located between 3 km to 15 kms from Mochudi, the baKgatla capital, with their cattle posts being more than 50 kms away. It is necessary for the family to remain at the fields, from October to March and return to the lands for the harvest in late winter, and some members remain throughout the whole season.

Map 15 shows the distribution of cultivated areas around Serowe in 1972. In large measure the areas shown are used by the people of Serowe although some of the areas near Paje, Mabeleapudi, Tlabala and Moiyabane are used by the residents of the respective villages. Appendix J provides schematic diagrams of the major Serowe lands and details of the families which used the lands in 1966 together with a note of where they lived. The diagrams suggest a close intermingling of the cultivated areas of the different settlements and groups. The Serowe lands however formed a semi circle to the east of a line from Moiyabane to Cheleche. This marks the edge of the Kalahari escarpment and no arable farming takes place on the Kalahari sandveld. The fields are located in the flat plains of the River Lotsani and its tributaries where maximum possible use is made of the dry river valleys where the soils which retain the moisture for longer are more fertile than elsewhere.

The distance from the homestead to the lands varies from household to household and ward to ward. The nearest fields are within 5 kms requiring perhaps an hour or two in travelling time, to some 50 kms requiring perhaps a two day journey by ox-wagon. A direct comparison may be drawn between the relationship of fields and town with Tbadan.



MAP 15: CULTIVATED LANDS, 1970

Whereas at Ibadan at one time the fields were some 8 kms from the city centre and farmers would commute daily to their fields, now the fields lie some 50 kms distant and the workers tend to remain at the fields returning to the city only for major festivals. (Paterson 1970).

Ellenberger stated that the cultivated areas associated with any particular section of Serowe had a particular geographical expression and a relationship to the position of the section in Serowe. In his letter to Schapera (Ellenberger to Schapera 1938) he expressed the view that the fields lay immediately beyond the boundaries of the individual section. His organisation would have had a direct parallel with Violich's model of Latin American cities. (Violich 1944). Clearly the lands of the Maaloso-a-Ngwana section could not have been located to the west of Serowe since little or no cultivable land was available because of the proximity of the Kalahari. Ellenberger's analysis of the current distribution was too simplified and with frequent movements of cultivation the situation is now more complex. However the District Officer Serowe could inform the Census Officer in 1964 that certain areas belonged to certain wards:

Basimane

Botepetepe

Dikabea

Mokoba

Motolo

Motholong

Nalalatadi

Phikwe

Rancheng

Taukome

Maaloso

Hulwane

Nalalatadi

Tlalamabele

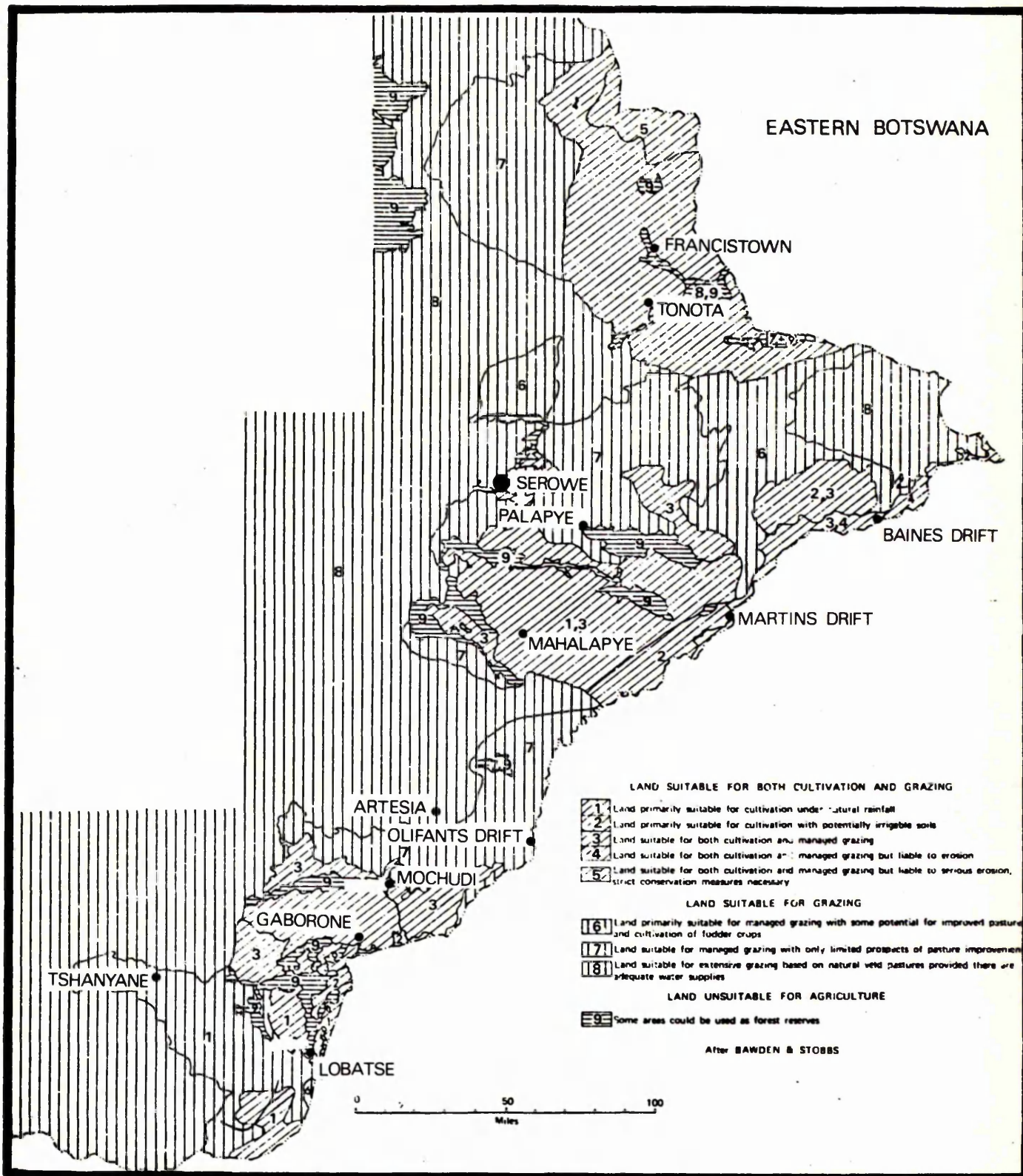
However an examination of the responses of householders carried out in 1965 shows a more diverse pattern. Whilst it is probably correct to say that sections may have a majority interest in one area it would be wrong to imply that an area is exclusive to any section. On the contrary, the District Officer implies this by listing Nalalatadi lands under both Basimane and Maaloso.

The main responses of the householders in 1965, with additions obtained from oral evidence and from the tribal authorities, are summarised in Appendix I. A comparison of the distribution of lands of Basimane section for example with the map of the Serowe lands, (Map 15) shows that the section's lands are spread from Rantsheng and Taukome in the north east, to Kgaswe, Mmamorontshe and Tshetlhong in the south. Moreover, the section appears to be spread over lands both close to and distant from Serowe. Maaloso-a-Ngwana appears to spread from Rantsheng and Botepetepe in the north east, to Kgaswe and Nakatsakgama and Mogatsapoo in the south with a small extension to Moriri in the south west. Maaloso has a similar distribution with, however, a lesser concentration in the north east and a greater extension in the south and south west to Itsokwane and Bojelakhudu. Only Ditimamodimo retains some semblance of cohesion in that many of its wards have lands at Tshetlhong (south) and Kgaswe, Nakatsakgama and Mogatsapoo in south west, with some off-shoots at Hulwane in the east.

It is therefore impossible to generalise and suggest a clear division of lands on the basis of geographical spread. The pattern of traditional agriculture may have contributed to this diversification. With ample land for all needs, tribesmen felt little need to conserve the land. Moreover since the land did not belong to them and since their rights over the land extended only to its usufruct, opinions

have been expressed that the villagers could feel little responsibility for the land and therefore little attempt was made to preserve it. When the soil became infertile through over-cultivation or degenerated as a result of erosion, the tribesmen were able to apply to the chief for a new area and generally applications were granted. Appendix I also give the major lands for 1940 as provided by Schapera (1943) together with a note on some of the areas abandoned. This constant movement resulted in the intermingling that was apparent in 1966. It further resulted in families having more than one area under cultivation and some householders acknowledged three and four such areas. With a highly variable climate, where the onset of rain may be highly localised, the possession of a number of scattered lands was considered a wise precaution against the vagaries of nature. That the system was wasteful of time was acknowledged by those who considered time to be important. With the establishment of the Tribal Land Boards in 1970 it was expected that the approach to land usage would change. Upto 1972 little change had taken place in this aspect of community life and this was to be expected in view of the importance that land has in the lives of the baTswana.

However there may be possibilities for the expansion of arable farming in the Serowe bearing in mind the uncertainty of rainfall. Map 16 shows the distribution of land suitable for agriculture and is based on Bawden and Stobbs (1963). Their survey of land resources of eastern Bechuanaland showed that for the eastern watershed only 500,000 hectares out of a potential 3.3 mill hectares were cultivated and that 2.8 mill hectares were available for arable farming. In regard to grazing land, Bawden and Stobbs estimated that, of the 5.1 mill hectares, less than 1 mill hectares were being grazed and an



**MAP 16: BECHUANALAND
LAND USE RESOURCES OF EASTERN BECHUANALAND,
1963**

additional 4 mill hectares could be added to the existing areas, Whilst these totals for potential expansion are considerable it must be borne in mind that the thorn veld of eastern Botswana is easily damaged and indeed the Transitional Plan (1966) pointed out that as a result of the 1961-66 drought many areas had been over-grazed and perhaps permanently damaged. In addition, the National Development Plan PT III (1973-78) stated that there had been considerable erosion on the Serowe Land System and the Serowe Scarp Land System. Developments in agriculture may be possible in other areas of eastern Botswana but there must be doubt as to the true extent of potential expansion in the Serowe area. This must affect the potential for the maintenance of Serowe and its future growth or decline.

b) Animal Husbandry

The distribution of cattle posts is shown on Map 17 and summarised by wards and sections in Appendix K. An examination of the distribution of cattle posts shows that very few wards had their cattle posts and lands at the same place. In 1965 of the 1956 householders questioned only 221 or 11.3% stated that their cattle posts and lands were together. Generally the plan was to keep the cattle away from the crops to prevent spoilation since the fields were not fenced and indeed tribesmen were prohibited by the chief to fence land. This system also made the best use of all the land in a particular area especially the land that was unsuitable for cultivation. The cattle posts were spread over a far greater area than the lands and generally occupied areas to the south of Serowe beyond Shoshong to Mahalapye to the east beyond the railway line and to the north to the Mankgadikgadi. It is noteworthy that in all cases the annual totals of rain decrease

with distance from the cultivated areas. Travelling time between Serowe and some of the cattle posts was considerable, in some cases, e.g. to Nata, a journey by foot taking two weeks and being lengthened by a further two weeks, by quarantine camps at Makoba, 130 kms NW of Serowe.

7. The future role of Serowe as a regional centre

The Censuses of 1964 and 1971 have shown that there has been a substantial movement of population from the drier western parts of Botswana towards the east. In particular the towns along the north-south railway line have been characterised by dramatic increases in population. Some of the people moving to the railway towns of Francistown, Palapye, Mahalapye, Lobatse and Gaborone have come from Serowe and must have influenced the rate of growth of Serowe. On the other hand, migration to Serowe from the surrounding villages may have been important too, during the period immediately prior to 1964. The onset of a long period of severe drought which did not end until 1966 made farming in the drier areas fall below the margin and encouraged migration and many may have moved to Serowe in the hope of seeking relief from the tribal authorities. Some, after remaining in Serowe for a limited period, many have moved on to the railway line in the hope of finding employment. Figures for employment in Serowe are not available from the Censuses of 1946, 64 and 71 and the most that can be obtained are figures for the whole of the Bechuanaland Protectorate/Botswana and for the baNgwato Reserve/Central District Council. The 1971 Census refers to Central Serowe as an enumeration district. This must not be confused with Serowe itself since Central Serowe included a further 60 villages, lands and cattle posts in

addition to Serowe proper. Comparisons are made difficult therefore. However, Tables 24 and 27 summarise the main employment opportunities. The only specific reference to Serowe was taken from the District Commissioners Files in Serowe which showed that in 1963 there were 133 skilled and unskilled paid workers in Serowe:

TABLE 26

Skilled and Unskilled Workers, Serowe 1963

Tribal works	50
Garages	22
Licences/Trade	30
Government drivers	6
Transport	25
<hr/>	
Total	133

Source: District Commissioners Files, Serowe 1964

Serowe in 1972 offered only marginally more opportunities for employment than in 1964 and the structure of employment had changed but little. Tables 24 and 27 show that there was very little change in the percentage of labour employed in the various categories nationally and it must be borne in mind that many of the newer openings would have become available outside Serowe. Employment possibilities had developed in four important areas between 1964 and 1970, namely Orapa with the discovery of important reserves of diamonds, at Selebi-Pikwe with the exploitation of copper and nickel, at Francistown which benefited from the additional trade and transport needs of both Orapa and Selebi-Pikwe and at Gaborone where the construction of the new capital of Botswana had commenced in 1963. In addition it was decided to establish a power station at Selebi-Pikwe using low grade

TABLE 27

Labour and Employment 1964 and 1971

Category	1964				1971	
	National		baNgwato		National	
	Total	%	Total	%	Total	%
Agriculture, Forestry, Hunting, Fishing	227649	90,8	92929	94	242646	86
Mining, quarrying	1940	0,8	515	0,5	2891	1,0
Manufacturing	2420	1,0	554	0,6	3238	1,1
Construction	2704	1,0	542	0,6	4268	1,6
Electricity, water, Sanitation	120	0,1	14	0,0	472	0,1
Commerce/Trade	2468	1,0	835	0,8	3253	1,1
Transport and Communication	2315	0,9	802	0,8	2138	0,7
Services	9798	3,9	2518	2,5	23288	8,3
Unknown	1264	0,5	186	0,2	296	0,1
Totals	250,678	100	98,895	100	282,490	100

Sources: Compiled from Bechuanaland Government (1964): Report
of the Census of the Bechuanaland Protectorate and Crone
(1972): Report of the Population Census 1971

Notes:

'Services' (1971) is a combined total of Finance, Insurance, Real Estate, Business and Community, Social and Personal Services.

coal and this led to the exploitation of coal by open cast methods at Morapule, 10 kms west of Palapye. Each of these developments stimulated the demand for skilled and unskilled labour and with Botswana's policy of localisation of the labour force, it meant that the majority of the posts were filled by baTswana. Further, the increasing diversity of government activities stimulated the demand for increasing numbers of civil servants at all levels based mainly in Gaborone. To each development baTswana have moved and to each Serowe must have made a contribution.

The likely future expansion of Serowe is an important factor in consideration of its future role in central Botswana. It is characteristic of agriculture in Botswana to be marginal and for there to be a desire by most to find supplementary employment which will be more secure. Most children entering school expect to find a means through examination successes to escape from bondage of agriculture and few look upon agriculture as a livelihood that offers reasonable economic prospects. In respect of employment, Serowe offered few opportunities outside of traditional subsistence agriculture and such rewards that might exist in industry or commerce would have to be found elsewhere out of Serowe. Furthermore, Serowe could not compete with the towns along the railway line in entertainment. Serowe had little to offer beyond the infrequent film show and family and tribal occasions. An increasing awareness of the outside world contributed to by the increasing ownership of radios, led the young to look for new experiences in entertainment and most frequently these had to be sought outside the context of the tribal society which Serowe as a whole typified. There are, therefore, a number of factors which can be cited which might contribute to a potential continuing loss

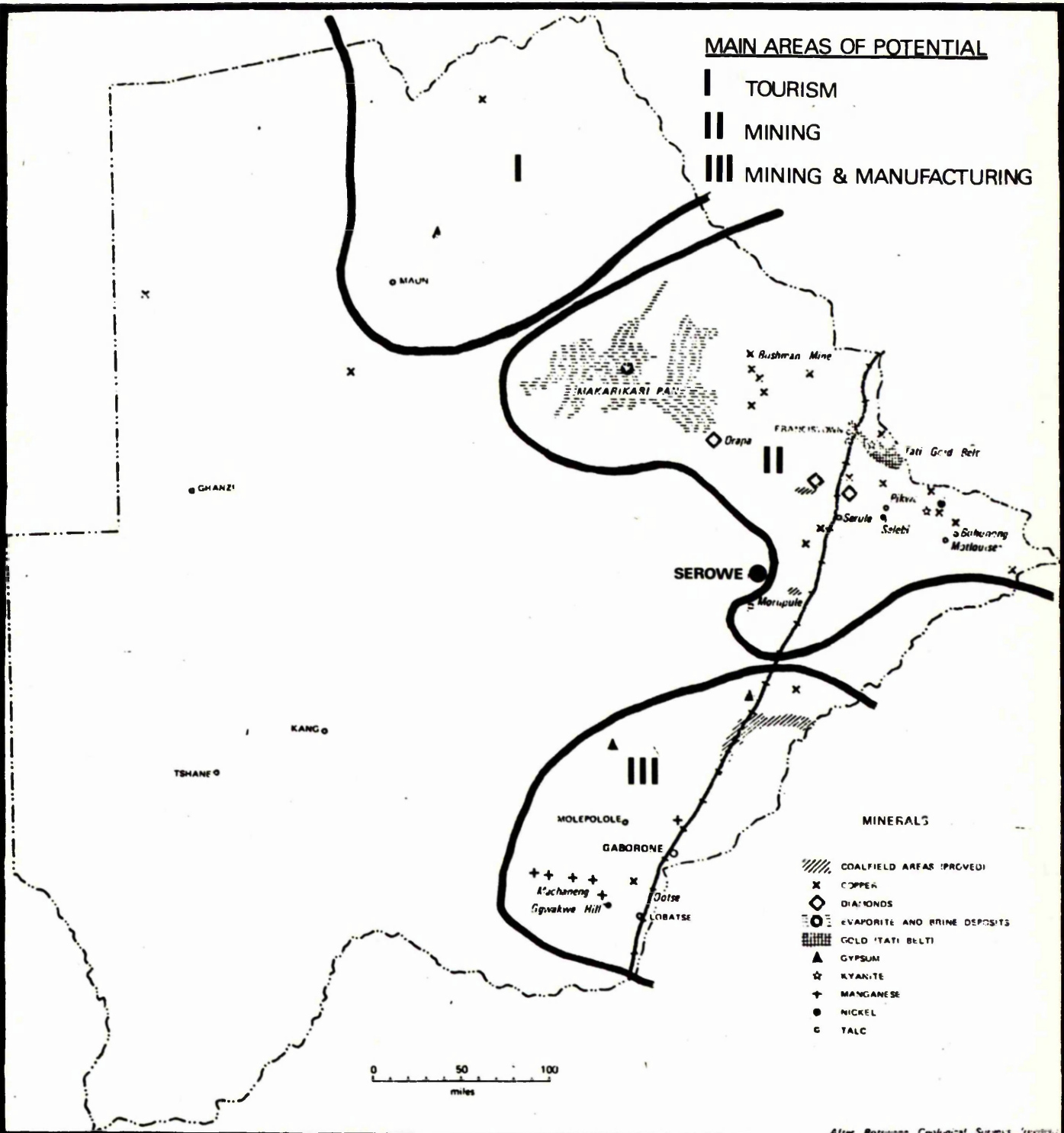
of people from Serowe and on that basis alone it may be that Serowe will commence to decline in importance in the last decades of the twentieth century.

Map 18, shows the distribution of mineral resources in Botswana, the major game reserves and the position of the railway and the main north-south roadway which is aligned with it. The map suggests that Serowe will not be included in the growth zones of Botswana and a review of the projects listed under the National Development Plans 1966, 1968-73, 1970-75, 1973-78 reveals no major investment in Serowe. The projects for Serowe were all of limited in nature which although important in themselves (such as building an inside kitchen for patients at the Sekgoma Hospital, MDO2 for 1966!) did not constitute major investment. By 1972 the Hospital still had only 164 beds although it was expected to cope with additional demands arising from the effects of developments to the north west at Letlhakane and Rakops. Although Swaneng Hill School received continual attention in the National Development Plan, no additional secondary schools were suggested and the teachers training college received only minor building works. The biggest development in employment had been in the brigades which had emanated from Swaneng Hill School and the NDP lists for 1973-78 11 brigades viz textiles, tannery, printing press, farmers, handicrafts, builders, carpenters, stonemasons, mechanics, potters and electricians.

Although distant from the railway line, Serowe could not be said to be inaccessible. A new road from Palapye to Serowe was constructed in 1967-68 and provided with a fast gravel surface which was passable at all seasons. However, perhaps little further development can be expected in the foreseeable future. Whilst at one time it was expected

MAIN AREAS OF POTENTIAL

- I TOURISM
- II MINING
- III MINING & MANUFACTURING



MINERALS

- COALFIELD AREAS (PROVED)
- COPPER
- DIAMONDS
- EVAPORITE AND BRINE DEPOSITS
- GOLD (TATI BELT)
- GYPSUM
- KYANITE
- MANGANESE
- NICKEL
- TALC

After Botswana Geological Survey (1970)

MAP 18: POTENTIAL GROWTH ZONES IN BOTSWANA

that Serowe would be connected directly to Orapa and that all traffic for Orapa would be routed via Palapye and Serowe, the difficulties of constructing the Serowe-Orapa link and the costs of operating it outweighed its advantages and it was decided to reroute the new road via Francistown. This denied Serowe an opportunity to develop new retail outlets and to benefit from the services that would have had to be supplied. The developments at Selebi-Pikwe and Morapule also had little beneficial effects on Serowe. Moreover, the low level of importance attached to Serowe from an economic point of view may be illustrated by the decision not to extend the railway spur constructed from Palapye to Morapule to Serowe despite the relatively short distance involved. Jennings (1961) has shown that there are no minerals in the Serowe area which offer possibilities of economic exploitation and that there are no opportunities for the establishment of mining complexes. Cattle make up the largest single commodity produced in Serowe and most of these were transported to the Botswana Meat Commission at Lobatse and apart from minor enterprises such as Eros Ltd which produced sausages there was no industrial processing of meat and by-products in Serowe. Two holding ranches were placed (NDP, 73-78) along the Serowe-Rakops road and this suggests that Serowe is seen as a staging 'post' for cattle on the way to Lobatse. Relatively distant from major route-ways and without substantial advantages for industrialists Serowe could not anticipate any significant expansion of industrial employment opportunities unless entrepreneurs received some positive encouragement to establish enterprises. Finally, Serowe does not have a tourist trade and there is little upon which to base one. The only monument of note in Serowe is the royal graveyard on Serowe Hill. Serowe also lies outside the game reserves and although there

was a game warden based in Serowe, his main function was to assist in the control of hunting in the area to the north and west of Serowe. Access to the main tourist attractions in the Chobe is by air via Francistown and in the Kalahari via Gaborone and Lobatse. Serowe's one major resources, its labour, will therefore have to look for alternative opportunities elsewhere. Thus in the foreseeable future, and failing a massive migration from outlying areas to Serowe, it must be anticipated that Serowe's population growth will be below the national average and may well be minimal. In terms of a hierarchy of centres of economic importance in Botswana it may well be that Serowe will become relatively less important in the immediate future. In the long term this could lead to a slow depopulation unless action is taken to encourage labour to remain in the settlement.

Within a social and administrative context Serowe will continue to hold its high position. As the seat of authority for the Central District Council, Serowe is well placed being approximately central geographically. Moreover Serowe is the seat of traditional and tribal authority and has the chief's kgotla and chief's official residence. For the immediate future the chief will continue to provide a unifying force within Serowe and within the tribe at large. However, the progressive reduction in the functions of the chief in line with the national policy for the integration of all tribal elements within a unified nation must eventually lead to the elimination of chief as an important factor in social administration. The establishment of Land Boards under the Tribal Land Act 1968 took away from the chief one of his major responsibilities for the administration of the land. His role is now reduced to one of arbiter between disputes and the ultimate judge on protocol and tribal usage. The attempts commenced

in the late 1960's to codify tribal law and to regularise the work of the tribal courts may well lead to a further reduction of the functions of the chief. The emergence of the chief in a minor role must have its influence on Serowe as a whole, leading to a loss of cohesion and sense of purpose and possible disintegration. However this dismal prospect must not be carried too far and neither must it be thought that it applies to Serowe alone. Molepolole and Kanye must also pass through a period of massive change as the reasons for the initial assembly of the people (bonding together for defence and regulation of tribal life) disappear. The problem is to ensure that each of these large agglomerations of family units passes from its out-moded tribal organisation to that of a modern-day settlement without social and economic disorientation.

CHAPTER IX

PERSPECTIVES ON SEROWE

1. Distinctive Features of Serowe

a) The role of chiefly authority in the development of nucleated settlements in Botswana

Silitshena (1979) has noted the importance of the authority of the chief in the development of nucleated settlements among the baTswana. Decline in the extent of chiefly authority has been a major factor inhibiting the further growth of such settlements and Silitshena (ibid.) claims that the changes that have occurred in the decision-making process will lead to a possible reduction in the size of settlements such as Serowe. Alternative theories to explain the development of the large villages have been proposed and the need for water (vide Moyo, 1975, Wilson, 1969) and defence (vide Schapera, 1953) has been suggested. Chiefly authority, however, may be considered a more substantial basis for the development of large settlements. In traditional Tswana society the chief occupied a central position. He was the foundation and pillar of the tribe. In Chief Kgama III's own words:

The position of the 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 (Parsons, 1972, p. 4).

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 1943a, p. 27).

Traditionally, the chief was a very powerful person who could rule distatorially as certainly Kgama III did. The chief was however not an absolute ruler and he/she held office at the will of the people as the expression Kgosi ke kgosi kabatho ('A chief is a chief by the grace of his people') conveys. A chief could be deposed. However, one area in which the chief was able to establish his rule was over the question of where the people should live and chiefs insisted that their people should maintain a household in the capital and live in the household for parts of the year.

During the period of colonial rule the powers of the chiefs in Bechuanaland did not decline as was the case in some other areas, notably in South Africa. In fact, the position of the chief was strengthened to such an extent that Gillett (1975, p. 104) has suggested that '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'. This may well be an overstatement of the case and it will be shown later that from the earliest days of the Protectorate the Administration took progressive but at first somewhat hesitant steps, to circumscribe the powers of the chiefs. Schapera (1943a) showed however that the chiefs had become less accountable to their people than before as a result of the support provided by the Administration and that the

chiefs had become more arbitrary in action and jealous of any challenge. Moreover, the chiefs were able to use the support of the Administration to overcome dynastic disputes as in the case of Kgama III and his quarrels with Sekgoma II as noted above in Chapter VI. By the 1930's the Administration of the Bechuanaland Protectorate had come to realise that their policies were creating monsters out of the chiefs and steps were taken to introduce legislation to reform and modernise the system of tribal administration. These reforms were included in the Proclamations Nos. 74 & 75 of 1934 and will be dealt with in more detail later. The protests and the High Court action which followed the issuing of the Proclamations led to the legislation being revised and reissued in 1943 in substantially weakened forms. The effect was to delay changes in chiefly authority until after independence in 1966.

Thus during the colonial period the powers of the chiefs were only curtailed in minor ways and to only a very small degree in respect of customary usage. Gillett (1973) has suggested that the spectre of incorporation into the Union of South Africa and the opposition to what white rule had imposed on Africans in South Africa encouraged the tribespeople to accept the rule of their leaders. The preservation and enhancement of the chief's powers were manifested in their control of the people's movements. Control of movement and spatial organisation is basic to Tswana culture and was centred upon the use of the tribe's main resource, its land. The extent of the control over individuals in the siting of homesteads and wards has been shown above in Chapter VI but it also extended to the restriction of action by individuals especially in relation to farming. This forbade any cultivation from

taking place before the formal holding of the letsema ceremony and the delays this could cause led the District Commissioner at Molepolole in 1936 to complain:

The pernicious custom of waiting for an order of the Chief before going out to plough must be abandoned 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 the rains failed and very little ploughing was done during November and December. (Quoted in Schapera, 1943, p.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. As the chiefs saw it, administration was easier with the population in nucleated settlements. Chief Bathoen of the baNgwaketse summarised it thus:

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 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 one 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 to them from the Medical, Veterinary and Agricultural Departments. I would like to see Kanye grow in size and beauty. (Quoted in Schapera 1943a, pp. 271-72.

Chief Tshekedi Kgama attempted to justify settlements on the provision of social services:

The primary object of establishing those villages is not to live round the tribal Chief, but we find that the 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 be rendered more difficult if it were not for the creation of villages. An absence of villages also means an absence of centres from which industrial and commercial developments can be organised. It appears that the path of economic progress would be along the creation of villages and concentration of people within. (Quoted in Schapera, 1943a, p.270).

The strength of the chief has had a major effect upon the establishment of nucleated settlements and a weakened chieftaincy has led to the decline in the power to control the spread of population outside the settlements. The 1964 Census (Bechuanaland Govt., 1964) contained the first indication that a new pattern of living permanently at the lands and cattle posts was emerging. In the baNgwato Reserve the dynastic disputes associated with the marriage of Seretse Kgama led to a weakening of the position of the chief and this must have encouraged some tribespeople to stay away from Serowe. An initial migration from Serowe to avoid direct involvement in the disputes may have been compounded into a decision to reside permanently outside Serowe since no authority existed to demand a return to the settlement in accordance with custom. The progressive reduction of the chief's powers in recent decades and especially since independence may have added to the tendencies to diffusion which have always existed and which have been strengthened

in the recent past. Although chiefly authority is still a force and duly respected (Gillett 1925), its heyday is over.

New legislation had also reduced the powers of the chiefs. In 1965 the Chieftainship Law empowered the High Commissioner to remove a chief on receipt of a complaint and after a judicial commission. These powers were added to by the Chieftainship (Amendment) Act, 1970 which allowed the President to remove a chief without complaints or a judicial commission. A second major thrust was to remove the administrative and legislative functions of the chief and the District Councils Law which came into effect in 1966 took away the chief's powers to regulate the social and economic life of the tribe, including the right to levy regimental labour. The District Councils are responsible for the overall running of and development of their districts and have oversight over primary education, health facilities particularly clinics, ungazetted roads, water supplies, community development, the welfare of children and relief work for destitutes and some categories of trading licences. The chiefs were initially the chairmen of the councils but now are only ex-officio members.

According to Gillett (1975 the biggest blow to the chiefs was the loss of their rights to levy taxes which had been vested in them as chairmen of the Tribal Treasuries. These powers were taken away by the Local Government Tax Law 1970 which transferred this power to the District Councils. The Matimela Act 1968 also took away from the chief one of the most treasured preserves of the handling and disposing of stray cattle. This function was taken over by the District Councils. Finally, the chief's powers were reduced by the passing of the Tribal Lands Acts 1968-1970 which withdrew all the powers of the chief over the control and allocation of land. These powers are now vested in Land

Boards, the membership of which is dominated by representatives of the District Councils. The chief is only an ex-officio member of the Board.

The chiefs have not been slow to make clear their objections about the direction of the legislation but there has been a general acceptance by the baTswana that the changes are desirable and inevitable. Although diminished in power and status, the chief remains a symbol of tribal identity and the chieftainship is a cultural heritage which Botswana seems determined to preserve in whatever form possible. Such preservation may be contradictory to the emergence of a national outlook but to destroy the chieftainship would be to do away with an institution which is central to Tswana culture. The influence the chiefs exercise derives mainly from whatever veneration the old generation still has for their institution. The chiefs have lost control over resources and the powers to order the use of space. In these circumstances, permanent migration to the lands can and does take place and it is yet to be seen how this will affect the size, growth or decline, of Serowe and the services it provides.

b) The importance of water in the growth of Serowe

Despite Silitshena's (1979) dismissal of water as the major factor conditioning the location of nucleated settlements among the Tswana, there is no doubt that the availability of water was a major factor in the choice of both Letcheng and Serowe for the capital of the baNgwato. Moreover, the lack of adequate water supplies was a major contributory factor in the decision to remove from both Shoshong and Letcheng. In both cases, however, there were other factors which influenced the final decision e.g. the degeneration of the lands at

Shoshong and the incidence of disease and the coming of the Europeans at Letcheng. The presence of good water supplies and the possibility of underground sources were positive indicators for the selection of Serowe although other factors were of equal and perhaps greater importance as has been demonstrated already.

In terms of the direction of growth of Serowe the supply of underground water has been all important but it perhaps equally noteworthy that at the micro-level the immediate availability of water appears to have been of less importance. The continued absence of piped water to individual houses has left unchanged the need to collect water from the public water supply points and it is possible that, over the intervening period since the 1965 survey was conducted for this dissertation, little change has taken place in the daily pattern of life concerned with the collection of water. The tradition of carrying the water to the home and not using it at the borehole for some purposes, e.g. the washing of clothes, appears to have remain unchanged also. Thus the daily expenditure of time and energy must still be considerable. The only change likely to have affected the lives of the residents of Serowe may have come with the provision of a reticulated water supply system in 1976 which may have ensured more regular supplies at all standpipes and reduced breakdowns and the concomitant demands for more time and expenditure to collect water from further afield. The impact of the introduction of the reticulated service has not been assessed since this lies outside to period of this dissertation which ends in 1972.

c) The importance of the ward as a unit of growth in Serowe

The detailed notes on the ward structure of Serowe and the patterns of growth have shown clearly the mechanisms by which the settlement expanded areally. The mapping of ward movements serves to illustrate the continued importance of the familial unit in Serowe up to 1972. Little evidence can be found to suggest that single family movements unassociated with wards was an important or regular feature of life in Serowe although Schapera (1943b) did suggest that individual persons had moved to the outskirts of Serowe. Schapera regrettably did not specify individuals and he did not attempt to indicate any particular circumstances which may have prompted such moves. His reference to the moves may however have indicated the beginnings of the breakdown of ward cohesion and structure but if this were so, little evidence could be found up to 1972 to suggest that the cases identified by Schapera represented a trend towards individual resettlement. Up to 1972 the evidence suggests clearly that the ward was still the primary unit of association, that its areal expression in Serowe was positive, and could be traced easily into the cultivated lands and grazing areas, and that the ward made an important contribution to the ordering of the social, economic, judicial and political life of the settlement.

d) The relative unimportance of economic factors in the development of Serowe

Apart from the question of water supplies and the availability of cultivable land nearby, the major factor influencing the choice of Serowe appears to have been Kgama III's appreciation of the political context of the opening years of the twentieth century. The absence

of potential sources of economic development appears to have been unimportant in the selection of Serowe. No opportunities existed then for the exploitation of minerals and no new mineral resources have been found near to Serowe in the intervening period. Indeed all mining development has been located away from Serowe and it is probable that Serowe has been the net loser of population to these new sites. Serowe has also been unable to compete with the new sites for additional investment both governmental and private and apart from minor benefits accruing from Serowe being a staging-post for cattle trekking en route to Lobatse there appear to be few benefits that are likely to add to the wealth of Serowe from additional industrial or commercial developments. Moreover, transport links appear to be of secondary importance in the development of Serowe. Serowe was established and developed without substantial investment in a major link to Palapye and the railway line. The Palapye road was constructed for the visit of the Prince of Wales in 1925 and despite regular maintenance and subsequent relocations and upgrading in the 1950's and 1960's the road was still only gravel surfaced up to 1972. The decision not to extend the railway spur from Morapule to Serowe was also indicative of the low value placed upon the link and the unlikelihood of a return on the investment in the construction of the line. In the face of the competition of road transport from Serowe to Palapye and mindful of the individual Serowe resident's dependence on small vehicles, including ox-wagons, for access to their lands and cattle posts, there appeared to be little potential trade for a railway link. Within Serowe itself only the major road through the centre of the settlement appeared to be used to any great extent

and demanded continuous maintenance. In consequence, 19 kms of the route in the centre of Serowe were tarmaced in the mid-1970's, a move objected to by many citizens (Head, 1981). The absence of graded side roads throughout Serowe was also indicative of the low level of priority given to road and transport development.

A further noteworthy feature was the absence of a land market. Since the lands of the baNgwato were not allowed to be sold under the tribal administration prior to the establishment of the Bamangwato Tribal Land Board, land had no price. There was therefore no competition for land by price for particular locations or use, the land being allocated by the chief. The houses built on the land could be sold but the purchaser had, traditionally, no rights to the land and could be removed at the will of the chief at any time. For traders, stand rents were not introduced until the middle of the century and only a very limited degree of security was eventually accorded to them.

In like-manner there was no zoning of land for specific purposes. No areas were set aside for industrial, commercial and residential use. Decisions regarding land use were taken in the light of the contemporary circumstances with residents being asked to move to new sites if their areas were required for other purposes. There were no attempts to establish neighbourhoods with associated services and structures and in consequence there was a high degree of concentration of commercial services in central Serowe along with the major administrative functions. Limited attempts at zoning for primary school registrations were only partially successful.

Finally within Serowe there was little evidence of those attributes one might expect to find in a large and integrated settlement. There

were no parks and open spaces designated for public use except for the recently constructed sports ground to the east of Serowe Hill. There were no monuments in Serowe except for the royal graveyard on Serowe Hill and there were no statues to earlier leaders. No museum existed and the only small public library was located in the Community Centre. On the other hand, there were no identifiable zones of housing and settlement within Serowe which could be likened to other large concentrations. There was no central core of degraded housing, no area of slums and shanty towns on the periphery and Serowe illustrated considerable uniformity in housing quality and development throughout its area. Serowe also exhibited a high degree of centrality based on the location of tribal administration, modern services and commercial enterprises and this pattern had remained largely unchanged throughout the period from its establishment up to 1972.

2. Serowe in the context to African urbanism

a) Primacy

Any attempt to assess the degree of primacy of Serowe is fraught with difficulties because of the inadequacy of the available population statistics. The difficulty is also increased by the different approaches to the calculation of the population of particular settlements arising from the peculiar pattern of movement of the baTswana throughout the year. However, Table 28 offers a reassessment of primacy in Botswana based on Peil's (1984) formulation of the totals of the 2nd and 3rd settlements divided by the population of the largest.

TABLE 28

Primacy in BotswanaPopulation Totals

	1946	1964	1971 (De Jure)	1971 (De Facto)
Serowe	15935	34182	45560	15725
Mahalapye	2455	13199	15463	12056
Palapye	1042	5137	5052	5217
Gaborone	-	3849	17718	-
Francistown	-	9479	18613	-
Lobatse	-	7604	11936	-

Calculations of Primacy

Serowe (within Ngwato Reserve)	21.9	53.6	45	108
Serowe (National)		66.3 ^a	80.3 ^b	180 ^c

Notes: Settlements in Order

- a) Serowe, Mahalapye, Francistown.
- b) Serowe, Francistown, Gaborone.
- c) Francistown, Gaborone, Serowe.

The evidence suggests that Serowe has always been the leading settlement among the baNgwato and until recent times also throughout Botswana. Only with the growth of Gaborone, Francistown and Lobatse has the primacy of Serowe been challenged to any serious extent. Within the baNgwato Reserve the growth of the railway towns of Mahalapye and Palapye reduced the supremacy of Serowe from 21.9 to 45 over the period

1946 to 1971 and if the de facto population figures are used for 1971, Serowe can only be accorded 108. These changes may well be in line with Smith's (1982) claim concerning the growth of intermediate towns as economic systems develop and it is reasonable to anticipate therefore that over time the primacy of Serowe will be reduced further. This should also be the case if the tendencies for the growth of smaller settlements continue, as suggested by Silitshena (1979), leading to the slowing down of the growth of Serowe or even its decline. The policies of the Government of Botswana (Nat.Dev.Plan, 1973-78) to encourage the progressive decentralisation of functions should also contribute to a decline in importance of Serowe and a progressive loss of primacy by the settlement, through the encouragement of the growth of other settlements in Botswana.

Serowe is, therefore, perhaps not typical of many large settlements in Africa. Most capital cities in Africa have grown considerably in recent decades and have provided the main focus for industrial and commercial development. Within Botswana this has been the case with Gaborone and with Francistown and Lobatse to more limited degrees. It has not been the case with Serowe which has attracted little development in terms of industrial or other activities. Even within the baNgwato Reserve Serowe has not been identified as the natural locus for sustained development and indeed to some extent has emerged in the third quarter of the twentieth century as a stagnating centre with marked tendencies towards loss of cohesion and loosening control over its hinterland.

2. b) Ethnicity

In terms of major racial groupings Serowe exhibited a number of unusual characteristics. In common with many other settlements in Botswana there were no people of Asian origin up to 1971. Asian communities had begun to be established in the south of Botswana and at one time there was an Indian primary school in Lobatse although this was converted to a multi-racial, English-medium school on independence in 1966. Hearsay suggests that Kgama III forebade Asians from the baNgwato Reserve but it was not possible to substantiate this claim. It may have been, more simply, that Indian commercial interests had not identified the baNgwato as a potential area for development. It was however the case that there were no Indian settlers in the baNgwato Reserve during the period of this research up to 1972.

In contrast the settlement among the baNgwato of people of European descent had taken place over a long period of time and most of the commercial activity was controlled by European traders. Indeed, at one time the Protectorate Administration considered it unwise to encourage local participation in trade, although Kgama III was considered to be an exception and owned 2 shops in Serowe. The baTswana were anxious to start businesses and requested this at the Native Advisory Council (Minutes, 2nd Session, 1921 and 9th Session). However it was officially considered to be inappropriate owing to their lack of capital, experience and business ability. The Resident Commissioner in 1932 stated:

If it were allowed, it would follow that the more influential Natives would apply, and pressure would be applied to their immediate followers to patronise their stores

I am confident that the time has not yet come for Natives to enter into competition with Europeans in regard to trading. The position in some reserves is difficult now, and it is not desired to increase them unnecessarily. (Mafeking Registry J 8069).

However by 1936 this attitude had changed and Government Secretary's Circular Minute No.8069/2 of 28th May provided for the issuing of trading licences to baTswana. By 1943 Schapera was able to note some twenty men trading as general dealers, bakers, blacksmiths etc. in the baNgwato Reserve. No separate figures for Serowe are available for that period.

In addition to the traders where were a number of government officials based at Serowe. From 1902 with the establishment of an Assistant Commissioner at first Palapye and a Resident Magistrate at Serowe, the capital of the baNgwato became recognised as a major centre of administration for the northern part of the Bechuanaland Protectorate. To the District Administration were added police and medical functions all of which were staffed by Europeans at the more senior levels. By Independence the total European population of Serowe totalled approximately 100 adults and children, a large percentage of those employed being in government service and occupying important positions. Few Europeans were engaged in education and for the most part the primary schools were staffed by local recruits. With the opening of the Teachers Training College and Swaneng Hill School in 1963 a larger number of Europeans arrived in Serowe and occupied positions at less prestigious levels. Up to 1972 the majority of Europeans in Serowe were from well-established families, some of whom has been resident with the baNgwato since before the move to Serowe, and made up a substantial proportion of the well-to-do population of the

settlement. Finally, in Serowe there were small numbers of people of Afro-European descent who occupied no positions of authority and power and who were only separated from the baNgwato by their ethnic origin.

The vast majority of the residents of Serowe were of African descent but as has been shown above these did not constitute a homogeneous body. The twenty-two groups identified by Schapera (1952) and confirmed by the house-to-house survey conducted for this research testify to the heterogeneity of the settlement. The process of assimilation that has taken place over time has blurred the sharp boundaries between ethnic groups to some extent but the spatial distribution of Serowe and its sociological foundation serve to underline the significance of ethnic origin and affiliation. The distinctions between dikgosana, batlhanka and bafaladi serve to indicate ascribed status within the total community and the juxtaposition of the wards which have been based on these distinctions reinforces positions within a hierarchy which has appeared to change little in recent historical times. As Cohen (1969) has suggested cordial relationships can and do exist between different ethnic groups and conflict has been avoided by the presence of a powerful chief and a carefully articulated system for the settlement of disputes and the expression of opinion. How the situation will develop in the future with the continued reduction in the powers of the chief remains to be seen. Certainly by 1972 there was little evidence that disputes which existed elsewhere within the baNgwato e.g. the baKalaka question, were leading to upset and tension within Serowe. The tribal, clan and locality groups of Hanna and Hanna (1981) were the source of ethnic differences in Serowe and the wards were the main expression of ethnicity although as has been shown in the case of Matshego (Wd) the membership of the ward could be complex.

It may be that ethnicity was not considered to be important in Serowe. Regrettably records of marriages were not available to discover whether marriage across ethnic boundaries was common. That the ward was a non-exogamous unit has been established (Schapera, 1952) but this helps but little. Of more importance may have been comments by the chief against marriages within close family circles (vide Schapera 1952). Language differences may have influenced ethnic attitudes to some extent although this may have only been of limited importance. With Setswana as the main language there were few groups e.g. the baKalaka, whose linguistic background was sufficiently distinct as to raise major problems. Finally, if indications of the importance of ethnic diversity were to be looked for elsewhere in terms of cultural outgrowths there were few to be identified within Serowe. No cultural events linked to individual ethnic groups were organised and all activities outside the family appear to have been centred upon, and directed by, the chief. These events were largely associated with the annual cycle of cultivation and many were eventually christianised by Kgama III e.g. initiation ceremonies and the naming of age-regiments. With a controlled religious milieu until the late 1950's there were no divisions based on church membership and the recent growth of churches does not appear to have any ethnic foundation. Lastly, whilst Serowe has seen the modest growth of social and cultural organisations as shown in Appendix G none of these appear to be ethnically based as perhaps Banton (1965) and Southall (1975) might have anticipated.

2. (c) Occupational Development

In Chapter VIII it has been shown that over the period up to 1971 there had been relatively little change in the occupational structure of

Botswana. By 1971 growth had taken place in the areas of mining and quarrying, manufacturing and services but the vast majority (86%) of the economically active population (Crone, 1971) was engaged in agriculture, forestry and hunting. For the age group 10 - 24, 83% of the male and 91% of the female population was economically active or at school. For the total labour force, 73.4% was active and 24.6% inactive (Table 21, National Development Plan 1973-78). Figures for Serowe proper were not available and the national figures and those for the Central District must be used as proxies. In 1964 the 94% engaged in agriculture represented a limited change on previous figures and reflected the importance of agriculture in the lives of the people. Within Serowe itself the percentage may have been slightly lower because of the greater concentration of services and trade there, but, the actual percentage in agriculture, forestry and hunting would not have been much different from the national average. The figures do have to be used with caution however since both men and women may combine agricultural activities with other forms of employment and Crone (1971) has suggested that perhaps only 60% of males and 61% of females are entirely dependent on agriculture.

It appears correct to state that for the most part the residents of Serowe up to 1972 were self-employed and only relatively limited numbers were employed in manufacturing, commerce or administration and even fewer people were entirely dependent upon their incomes from employment. The continuance of Serowe as the administrative centre for the Central District and as a regional centre for central government administration ensured the maintenance and limited growth in this area of employment. The increased number of transport services available

as shown in Table 23 provided a number of additional employment opportunities. Beyond these areas of development and those associated with the introduction of small scale manufacturing enterprises such as Eros Ltd and N.I.D.C.O., there appear to have been few changes in the employment structure. This is reflected in the importance of what Santos (1979) has described as the 'lower' circuit of the economy. The establishment of the Basadi Ba Ba Ithusang - a group of 50 women making dresses-and the handicrafts and domestic science project at St Gabriels School in 1972 has served to emphasize the small-scale and traditional base of the economy of Serowe. In this Serowe is not untypical of many settlements in Africa where much small-scale activity predates the colonial period and has been added to in more recent times. This is reflected in the list of licences for Serowe given in Appendix F and parallels may be drawn with the Yoruba (Ojo, 1966) and with Kampala (Obbo, 1975).

Serowe is, however, similar to many African urban centres in that there have been no large scale industrial or manufacturing developments. This may be associated with the relative isolation of Serowe and its lack of good communication networks. It must also be linked to the concentration of development elsewhere in Botswana at Gaborone, Francistown and Lobatse and at the new mining complexes at Orapa and Selibe-Pikwe. There is no pre-eminent industry that dominates Serowe, as the Botswana Meat Commission does at Lobatse, and there is little evidence to suggest that any outgrowth of this nature is likely to take place in the future. Unlike elsewhere, also, it is not possible to demonstrate that there has been a substantial increase in the number of firms in trade and construction (vide Schatz 1977) although most of the development which took place in Serowe up to 1972 was initiated by

local residents. This reflected a change in emphasis in investment from expatriate to local capital, albeit at a low level, the firms established having required little capital input.

Finally in relation to unemployment, Crone (1971) suggested that 18% of males and 19% of females aged 15 - 45 years were economically inactive in the Central District: no figures for Serowe were offered. Unemployment registers were not maintained in Botswana and hence any figures must be treated with caution. Perhaps of more importance might be assessment of the levels of underemployment and attitudes to what is considered to be work would be a valuable field of investigation in Botswana. Whether the Crone figures can be used as a proxy for Serowe is also open to question. It may have been that larger numbers of unemployed people gathered in Serowe in the hope of either employment or assistance from traditional authorities but this is conjective and little progress can be made in the analysis of the true unemployment situation. No analysis has been attempted of the reasons for economic inactivity and the Crone figures were not subdivided to offer categories of, say, those in school, chronically sick, handicapped etc.

In summary, in comparison with other African urban centres Serowe appears to have changed little up to 1972 with only limited growth in public sector unemployment and in small scale enterprises. Traditional agriculture and services had retained their importance and no developments could be detected that suggested that the pattern of employment would change in the immediate future. Disguised unemployment may have been growing due to inward migration but this may have been balanced by out-migration resulting from people living permanently at their lands and cattle-posts or in smaller settlements nearby.

d) Spatial Relationships

Few parallels can be drawn between Serowe and the models of spatial differentiation in towns of Burgess, Hoyt or Harris and Ullman. No evidence is available of concentric circles around a central business district, nor of the incorporation of previously discrete villages within the growing settlement. Some links might be made to Hoyt's suggestion that newer developments are attracted to existing areas. The division of Serowe into wards which were ethnically based meant that migrants to Serowe were likely to be placed close to existing wards and some evidence exists to suggest growth by a process of accretion. Some parallels might be drawn with Peil (1984) who adapted Burgess's model to provide for a CBD surrounded by indigenous housing. Beyond this area Peil suggested there would be the government institutions and high-income estates. Originally in Serowe the government buildings, both office and residence were close to Serowe Hill and only later were these moved to the west away from the centre of the town. Later additions such as the Teachers Training College and the Police Lines were also placed away from the centre to avoid congestion and to provide adequate land for development. Certainly the larger houses of the Europeans formed a partial ring around Serowe at one time and marked the edge of the settlement up to 1947. This appears to have arisen less from a conscious attempt to separate Europeans from Africans and more from a desire to maintain the integrity of the traditional relationships within Serowe. There were no 'ville blanche' and 'ville noire' divisions in Serowe such as Vennetier (1976) has suggested for elsewhere.

More valid parallels can be drawn with the Yoruba towns and with Addis Ababa. Krapf - Askari (1969) noted the ward structure of the Yoruba towns and the inward-looking nature of the individual households. In adopting a semi-circular form the wards of Serowe offered little invitation to outsiders and ward life focused on the ward and about the ward kgotla. However, Krapf - Askari's analysis may not be taken too far. It is not possible to continue the analysis to identify wards each with some services. Nor would it be correct to suggest that facilities e.g. schools, post offices and banks were located on the periphery of Serowe. Schools in Serowe from the earliest days were located throughout the town starting in the centre. An easier comparison may be made with Shack's (1973) description of Addis Ababa where the sefers which make up the city contain people from one rural locality. The parallel may not be exact but it illustrates the importance of ethnicity and home locality in the make-up of the settlements. No parallel can be drawn however with the stranger communities of Tudun Wada and Sabon Gari in Zaria and Kano in northern Nigeria.

Serowe is noteworthy in not having a market area. No reasons can be advanced for this but the absence of a market is common among all the settlements of Botswana and may reflect the migrant nature of baTswana life and the availability of basic foodstuffs. Concern was expressed by the Bechuanaland Administration (Schapera, 1943b) over the poor diets of the baTswana in general and in particular over the lack of vegetables. Tshekedi Kgama (Schapera, 1943b) countered this by claims of the greater availability of foods at the lands and cattle posts where people spent considerable periods of time. In the 1971 Census (Crone 1971) a considerable growth of food outlets in Serowe

was noted and many of the newer enterprises were providing fresh food-stuffs. Traditionally the traders of Serowe had concentrated on dry goods or in a more limited way on imported tinned goods. There was no evidence by 1972 that a market was considered necessary and no plans were being formulated to establish a venue for market stalls. On the contrary, there was opposition to the expansion of retail outlets and Serowe is atypical of many large settlements in African being without large numbers of hawkers. In this respect Serowe did not fit into Sjoberg's (1960) characterisation of the pre-industrial city with most people overtly participating in some form of trade or commerce.

In respect of functional land use Serowe is again atypical of most settlements. Whilst the central government offices are concentrated, these are separated from local government offices by some 2 kms. No diffusion of administrative services had taken place and all residents were required to attend the respective offices. The only attempt to concentrate development had been in the designation of the CBD as a shopping mall in the National Development Plan 1973-78 and the intention to focus further construction there. Limited industrial development had taken place along the Palapye-Serowe road but no overall development plan for Serowe existed which designated areas for controlled expansion. The majority of new enterprises appear to have been scattered throughout the town and in this Serowe does resemble other indigenous settlements in Africa (vide Bray, 1969).

2. (e) Housing types

Serowe is typical of most African settlements in that horizontal

expansion has been the predominant feature of the growth of the town. No vertical development had taken place by 1972 and the availability of ample land suggested that additions to the town would continue to lead to areal expansion rather than greater densities. The case-study of Matshego ward has shown however that high densities can result even in areas with only one-storey buildings, some 77 people having been identified in the 5 courtyards of the ward. The multiple occupancy of sites should not be interpreted, however, to mean that rooms are let by owners to others, particularly migrants. There was no evidence in Serowe that renting accommodation was a regular feature among the indigenous population. The only rented accommodation was provided by government for civil servants posted to Serowe and for the employees of specific institutions such as the Teachers Training College.

Housing in Serowe consisted of three main types. The majority of houses were wholly African owned and built and were mainly rondavels of mud and thatch. There were however an increasing number of square houses built of concrete or brick with a corrugated iron roof. The general standard of this housing was high and traditionally the chief insisted that the houses and the courtyards in Serowe were maintained at least annually. Serowe is also noteworthy for the absence of squatter areas because settlement was controlled by the chief who could approve of new developments. He also had the means to remove unwanted settlers. There were also no shanty towns. The easy availability of building materials and the traditions of building durable houses has encouraged the practice of erecting substantial houses capable of withstanding the weather. The second category of housing in Serowe was made up of houses erected by the traders who

expected to remain in Serowe for long periods of time. These houses tended to be large and were constructed in the European style and in contrast to the rondavels of the baNgwato had adequate supplies of water, indoor sanitation connected to cess pits and private generating capacity. The overwhelming majority of baNgwato dwellings were without services and water had to be carried from nearby boreholes. The third category of housing was provided by government and consisted of substantial houses made of concrete and brick. These houses, many of which were in the Government Residential Area (The Camp), were equipped with indoor sanitation, and a reticulated water supply. Some were connected to an electricity supply generated by the government at the Sekgoma Memorial Hospital. There were no company owned houses in Serowe up to 1972.

The absence of a land market in Serowe meant that neither land nor buildings near to the centre of Serowe were at a premium and hence there were none of the pressure upon residents to move to cheaper areas on the outskirts of the town. Indeed, as has been suggested above there were important disadvantages in terms of status and distance from the centre of chiefly authority in being located on the periphery. A resident of Serowe could however sell his house (Schapera 1943b) but little evidence could be found that a house in the centre of Serowe would command a higher price than a similar one on the periphery. So few houses were sold that comparisons were made difficult. The quality of the house at the time of sale appears to have been a more important factor than its location.

The question of the ownership of compounds was not in doubt under traditional law and custom. Whilst elsewhere in Africa it may have

been the case that compounds were owned by the resident families, this was not so among the baTswana. Families and wards could be and were removed at the will of the chief without compensation if the good administration of the tribe demanded it. Families who were reluctant to move could be forced to do so and instances of the brutal handling of recalcitrant tribespeople were recorded. This could lead to claims for damages but as shown in the case of the Rratshosa's these were to no avail, tribal custom and usage being employed to justify the action taken. With the advent of the Ngwato Land Board this situation has changed but by 1972 little progress had been made.

3. The impact on the baNgwato of contact with Europeans

a) Changes in the daily lives of the baNgwato

The increasing contact that the baNgwato had with Europeans from the middle of the nineteenth century brought about many changes in the daily lives of the ordinary residents. These changes increased and intensified with the declaration of the Protectorate of Bechuanaland in 1885 and with the gradual extension of government interest and control in social and economic lives of the baTswana. The new influences from outside were so wide-ranging and of such importance that the chiefs of the baTswana felt it necessary to respond to preserve the quality of tribal life and Schapera (1943a) noted that:

Practically all known legislation among the Tswana occurred after the initial impact of Western civilisation. Assuming that the very scanty information about earlier legislation is not due simply to the absence of records, whether written

or traditional, but actually reflects the paucity of such legislation, we may conclude that contact with Europeans created situations that called for the more frequent exercise of the chief's legislative powers. (p.66).

Appendix L provides details of the tribal legislation introduced in the baNgwato Reserve, 1872-1940 and indicates the widespread coverage of the legislative measures taken. The main areas of change were initiated by the influence of the missionaries and the administration although the majority of the measures stemmed from the conviction of the chiefs that they were taken in the best interests of the tribespeople. In general the policy of the Protectorate Administration was to suggest directions of change and once those had been adopted by the chiefs to formalise the innovation by a Proclamation. Thus, in 1890 the High Commissioner while on a visit to the Protectorate suggested to the chiefs that they should protect the big game in their respective areas. This led to the chiefs making laws and Kgama III in 1895 prohibited the killing of eland, giraffes and other big game without permission. A further example may serve to illustrate the approach adopted. In 1931, the Administration was asked by various missionary bodies to prohibit by proclamation the holding of initiation ceremonies some of which had lead to abuse in particular instances. The Resident Commissioner brought the matter to the Native Advisory Council.

Most of the Chiefs have suppressed or wish to suppress these ceremonies, and the point which I wanted to know is whether it would be better to suppress them by proclamation or whether the Chief would prefer to suppress themselves (Minutes, Native Advisory Council, 1931, p. 39).

After listening to the discussion, which was almost wholly opposed to legislation by proclamation, the Resident Commissioner concluded:

I would much prefer the chiefs dealt with this matter themselves, each in his own Reserve, and I am quite prepared to agree that they should do so: then if they find difficulty we will support them (ibid. p.39).

It was not until the Proclamation of 1934 (No.74) that the Administration assumed the power to dictate to the chiefs that they should make such laws as they were requested. This assumption by the Administration was savagely attacked by the chiefs.

The influence of the missions was all pervading and Appendix L shows that Kgama III swept away many traditional practices. The substitution of Christian ceremonies for the traditional sowing festivals, for initiation ceremonies, for rain-making and the prohibition of established practices e.g. the undertaking of secular work on Sunday hit hard at the foundations of tribal life. By dint of force of character and with the knowledge of the support of the missions and the Administration Kgama III clearly felt confident enough to carry through the reforms. Only in the question of the making and sale of corn beer did he have to yield to pressure in 1895 although by 1910 he was able to reintroduce his prohibition.

The greatest areas of change concerned the daily life of the individual moNgwato. Schapera (1953) noted that the Tswana originally had been self-supporting depending upon subsistence farming to provide basic foodstuffs with meat generally provided from hunting. Clothes were made from skins and implements were fashioned from locally available materials or obtained by barter, particularly those made of iron. Transport depended upon head portage or oxen, hoes

were used for planting and all exchange was dependent upon barter. Schapera (1943b) noted that the traditional rates of exchange were a pot for its contents of grain, a basket for twice its contents of grain and a cow for two large skin bags of corn. No traditional forms of money have been recorded. Water was obtained from streams, dry river beds and shallow water holes and no systems existed for the supply of water to houses or the storage of water beyond the small quantities needed for immediate personal use.

By 1878 Paterson noted that:

Some advance may be said to have been made in agriculture as they have in use some forty imported ploughs. (p.26).

This led to the expansion of the areas under cultivation. Oxen were harnessed to the ploughs which replaced iron-tipped hoes and the men now assumed the responsibility, previously that of the women, of ploughing the land. The introduction of maize as a cash crop led to a reorientation in agriculture and also to the control of the sale of corn to traders. The transport of the produce was also influenced by the introduction of donkeys and horses by the Europeans (Schapera 1943b), and was further stimulated in the twentieth century by motorised transport and regular services to the railhead. Of major importance in the lives of the baNgwato is the supply of water and one of the most significant changes brought by the Europeans was in the means of obtaining water from the ground. The deepening of boreholes, the casing of wells in wood and the provision of a windlass and trough were leading innovations that suggested that settlements could be permanent and did not have to be moved once streams or springs failed. The later introduction

of very deep boreholes and pumps further improved the supply of water and allowed for the expansion of concentrated populations in Serowe and elsewhere.

It was perhaps the use of money that brought about most changes. The need for money to be paid to the Administration for the Hut or Poll Tax stimulated tribesmen to undertake contract work in the mines in the Union of South Africa. The imposition of levies in the form of compulsory labour by the chiefs had had a long history but the introduction of money made it possible for individuals to commute their commitments to a cash payment. This became a regular feature of baNgwato life and Tshekedi Kgama levied payments for the building the Tribal Office in 1928 and for his visit to the Secretary of State in 1930. These were but two examples and the practice of raising cash through compulsory levies remained until it was made illegal by the Protectorate Administration in 1934. Moreover the demand for money led to stock theft becoming more frequent (Schapera, 1943a) and to the storage of grain for sale in order to meet the needs for fees for education, for medical treatment, to pay fines and to pay for the increasing range of non-indigenous goods which were being stocked by the traders. The eventual establishment of postal services and later bank services completed the change from a purely traditional barter economy to a modern one based on money and exchange. The change to money as a measure of exchange was encouraged by Sekgoma II who in 1923-26 fixed prices for the sale of firewood and skins in an attempt to regularise the market in these goods.

In social services, equally widespread changes were introduced through European influence. In health services, the establishment in 1923 of the Sekgoma Memorial Hospital marked the beginning of modern, westernised medicine. This did not mean the exclusion or banning of traditional medicine but it did provide alternative approaches to medical treatment based on more scientific methods. In education, the primary schools of Serowe introduced a new style of institution based on British models of the nineteenth century. The instruction provided had few parallels with the traditional education of the home, the initiation school and the age-regiment and had no foundation in the environment, physical, social or vocational, of the pupils. Basic literary and numeracy and elementary Bible study appear to have formed the main constituents of the educational diet and little change was made in this until the introduction of history, geography and science in the mid-twentieth century. The lack of correspondence between the education provided in the schools and the homes did not attract attention but it contributed greatly to the development of attitudes that looked to education as an avenue of escape from the harsh rural environment.

It must not be thought, however, that European influence led to a total change in life in Serowe. In many respects baNgwato traditional life remained unchanged. The use of local materials for house building maintained the traditional character of the settlement. The annual pattern of life also remained largely unaltered and the baNgwato chiefs took such action as they could to maintain tribal life. Tshekedi Kgama was particularly active in attempting to combat the erosion of tribal tradition by the growth of individua-

lism brought about by the increasing use of money. His attempts to insist on communal effort met with resistance from the residents of Serowe, but they were successful not only in the fulfilment of their objectives but also in stimulating a sense of community in Serowe. The role of the chief among the baNgwato throughout the period of colonial rule was subject to change but, up to Independence the baNgwato chief, in common with other baTswana chiefs, remained the guiding force among the baNgwato and made a major contribution to the emergence of policy in relation to the administration of the Protectorate. The chief remained the arbiter over disputes among the tribespeople although opportunities existed for redress outside the tribal system. The chief was also the controller of the allocation of land and it is perhaps in its conception of the place of land in its society and its uses that the baNgwato changed least up to the establishment of the Ngwato Land Board in 1968. The individual use of land, which was owned by the community and administered by the chief on behalf of the tribe, was one of the most sacrosanct principles of tribal life. There had been no abrogation of this principle and the concept of individual ownership of land with the possibilities of the sale of land was an entirely new introduction in the Tribal Land Act, 1968.

b) Changes in the administration in the baNgwato Reserve

The whole period of colonial rule in the Bechuanaland Protectorate witnessed continuing and increasing steps to place the administration of the baTswana tribes on a more consistent basis. The government of the baNgwato was not exempted from this incursion by Protectorate Administration and some measures arose as a result of specific

incidents within the baNgwatQ Reserve. The effect of all the changes that took place was to reduce subjectivity inherent in the personal rule of the chief and to place the resolution of disputes in the hands of those who had no personal interests in the outcomes. The process of expanding the control over the chiefs continued after Independence as outlined in section 1 of this chapter so that by 1972 the position of the chief had been confined to that of a ceremonial figure with restricted capabilities of offering advice and comment, the major decisions about tribal matters being taken by formally constituted bodies with legally defined powers. The steps in the extension of central control are summarised in Appendix M which provides a chronology of the major administrative instruments adopted between 1885 and 1970. It is suggested that an analysis of these steps and the reasons for which they were taken indicates the changing nature of baNgwato society. It also shows how Serowe becomes more urban in character as more changes are introduced.

The extension of control over the chiefs can be summarised under three headings, namely the protection of the resources of the tribes, the improvement of the standards of justice, and the establishment of formal institutions to regulate tribal life. The Order in Council of 1891 provided the fundamental law for the administration of the Protectorate and gave the High Commissioner the authority to legislate by Proclamation subject to the condition that his Proclamations must:

..... respect and Nature laws and 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 compatible with the due exercise of Her Majesty's power and jurisdiction. (Clause 4).

This provision was to prove of critical importance in the controversy that arose in 1933 and 1934 regarding the legal validity of the legislation introducing a new system of tribal administration. Under the Order in Council the High Commissioner could and did appoint magistrates whose jurisdiction did not include matters in which only baTswana were concerned unless this might be required in the interest of good order or the prevention of violence. When the courts did intervene they were to follow native law and custom subject to the usual condition of repugnance. The whole tenor of the approach to the administration of the tribes was to take as little action as necessary and the Secretary of State in 1895 in speaking about chiefs Kgama, Sebele and Bathoen while on their visit to London, stated the chiefs were to 'continue to rule their people much as at present'. (Hailey, 1953).

This approach to government did not preclude the intervention of the Protectorate Administration and a number of steps were taken to protect the interests of the tribespeople. The Concessions Committee of 1893 was at first resented by the chiefs of the baKwena and baKgatla, Sebele and Lentswe, but the results achieved were for the good of all. Some of the chiefs had already granted concessions, in one case, Sebele, to the extent of granting to a European syndicate the right to make Ordinances, to establish Courts of Justice, to fix tariffs and appoint officials. Hailey (1953) noted that the Commission swept aside the concessions and established that all future concessions had to be approved by the

Secretary of State. The same provision was extended to the occupation or ownership of land by outsiders.

The Administration also took steps to settle disputes between tribes and to define the areas over which the chief claimed control. In 1893 the Resident Commissioner settled a long-standing dispute between the baNgwato, the baKgatla and the baKwena over the ownership of land. This was followed in 1895 by agreement with Chief Kgama, Bathoen and Sebele that the tribal reserves would be demarcated. This work was completed in 1899 by Goold-Adams and confirmed by Proclamation 9 of 1899. The areas outside the Reserve were designated as Crown Lands and the residents there came under the direct control of the Protectorate Administration. In general these boundaries have changed little over the intervening period up to 1966 until the establishment of the new system of District Councils. On Independence the Crown Lands were renamed State Lands. The effect of these agreements was to reduce the areas of dispute over ownership and to provide for a means of future settlements. This meant that the powers of the chiefs were somewhat curtailed although the formalisation of the boundaries of the Reserves also strengthened the position of the chief allowing him to concentrate more on internal matters of tribal life.

The Order in Council of May 1891 had also made reference to maintaining in the Protectorate standards of 'morality, humanity or natural justice'. The traditional institution for the settlement of disputes had been the kgotla. Within large settlements such as Serowe there were differing levels of jurisdiction from the ward kgotla, through the section kgotla, to the chiefs kgotla which

represented the final court available to the tribespeople. The concept of trial by kgotla was basic to tribal life. Any and all of the tribe could attend the kgotla and could offer opinions and the chief would settle the case according to the evidence and his assessment of the attitude of the tribe. This could mean some variations in the punishments awarded and without written records to call upon to guide decisions there is little doubt that the settlements reached did contain an element of personal bias. Instances of arbitrary action by the chief did take place and without doubt some injustices were perpetrated. The Protectorate Administration, however, made few changes initially and it was not until the promulgation of Proclamation No.33 of 1943 that the practice of trial by kgotla was legally formulated in national laws.

This did not mean however that nothing was done to attempt to improve the administration of justice. Proclamation No.2 of 1896 defined the jurisdiction of the Assistant Commissioners and Resident Magistrates as extending to all criminal and civil cases, except homicide. The chiefs with their advisers dealt with all cases involving only baTswana except for homicide. The Resident Commissioner acted as a Court in the first instance for murder cases and as a Court of Appeal. Provision was also made for appeal to the Privy Council. In 1912 a Special Court was established at Lobatse to deal with major criminal cases.

The Administration also began to affect the organisation of the tribes. In 1895 in line with the pledge given by the British Government, the control of the sale of liquor was implemented by Proclamation prohibiting the possession by baTswana of any form of

intoxicating liquor, with the exception of corn beer. Although the Resident Commissioner in Colonial Reports (BP) No.479 (1904-05) could state in 1904 that the system of rule in the Protectorate was based on the policy of permitting 'a very wide latitude, to the Paramount Chief in the management of their own people' this did not stop the Administration from removing from the chief's courts specific areas of jurisdiction. In 1912 cases involving stock theft were taken over by the Resident Magistrates. Later in 1927 the trial of sorcerers was removed from the Kgotla and the practice of witchcraft was made a penal offence. In 1919 a major innovation was the institution of appeals from the chiefs Kgotla to the civil courts although the value of the avenue may have been reduced somewhat since the chief sat with the Resident Magistrate as a member of the appeal board. However, the principle of appeal to authority beyond and above the chief was established and this led to a greater uniformity of decision and the reduction of the personal element in the administration of justice.

Developments in the 1920's and 1930's led to the British Government having to give more serious consideration to reform in the Bechuanaland Protectorate. The publication of Lord Lugard's 'The Dual Mandate in Tropical Africa' in 1922 led to a reconsideration of the problems of administration as a factor in colonial policy. The interest in the methods adopted were also stimulated by the Report of the East African Commission of 1924 (Cmd 2387, 1925) and the Report of Lord Harlech's visit to West Africa in 1926 (Cmd 1744, 1926). These texts drew attention to the systems

of administration and the Bechuanaland Protectorate could not escape inclusion in any review of policy. These broad considerations were added to by more localised incidents in the Protectorate. As Sir Alan Pim (1933) had pointed out the baTswana had been well served by their chiefs and had owed much in the past to the personality of some of their chiefs who had kept their people together during the invasions of the Ndebele and Boer freebooters. The chiefs had been responsible for maintaining the identity of their tribes in spite the heterogeneity of their populations and the reasons why they came together. This older order of chiefs was however passing away and being replaced by a newer order better educated and better acquainted with European ways but not so close to their own people (Fortes and Evans-Pritchard, 1940) and apt in some cases to use their authority to their own personal advantages. Indeed the Administration had found it necessary to depose Sebele II of the baKwena for incapacity to carry out his duties. Moreover, an incident between Tshekedi Kgama and the Rratshosa's, mentioned in Chapter V above, had attracted much attention in the UK and had lead to comment on the standards of justice in the Reserves. This incident led eventually to an appeal from the Special Court to the Privy Council which noted the action taken by the Tshekedi Kgama under the cover of native custom was not compatible with 'morality, humanity or natural justice' (Privy Council Appeal No.4 of 1930, vide Mockford J, Seretse Khama, 1950). At the same time the position of the Sarwa in the baNgwato Reserve was giving cause for concern and a Commission of Enquiry was appointed in 1931 (Proclamation No.20 of 1931). The control of a ruling tribe over

a servile people although in line with local law and custom was considered not to be compatible with the Order in Council, 1891 and was repugnant to opinion in Great Britain. The inquiry that followed was confined to the baNgwato Reserve and the Tagart Report (1932) showed that whilst the Sarwa were not slaves their position was similar to that of serfs of baNgwato masters. A subsequent Report by the London Missionary Society (1935) criticised the Commissioner but did not suggest what should be done. A Report was also made to the League of Nations (Joyce 1938). The government responded by issuing a proclamation (No.15) on Slavery in 1936 and Proclamation (No.14) also of 1936 under title of the Protection of Native Labourers which laid down that all labourers should receive wages in case or kind.

Whilst these were clearly important matters which guided the decision by the British Government to instruct the Resident Commissioner to consider reform, there were also a large number of smaller matters which had given concern over a long period of time. The introduction of at first the Hut Tax, later replaced by the Poll Tax, was agreed to by the chiefs and they were paid 10% of the receipts as a fee for their services in collecting the tax. In addition to this money the chiefs also handled considerable sums from stand rents, fines and special levies. In the case of the baKwena and baTawana a Tribal Fund had had to be created to deal with the money and the Magistrate of the District had had to take control. Elsewhere the complaint was not one of maladministration but of lack of information about how the money was being expended. By 1930 the baNgwato chief was thought to have an income of £7000

(Hodgson and Ballinger, 1932). In addition in the baNgwato Reserve a small amount received from the British South Africa company for its mining commission was controlled by trustees appointed under a deed approved by the High Commissioner.

Questions were also raised over the chief's ability to raise money by levy. Although some levies were not open to objection as for instance those for the building or maintenance of schools, there were others where the proceeds were for private purposes. Tshekedi Kgama raised money in the form of one ox per man to pay for his visit to London in 1930. A different form of levy was the chief's right to call out age-regiments to provide unpaid tribal labour. Most uses of unpaid labour were clearly for the general good, e.g. the collection of stray or ownerless cattle, the collection of arrears of tax, destruction of beasts of prey, repair of tribal buildings or the making of dams. However, regimental labour was used also for tilling the chief's tribute fields (Masotla), for building his cattle crushes and for domestic purposes such as the preparation of skins. There was nothing unusual in this practice because the chief was expected to use the produce of his lands for the relief of distress. There was no evidence that the right of free service was abused by the baTswana chiefs but there were complaints about the manner in which the requirements were used for public purposes. It was argued that such work should be paid for. Chief Tshekedi had had complaints lodged against him for the methods used to enforce unpaid labour in 1930.

In view of all the circumstances the Resident Commissioner informed the Native Advisory Council that reform was needed and

consultations with Council commenced. Eventually Proclamations No. 74 (Native Administration) and No. 75 (Native Tribunals) both of 1934 were promulgated. These introduced major changes in their respective areas and were immediately challenged by the chiefs, the leading protagonist being Tshekedi Kgama who claimed that the proclamations were invalid and that the Bechuanaland Government had no powers to issue the proclamations. Tshekedi Kgama claimed that the proclamations were contrary to the spirit of the Order in Council 1891 and he cited specific clauses. These claims led to an action in the Special Court at Lobatse, the outcome of which was to confirm the High Commissioner's ability to issue the Proclamations and although their contents did make changes in native law and customs, there was only an obligation on the High Commissioner to 'respect' Native law and custom. The Special Court held that the High Commissioner had complied with this requirement by the consideration given to the views put forward in the course of the consultations with the chiefs and the tribes. However, the discussions had served their purpose and whilst the Proclamations 74 & 75 of 1934 were not repealed, they were replaced by Proclamation 32 (Native Administration) and 33 (Native Courts) of 1943. The continual exchange of views between 1934 and 1943 had led to a greater measure of agreement and the 1943 Proclamations produced less comment and a wide degree of acceptance.

In commenting on the 1934 Proclamations Hailey (1953) felt that the direction of change adopted by the proclamations was appropriate but that the changes represented an abrupt departure from tradition. The Native Courts Proclamation provided for the

establishment of Senior and Junior Tribal Tribunals with a fixed composition which took over the work of the kgotla. The removal of the most characteristic institution of the baTswana was seen as a challenge to trial by a system to which the people were deeply attached. In respect of administration, the Native Administration Proclamation in particular appeared to be designed not so much for the purpose of using indigenous institutions as agencies for local government purposes, but more to provide a means of preventing the misuse of power in the hands of the chief. The introduction of a Tribal Council in which the chief sat with advisers and councillors allowed for the Administration to intervene in tribal affairs. The proclamation also provided for the High Commissioner to withhold the recognition of a chief. The High Commissioner could suspend a chief although only a tribe could depose a chief. Finally the proclamation defined the duties and powers of a chief and it was in this respect that there was the first evidence of the intention to put on a statutory basis the administrative control exercised by the Administration over the chiefs. The chief was required to obey orders or instructions given to him and to help in preserving order and the promotion of health among his people. No money could be levied by a chief without written permission of the Resident Commissioner, who was not to give approval unless the tribe assembled in kgotla had agreed to the proposal. Finally, the chief could use regimental labour in times of national emergency, to provide for the communal needs of the tribe and to perform personal services to the chief recognised by custom e.g. the ploughing of tribute fields.

The administration of tribal monies was modified in 1938 by the establishment of Tribal Treasuries (Proclamation 1935) and Treasuries were introduced into seven areas with the beginning of the financial year 1938-39. The Native Fund which has been set up in 1919 was now abolished and the voluntary levy taxpayers paid for education was now credited to the Treasuries. Proclamation 35 of 1938 also allowed for 35% of the total collection of the Poll Tax to be paid to the Treasuries (Notice No. 126 of 1938). The chiefs ceased to draw a percentage of the collections as commission as before in view of the fact they now received a fixed stipend from the Treasuries.

The history of the subsequent legislation on tribal administration may be summarised briefly. The period of the 1930's represented a major turning-point in the modification of tribal administration. Whilst the 1934 Proclamations and the subsequent proceedings suggested that changes were not likely to be entertained by the chiefs and their people, this was not to be the case. The experience gained with the operation of the Tribal Treasuries after 1938 suggested also that changes were not only possible but could be beneficial. The discussions on the 1943 Proclamations took place in changed circumstances. In respect of Native Courts, Proclamation No. 33, 1943 placed trial by kgolta on a legal foundation and the Native Administration Proclamation No. 32, 1943 confirmed the ability of the High Commission to appoint a chief or an administrative officer in his place if no chief could be appointed. Thus the appointment of chief ceased to be a purely tribal matter and the High Commissioner could remove a chief. The

Tribal Council introduced in 1934 was now omitted from the proclamation although it required that authority should be exercised by the chief in consultation with his Council in accordance with its advice.

Legislation in the immediate period after 1943 was necessitated by the dynastic troubles in the baNgwato Reserve. Proclamation 43 of 1949 extended to the Reserves the powers of the High Commissioner to appoint a person to be Native Authority. In the baNgwato, with Tshekedi and Seretse Kgama absent, a Native Authority was urgently needed and Rasebolai Kgamane was appointed. This power to appoint was further extended in 1950 although such appointments were intended to be for stated periods of time.

The final steps in the progressive reduction of the chiefs powers were taken between Independence in 1966 and up to 1970. The removal of the right to regimental labour, (1966), and the right to dispose of stray cattle (Matimela Act 1968) were major measures. However, it was the creation of the District Councils and the Land Boards that took away the last remaining areas of responsibility exercised by the chief. The final act in 1970 was to allow for the President of Botswana to remove a chief without waiting for a complaint against a chief. By 1970 therefore the personalised rule of the chief as exemplified by Kgama III and Tshekedi Kgama had disappeared entirely with every facet of tribal life being subject to the formalised control of state sponsored and directed institutions. The old order to chiefs capable of exercising a great deal of influence in the daily life of their people had passed for ever. So had the individualised and personalised assess-

ment of cases before the kgotla. The freedom of the use of tribal labour and monies for the improvement of the life of the tribe, with the possibilities of misuse and abuse, had passed also and been replaced by new systems based on more rational procedures in which accountability played a major role. Throughout the period of colonial rule the chief accepted new structures where these were thought to be useful - the establishment of the Native Advisory Council, the Native Fund, the transfer of categories of cases to the Resident Magistrates were all accepted as were the Native Treasuries. The chief objected when they felt the changes were unacceptable or too abrupt and one can but think again of the wisdom of Rev. J.S. Moffat when as Assistant Commissioner at Palaye in 1893 he said:-

No trouble is to be apprehended so long as we leave the people and the Chiefs to manage their own affairs But at present there is a deep-seated and resentful conviction that we intend to take the ground from under their feet Any laws we impose will become a dead letter if not imposed with the sympathy and goodwill of the chiefs. (Annual Report of the Bechuanaland Protectorate, 1893-94, p.50).

However, transformation in tribal administration could not depend solely upon the acceptability of innovations by the chiefs and wider forces were at work to bring about widespread and overwhelming change. The direction of change from personalised to depersonalised structure of control is important and indicates the degree to which settlements including Serowe became more urban in character.

4. Serowe : an urban settlement

a) Serowe is urban

Within the context of Botswana, Serowe is not formally classified as urban for administrative purposes, but by the measures normally adopted to assess urbanism, Serowe must be considered to be urban. Wirth's (1938) characteristics of a relatively large, dense and permanent settlement are met in full and ample evidence has been presented above of the heterogeneity of the population of Serowe. However, the analysis of the occupational structure of Serowe does not meet Bascom's (1955) view of heterogeneity which conceptualised a society in which each person is economically dependent on others. Such a society would demand specialisation of function to such an extent that no person could consider himself to be independent. This has never been the case in Serowe where the majority of the population are independent farmers producing mainly for their own consumption with limited surpluses for sale. In recent times, the introduction of new manufactured goods into Botswana has led to the emergence of traders and small-scale entrepreneurs who depend for their major source of income upon the profits of their businesses. However, for the most part these businessmen are but one step away from their former total dependence on farming and in general still engage in some farming activities. Even government officials and those in social services in general continue to participate in agriculture. Whilst figures are not available to provide for a detailed analysis, there is widespread belief that those who are totally dependent upon their monies from the performance of their

specialised functions form a very tiny percentage of the total population of Serowe. Economic interdependence, therefore, would be a difficult criterion to sustain in justifying a claim that Serowe is urban.

An easier claim to urban status for Serowe may be linked to Bascom's (1958) revised view that heterogeneity should be seen in administrative terms through the existence of controls on a secondary and suprapkinship level. Such forms of control have always existed in the nucleated settlements of Botswana and in this Serowe was no exception. The use of the wards and sections as mechanisms of control has been an essential feature of the administration of Serowe and the baNgwato for the last 150 years. The wards, whilst being the basic social unit of organisation, also provided for the absorption of migrants and dissidents and have not always remained the familial groups as has been shown in the case study of Matshego. The section has provided for the integration of diverse ethnic groups within an administrative framework. The areal concentration of the sections was disturbed in the expansion of Serowe but this did not cause the section to be reduced in importance in the organisation of the life of Serowe. In 1966 a new structure of political units was imposed on Serowe to provide for constituencies for the Central District Council but this did not mean the abolition of the section which still performs functions of a social and coordinating nature. Above the ward and the section lay the central guiding and directing force of the chief whose ability to control the lives and activities of the people of Serowe was of paramount importance in maintaining the

cohesion of the settlement and preserving its existence in times of stress and threat. The absence of firm guidance by the chief and the progressive reduction of the power of the chief can be seen to have significant influences on the nature of Serowe and Silitshena (1979) has indicated the potential destabilisation of the nucleated settlements as a result of the emasculation of the authority of the chief.

Serowe may also be classified as urban on the functions that are found within the settlement. Smailes (1947) has suggested that the natural locus of centralised services is in the towns and in this Serowe is no exception. From its establishment, it has been the centre of administration not only for Serowe itself but also for the whole of the baNgwato Reserve. The tribal administration of Serowe was carefully articulated and directed from the chief's kgotla. The chiefs also developed a system for the appointment of their own representatives in outlying districts and these posts were subsequently acknowledged by the Protectorate Administration as the Subordinate Native Authority. Moreover, Serowe was recognised by the Protectorate Administration as an important site for central government functions. As the capital of the most numerous tribe and as the centre of administration for the largest tribal area in the Protectorate, Serowe was a natural choice for the placement of a Resident Magistrate. This office became the District Administration in due course and attached to it were the Police HQ, for the baNgwato Reserve, and the prison. Other district offices of the central administration in the baNgwato also were placed under the Serowe office. In respect of social services, Serowe received the only hospital in the baNgwato Reserve

which also provided outreach services to nearby villages. In education, Serowe witnessed the growth of a number of primary schools and in 1963 a secondary and a teachers training college were located there. In terms of postal and telegraph services, Serowe has always had a greater range of facilities in comparison with other settlements among the baNgwato. All these services tended to increase the importance of Serowe as a node in Botswana and to reinforce the tendencies to concentration that already existed. Serowe has been a primate settlement among the baNgwato and in Botswana until very recent times and the concentration of services and administration in Serowe has been instrumental in maintaining the pre-eminence of the town.

It is, perhaps, in respect of political relationships and decision-making that Serowe raises questions of analysis and interpretation. If the argument (Castells, 77, 78) is that a settlement is the more urban if means are provided for more people to participate in the decision-making process then Serowe has been urban for the whole of its history. The process of discussion in meetings at the ward, section and settlement and indeed tribal level allows for all to contribute. Schapera (1943a) has made it clear that the opportunities to express opinions were taken by the ordinary tribespeople and that the chief acted according to his assessment of the mood of the tribe. Undoubtedly, the chief could manipulate opinion and could on occasions go against the expressed view of his advisers and leaders, but this could not be done on too many occasions without the chief being exposed to the wrath of his people. This could lead to his being deposed.

Under the changed circumstances of the late 1960's the expression of opinion by the residents of Serowe became more formalised through the establishment of the District Councils and the elections that were held. This did not sweep away the traditional patterns of representation and residents, up to 1972, had acquired increased opportunities of making their views known. A second aspect of the government of Serowe and the baNgwato which indicates an increasing degree of urbanism lies in the progressive replacements of the personal rule of the chief by formal institutions. The gradual removal from the chief's court of categories of offences, the introduction of new methods of accountability and the creation of new administrative frameworks first in 1934 and later in 1943 were all intended to reduce the subjectivity of the decisions and actions taken by the chiefs. In its place both the Protectorate Administration and the Government of Botswana have sought to provide for continuity in administration, uniformity in the administration of justice, objectivity in the conduct of public affairs and the accountability of public monies.

Finally, a valuable indicator to the urban quality of Serowe may be gained from a review of the social milieu. The persistence of the ward as the primary unit of association in Serowe has ensured that primary relationships have continued to be of great importance within Serowe. Whilst Head (1981) has suggested that the increasing incidence of theft and the breakdown of family life indicate a changing morality in Serowe there is little evidence that either aspect has become of such importance as to warrant major investigation. This suggests that familial and

group relationships are sufficiently strong to curb antisocial activity although regrettably there is no literature to support this assertion. Of more direct value may be the emergence in Serowe of a number of social organisations which cater for specific interests. These organisations are not solely for particular ethnic groups and it would be difficult to suggest that these indicate the emergence of sub-cultures in the sense that Fischer (1975) prescribed. They do however represent opportunities from peoples from different backgrounds to meet together for purposes other than immediate family, ward or work needs. The pattern of relationships that have emerged in Serowe suggest therefore that numerous opportunities exist for people to associate in the economic and social spheres and it is suggested, with Eades (1980), that there exist those complex interrelationships outside the nuclear family which are a distinguishing feature of urban life.

4. b) The Urbanisation of Serowe

It remains to suggest phases through which Serowe has passed in its emergence as an urban centre in Botswana. Perhaps and most direct comparison may be drawn between Serowe during its first phase of settlement under Kgari in the early nineteenth century and the folk society as outlined by Redfield and Singer (1984) and Sjoberg (1960). The folk society was envisaged as a long-established community which was isolated, small, homogeneous and self-contained. The folk community was seen as having a system of common understandings. It was also one which had no

class system, no division of labour and depended upon a simple technology. This profile of the folk society parallels exactly the nature of the tribal communities among the baTswana up to the coming of the Europeans during the middle of the nineteenth century. The baNgwato nucleus had been forced to move from place to place in response to the difficult political circumstances in southern Africa in the late eighteenth and early nineteenth centuries. These movements did lead to disruption, dispersal and reassembly and the composition of the communities did change as regroupings lead new units to replace old. However, there appears every reason to expect that the nature of the tribal society of the baNgwato remained largely unchanged. Few non-indigenous influences were at work in the area of the baNgwato. It was not until the arrival of travelling traders and later resident traders and missionaries that exotic factors were introduced into the situation. With the missionaries also came new ideas of social behaviour, of the spiritual world, of dress and of education. Each of these factors lead to a re-assessment of aspects of tribal life and resulted in changes in the baNgwato society. These changes continued to have their influence on the baNgwato at Shoshong, at Letcheng and by the time the tribal capital was moved to Serowe by 1902 they had brought about major modifications in the fabric of the daily life of the baNgwato.

By 1902 the baNgwato had passed from the stage of incipient urbanisation in which the folk society of Kgari and Sekgoma I existed to that of primary urbanisation as outlined by Redfield and Singer (op.cit). From the establishment of the Bechuanaland

Protectorate new major factors had been at work among the baNgwato which led eventually to a greater formalisation of administration and modifications in the life of the people which carried forward the move to greater urbanisation. By 1902 with the settlement at Serowe, the capital of the baNgwato resembled closely the orthogenetic city of Redfield and Singer (op.cit). The importance of the chief, and of rules and laws derived from tribal law and custom, emphasized the traditional nature of society. This provided guidance for tribal leaders as a retrospective view of the world and stressed the importance of cultural, political and administrative controls. Moral and religious norms underscored a common culture which had changed the folk into a peasant society. Serowe also resembled the stage of primordial urbanisation of Lampard (1966) with hierarchies founded on religious and political bases and the organisation of agriculture adapted to the environment to produce a food surplus. One aspect in which Serowe did not match either Redfield and Singer and Lampard was the absence of a literati. There is no evidence that there existed an educated class that could write and even Kgama III was illiterate although he could write his name (Schapera, personal communication). The establishment of primary schools first in Shoshong, then Letcheng and Serowe had led to the emergence of some degrees of literacy among the baNgwato but this had not led to the issue of sacred books as would be expected with the translation of the Little into the Great Tradition. Tribal sages provided the historical perspectives to guide tribal opinion and a source of information on tribal law and usage, but there was no aesthetic tradition beyond wall markings. The only extant form aesthetic expression are the praise poems to the chiefs (vide Schapera,

1965). No intellectual class had emerged and no monuments, sculpture, painting or architecture can be offered to demonstrate the strength of the culture that existed.

The model of the pre-industrial city by Sjoberg (1960) offers many points of similarity and differences with Serowe. The relatively small population and area of Serowe up to 1947 with its divisions into ethnic units, its prescriptive roles in society, restricted social mobility, and the inferior position of women emphasized the restricted nature of Serowe society. Sjoberg's model also found parallels in the economic aspects of Serowe. The importance of barter and the absence of a fixed price or quality stressed the lack of regulation and incomplete knowledge of the market. The dependence on animate source of energy was an additional point of correlation. However, there were points of differences. In Serowe there were no occupational sectors such as existed in mediaeval European cities and no guilds existed to control the entry to crafts or the manufacture of goods. Trade did not engage many people in Serowe and in this characteristic Serowe is quite untypical of pre-industrial cities.

The introduction of motorised vehicles into Botswana led to changes in the level of contact between peoples and settlements and made it possible to replace animate by inanimate sources of power. However, the substitution of sources of energy cannot be taken too far. Up to 1972 little use had been made of new forms of energy and little had been done to reduce the demands made upon the individual to perform necessary duties. Petrol and diesel were used to power vehicles, stamp mills, borehole pumps and small electricity distribution systems. No attempts had been made to provide reticulated water

and electricity systems. Few Serowe residents owned tractors and for ploughing most continued to depend on teams of oxen. It would thus be quite wrong to suggest that by 1972 Serowe had begun to move into a period of industrial urbanism. Perhaps better parallels could be drawn with Lampards (op.cit) Classical phase of Definitive Urbanisation. Developments which took place in agriculture with the improvements in the techniques of cultivation, the use of higher yielding grains, all led to the accumulation of increased agriculture surpluses. These when added to the proceeds of cash crops provided for the accumulation of savings which were utilised through the institution of banking services.

Serowe from the 1930's felt the impact of secondary urbanisation, with the modification of traditional practices as a result of the influence of the Administration of the Bechuanaland Protectorate. This parallels Redfield and Singers (op.cit) stress on the weakening and suppression of traditional culture and the introduction of impersonal controls. The attempts to change the administration of tribal affairs by the Government started the process of weakening and this process of change continued throughout the period up to 1972 and allowed for the emergence of new viewpoints not linked and controlled by local norms. These developments which affected the intellectual, aesthetic, economic and political life in Botswana had their echoes in Serowe and among the baNgwato and led in turn to a more reform-oriented approach designed to bring about progress and designed change. This created tensions within Serowe as indicated by Head (1981) where conflicts emerged between the behaviour patterns of young and old sections of the community.

The movement of Serowe towards a urban society must not however be overstressed. There is no parallel between Serowe and the Industrial phase of Lamphards Definitive Urbanisation and the fluid class system of Sjobergs Industrial Urban society had not emerged by 1972. No parallel can be drawn with the heterogenetic city of Redfield and Singer as the city of the technical order which adopted a forward view of the world. Serowe had not reached the stage when there was a dependence on complex tools and an advanced technology and impersonal controls backed by sanctions of force had not replaced the long established forces of control of immediate social relationships. The growth of services, the institution of new rules for the regulation of life had modified traditional behaviour in the direction of more rational and consistent patterns based on laws devised on objective principles. This had not led however to a total disregard of the inherited framework of social behaviour or to the wholesale reorientation of the economic life of the community. What can be said is that onto a traditional format of life had been imposed a series of new norms and institutions which by 1972 had gone a long way to indicate and lead the direction of change. But as in all human societies the degree of acceptance and implementation of change varied between groups and individuals as they perceived the impact, both beneficial and detrimental, on their lives. Perhaps by 1972 Serowe exhibited some of both the good and bad aspects of both traditional and modern society and stood poised for development or regression as the winds of fortune might take it.

In conclusion, therefore, the burden of this dissertation has been to suggest that Serowe in 1972 was an urban settlement. It has

also been the intention to suggest that through the first half of the nineteenth century the nucleus of the baNgwato resembled a folk society in which little change had taken place over a long period. From the onset of contact with the Europeans from the middle of the nineteenth century, the baNgwato have gone through a number of changes which have transformed the traditional society to one which has successfully combined the old with the new. By the time of the establishment of the baNgwato capital at Serowe in 1902 these changes had already begun to be felt and Serowe could be classified as an orthogenetic city with established traditions, a peasant culture and well organised system of tribal administration. At this stage Serowe resembled Sjoberg's Pre-Industrial city although the comparison is not entirely acceptable. From 1902 until the 1930's changes in Serowe and its administration were small and took place slowly. However from the 1930's to 1972 there was a period of accelerating change in organisation, services, economic development and social provision. These, together with the growth of Serowe in terms of population and area suggest that Serowe moved towards becoming a heterogenetic settlement where reform, progress and change took place and was accepted. Again this analogy must be used with caution and up to 1972 there were many instances of the persistence of traditional practices to suggest that Serowe was at an important point in its transformation. The absence of potential bases for development in industrial terms suggest that Serowe would not become a typical industrial urban settlement of Lampards Industrial phase of Definitive Urbanisation. The most that might be expected of Serowe in the future is that agricultural patterns would be transformed as new technology

becomes understood and adopted and this will lead in time to the improvement of services, the integration of housing development and a general modernisation of facilities to match those of other similar sized urban settlements elsewhere in Botswana and Africa. How far progress will take place in those directions will depend on the future development of Serowe. This is in question in the closing decades of the twentieth century when the continued expansion of Serowe is in doubt, as other settlements gain in importance, as the relative isolation of this unique settlement makes it less attractive for the modern-day baTswana for whom the traditional pattern of life holds few attractions and where other locations in Botswana offer the potential for faster and greater personal advancement.

APPENDIX ANotesbaTswana:

the prefix ba-refers to the people- hence the baTswana are the Tswana people. Brown, J.T. (1926) offers three explanations of the derivation of the word Tswana.

- a. Cwaana: cwa means 'to come out' and 'ana' is a reciprocal suffix. Bacwaana in the diminutive form would mean perhaps 'little offshoots.'
- b. The Separators: 'the people who cannot hold together'.
- c. Ba a chwana: 'they are like (or just the same as) us'.

However Van Warmelo (1935) dismisses these explanations as 'fruitless speculation' (p. 103).

Shoshong:

the original name of this area appears to have been Leswaswa. The name was changed to Leshosho and eventually to Shoshong. An alternative derivation suggest that Seshosho imitated the sound of a spring.

Palapye:

the area was known as Serorome - meaning 'Everything is easy'. Tradition has it that in surprise a person exclaimed 'Oh Phala! bye! meaning 'So many impalas' and the name became Palapye.

Old Palapye:

the original name of Letcheng was changed with the adoption of Palapye as described above. Today the area of the old tribal capital is known as Malaka village.

baHurutse:

the baHurutse are the senior tribe of the baTswana and the baNgwato, baNgwaketse and baKwena acknowledge their descent from the baHurutse. However the baHurutse declined in importance and are now scattered among other tribes. Their name became corrupted with contact within the bakalaka and is now spelt baKhurutse.

Serowe:

Several origins of the name have been suggested. Serowe may be the locative form of Serowa, a bulb which used to be abundant in the area but which now is not available. A large boulder on the edge of Serowe Hill is said to resemble the serowa bulb.

Cattlepost:

The baTswana traditionally have 3 homes: one in the main settlement, one on their cultivated land (known as 'the lands') and one at their grazing areas (known as the cattlepost).

Regiment:

From time to time young men and women were formed into age-regiments (mephato). The establishment of a regiment marked the transit into adulthood and prior to Kgama III included initiation ceremonies. The age-regiments were used not only for the army or for disciplinary duties but also as labour units for communal undertakings, e.g. the building of the Serowe-Palapye road and the construction of schools, dams, etc.

Tirucalli Euphorbia:

(Setswana: Moremotala): known locally also as 'The Green Hedge', this plant is indigenous to

Tirucalli (contd.)

Ngamiland.. It was brought by Mrs Pretorius in the early 1920's to Serowe (vide Head 1981) and its use spread quickly. It replaced poles for the fencing of households.

Reserves:

Following the 1895 visit to London of Chiefs Kgama, Bathoen and Sebele, it was agreed that Reserves should be demarcated for each tribe in Bechuanaland. This work was undertaken by Goold-Adams and the Reserves declared in 1889.

Crown Lands:

Once the tribal Reserves were demarcated, the land outside the Reserves was declared to be Crown Lands. In 1966 on Independence these became State Lands of the Republic of Botswana.

APPENDIX BList of Wards (Motse) in Serowe, 1915-66

This schedule has been based on the 1966 list of taxpayers for Serowe amended where appropriate. The 1915, 1943 and 1949 entries are included for purposes of comparison. For 1915 a tick acknowledges the inclusion of the ward in the taxpayers list. The 1915 and 1949 lists were obtained from the District Commissioners Office, Serowe and the 1943 list is taken from Schapera (1952).

	<u>1915</u>	<u>1943</u>	<u>1949</u>	<u>1966</u>
A. Ditimamodimo Section (Tlase = e & NE)				
<u>Dikgosana</u> (all phuti: Ngwato)				
Ditlharapa (TLASE)		109	165	168
Matshotlha (TLASE)	✓	38	73	76
Magodu (TLASE)	✓	28	32	18
Mere (TLASE)	✓	77	135	129
MONAHENG (TLASE)	✓	26	33	35
Morwakwena (Godimo)	✓	76	86	91
Maiketso (TLASE)	✓	17	19	28
Sertso (TLASE)	✓	45	61	68
Molebatse (TLASE)		17		
Tshweu (Gare, formerly TLASE)	✓	59	33	93
Sedihelo (TLASE)		21	18	16
Kgope (TLASE)	✓	32	43	42
Tshephe (TLASE)	✓	12	18	16
Tlhalerwana (TLASE)	✓	24	32	49

		1915	1943	1949	1966
<u>Batlhanka (all classed as Ngwato)</u>					
Ditimamodima	(Gare formerly TLASE) Kwena: Kwena)	✓	50	78	100
<u>Batho fêla commoners) (classed as Ngwato)</u>					
Tsie, boo	(TLASE) (Kgomo, Birwa)	✓	4	9	11
Sethapo	(TLASE) (Kgomo ? Malete)	✓	16	26	34
Mantshela	(TLASE) (Kgomo: Tlharo)	✓	17	31	23
Makopo	(TLASE) (Kgomo: Malete)	✓	41	58	43
Bokone	(TLASE) (Tlou: ? Tlharo)	✓	23		33
<u>Bafaladi (ba ba agetseng Kgosi)</u>					
Talaote, bo	(TLASE) (Pelo: Talaote-Njai)	✓	353	509	649
B. <u>Basimane</u> Section (Gare & TLASE = C & SE)					
<u>Dikgosana</u> (all phuti: Ngwato)					
Tshisi, Ra	(Gare)	✓	45	65	75
Monamo	(Godimo) (Kgari)	✓	16		19
Mmabi	(Gare),	✓	36	54	63
Mmualefe	(TLASE)	✓	24	34	35
Mauba	(Gare)	✓	18	22	
Seiswana	(Gare)	✓	9	10	28
Kgopa, boo	(Gare)	✓	23	26	18
Tshosa	(TLASE)	✓	82	98	166
<u>Batlhanka</u> (classed as Ngwato)					
Basimane	(Mosipidi) (Gare) (Kgabo: Kgatla)	✓	255	288	413
Basimane	(Khumo) (TLASE) (Kubu: Rolong)	✓	141	215	223
Moseki, Ra	(Gare) (Kwena: Kwena)	✓	66	79	72
Makanana	(Gare) (Kweña: Kwena)	✓	42	63	53

		1915	1943	1949	1966
Sikwa	(Godimo) (Kgomo: Birwa)	✓	10	6	6
Motsokwane	(Gare) (Phuti: Ngwato)	✓	62	85	89
<u>Batho fela</u>	(Commoner) (classed as Ngwato)				
Motshwane	(Gare) (Kgomo:Maletse)	✓	71	110	108
Sefhako	(Konyana) (TLASE) (Kgomo:Maletse)	✓	110	124	162
<u>Malata</u>					
Motshubi, Ra	(Godimo) (Phuti:Kgalagadi-Ngwato)	✓	12		23
Modiega	(TLASE) (Tlou: Kaa-Tswapong)	✓	14	26	33
Mogaso	(Gare) (Kgabo: Pedi)	✓	20	14	13
Mmonwa	(TLASE) (mmutla: Pedi-Tswapong)	✓	82	136	151
<u>Bafaladi (ba ba agetseng Kgosi)</u>					
Khurutshe, ba	(TLASE) (Phofu: Khurutshe)	✓	134	199	208
Tshumanyane, Ra	(TLASE) (Phofu: Khurutshe)	✓	21	34	34
Seleka	(TLASE) (Phuti: Seleka-Ngwato)	✓	8	8	11
Setedi	(Godimo) (?Ward extinct) (Tlhapi: Setedi-Tlhaping)	✓	5	9	4
<u>C. Maaloso Section (godimo and gare = W & C)</u>					
<u>Dikgosona</u>	(all phuti: Ngwato)				
Maboledi	(Godimo)	✓	72		
Ramasuga	(Godimo)	✓	14		30
Rammala, boo	(Godimo)	✓	19	25	24
Mothodi	(Gare)				46
<u>Batlhanka</u>	(Gare) classed as Ngwato				
Maaloso	(Gare) (Kgomo: Birwa)	✓	210		263
Dikgatla	(Gare) (Kwena: Kwena)	✓	21		28

	1915	1943	1949	1966
Dinokwane (Gare) (Kwena: Kwena)	✓	121		150
Gwaila (Gare) (Kubu: Rolong)	✓	41		50
Bokotelo (TLASE) (Kwena: Kwena)	✓	95		112
Maineela (TLASE) (Kgomo: Birwa)	✓	10		16
Makolobjwane I (Orufheng) (Gare) (Kubu; Rolong)	✓	108		52
" II (Moleksane) (Gare) (Kgomo: Birwa)	✓			71
Morongwa (Gare) (Kgomo: Malete)		39		
Moshamu (Gare) (Kwena: Kwana)	✓	54		114
Phokela (Gare) (tau: S. Sotho)	✓	36		39
Bonyonyo (Gare) (Phala: Phaleng)	✓	34		68
Maatso (Gare) (Kolobe: Molopo-Birwa)	✓	42		77
Lekoko (Gare) (Kwena: Kwena)	✓	15		23
Motswaiso (Gare) (Kgomo: Malete)	✓	5		1
<u>Batho fela (commoners) (classed as Ngwato)</u>				
Masilo, ga (Godimo) (Phuti: Ngwato)	✓	47		89
Diranyane, Ra (Godimo) (Phuti: Ngwato)	✓	5		6
Mphelana, ga (Godimo) (Kgubo: Kgatla)	✓	16	18	20
<u>Malata</u>				
Ramareka (Godimo) (? Ward extinct) (Kolobe; Molopo-Birwa)	✓	1		
<u>Bafaladi (ba ba agetseng Kgosi)</u>				
Selolwane (Godimo) (mmutla: Peh-Kalaka)	✓	44		102
Mhafshwa (Gare) (mmutla: Pedi-Kalaka)	✓	104		146
Sebina (Gare) (tlou: kaa-Kalaka)	✓	276		515
Ndzimompe/Nkangwa (Godimo) (Pitse: Shangwe-Kalaka)	✓	49		74

		1915	1943	1949	1966
Marobela	(Gōdimo) (Kwena: Kwena-Kalaka)	✓	46		99
Chichana	(Godimo) (Kwena: Kwena-Kalaka)	✓	49		84
Sokwane	(Godimo) (tlou: Kaa-Kalaka)	✓	14		28
Nkowane	(Godimo) (Pitse: Kalaka)	✓	26		57
Rakgomo	(Gōdimo) (Kgabo: Kgatla-Kalaka)	✓	39		85
Senapa	(Godimo) (Pelo: Nyai-Kalaka)	✓	84		121
Talaojane	(Godimo) (Pelo: Talaote-Kalaka)	✓	39		67
Maphanyane	(Godimo) (Kgabo: Kgatla-Kalaka)	✓	17		34
Mokwena	(Godimo) (Kwena: Kwena)	✓	171		298
Tshipana	(Gare) (Kwena: Kwena)				9
Phaleng	(Godimo) (Phala: Kgalagadi)				
Maphakwane	(Godimo) (Kwena: Phaleng)	✓		14	18
<u>Unclassified Teko</u>					
Mapitse		✓			23
Mabele		✓			18
Teko					57
Mapoko					56

D. Maaloso-A-Ngwana Section (Godimo & Gare = W & C)

Dikgosana (all phuti: Ngwato)

Sekawana	(Gare)	✓	25	37	44
Menyatso	(TLASE)	✓	28	83	52
Mothodi	(Gare)	✓	87	115	110
Ramodimo	(Gare)	✓	43	52	64
Seosenyeng					14

	1915	1943	1949	1966
Semana (Godimo) Kgama	✓	31	42	61
Modimoeng (Godimo)	✓	23	35	42
<u>Batlhanka (classed as Ngwato)</u>				
Rakgomo (Gare) (Kubu: Rolong)	✓	267	336	321
Sekga (Gare) (Kwena: Kwena)	✓	32	46	23
Maaloswane I (Moloi) (Gare) (Kgomo: Malete)	✓	72		51
" II (Ibineng) (Gare) (Kgomo: Malete)	✓		95	31
Modikwana, goora - (Gare) (tlou: Rolong)	✓	22	28	63
Sekao (Gare) (Kgomo: Malete)	✓	129	180	210
Seletamotse (Gare) (tlou: Kaa)	✓	26	34	31
Marukhu (Gare) (Kwena: Kwena)	✓	28	31	26
Matshego (Gare) (Kgomo: Birwa)	✓	16	21	18
Tshipana (Gare) (Kwena: Kwena)	✓	96	170	83
Sengwato (Gare) (Kwena: Kwena)	✓	31	37	60
Tshomane, goora (Godimo) (Kwena: Kwena)	✓	25		30
Mathuba, Ra (Godimo) (Kgop: Kaa)	✓	28	47	60
Makolori (Gare) (Kgomo: Malete)	✓	55	53	97
Sekgwana (Godimo) (Kgomo: Birwa)	✓	47	75	55
<u>Batho fela (commoners) (classed as Ngwato)</u>				
Malela, бага (Godimo) (Kgabo: Kgatla)	✓	33	55	91
Thene, boo (Gare) (Kgabo: Kgatla)	✓	31		73
Senai, Ra (Gare) (Phofu: Khurutshe)	✓	8		7
Moitoi (Godimo) (kwena: Kwena)	✓	15	18	18
Mokwenanyane (Godimo) (Kwena: Kwena)	✓	14	11	14

	<u>1915</u>	<u>1943</u>	<u>1949</u>	<u>1966</u>
<u>Malata</u>				
Mapodise (Gare) (Pelo-Tete-Ngwato)	✓	35	30	14
Sebabi (Godimo) (tau: Phaleng-Kgalagadi)	✓	31	42	38
Loso, boo (TLASE) (Phiri: Shageng-Kgalagadi)	✓	20		
<u>Bafaladi (ba ba agetseng Kgosi)</u>				
Sesoma (Godimo) (ph [^] ok [^] o: Nyai)	✓		89	110
Thoka, boo (TLASE) (Phala: Thoka)	✓		83	95
Semelamela (Godimo) (Phuti: Seleka-Kalaka)	✓		10	Lo
Wanki (Hwange) (Godimo) (Kgabo: Nyai)	✓		12	13
Setemere (Godimo) (Phala: Thoka)	✓		7	11

Notes

1. Konyana is a collective name for Sefhako, Tsie, Mantshela, Makopo
2. Bomogaso listed under Maaloso-a-Ngwana in 1943/49 and Basimane 1966. Oral evidence stated that Booloso was renamed Bamogaso: "should not stay away from the Chief".
3. Bamonamo listed under Maaloso 1949 and Basimane 1966.
4. Mothodi listed under Maaloso-a-Ngwana 1949 and Maaloso 1966.
5. Sengwato listed under Maaloso 1949 and Maaloso-a-Ngwana 1966.
6. The following were listed in 1949 but not in 1966:- Molebatsi, Mauba, Ramareka, Maboledi, (stated to be extinct and included with Sedimo) and Morongwa.
7. The following were listed in 1966 and not in 1949:- Maaloso section, Tshipana, Mapoka, Teko (listed in 1915), Mabele (listed in 1915), Mapitse Maaloso-a-Ngwana Section : Seosenyeng. This ward, as a sub-ward, was created for the return of Sekgoma II from Nata in 1916 and placed under Setawane. It was reorganised as a full ward in 1956.
8. The 1915 lists available do not indicate the number of taxpayers in each ward. The tick indicates that the ward was in existence in 1915.
9. Mothodi ward was divided and the younger section joined Maaloso-a-Ngwana.
10. Dithharapa moved in 1920 from Shoshong to Serowe.
11. Maaloswane I & II have been reunited.
12. Tshipana I & II. Tshipana I in Maaloso section is the original ward. Tshipana II was established in Maaloso-a-Ngwana.

APPENDIX C

The Geology of the Serowe Area

This appendix is abstracted from Jennings, CMH: The Geology of the Serowe Area, Geological Survey of Botswana 1961. Jennings' work was based on the Quarter Degree Sheet 2226B.

Physiology and Drainage

The Serowe area, covering about 2800 square kilometres, is bounded by latitudes 22°00' and 22°30'S and meridians 26°30' and 27°00'E. The area is one of variable relief and altitude ranging from about 999m to 1420m above sea level and the country may be divided into a relatively flat sandveld plateau in the west overlooking a composite lower-lying plain to the east. These are separated by an escarpment ranging from 100m to 165m in height. The plateau stands at an altitude of over 1320m while the lower-lying plain ranges in elevation from 1190m to 990m in the south east. Large portions of both plains are covered by sands of the Kalahari type and on the lower plain there are extensive areas of 'black turf' soil.

The edge of the main western plateau is very irregular in outline due to the numerous headwater drainages of the Macloutsie and Lotsane river systems of the Limpopo drainage which are actively eroding back into the plateau. Alluviation is common in these drainages in the area from 6-14 kms from the escarpment and many of the main drainage channels dwindle in size or even disappear in this region. All river courses in this area are ephemeral and flow only after heavy rains. Weak springs occur at the foot of the escarpment in the Cave Sandstone at Leitho, Mooko and Paje. The edge of the plateau coincides roughly

with Du Toit's, (1953) Kalahari-Rhodesia axis of upwarp and forms the eastern rim of the Kalahari basin. The western sandveld plateau is completely devoid of drainage lines. The only other physiographic feature is Serwe pan north west of Serowe which is a large grass floored depression occupying an area of several square kilometres.

Outlying extrusions of this main western plateau occur to the east at Tswaneng (1341m), Leruti (Mangwedi beacon, 1330m), Paje, Tebele (1292m) and the Taukome hills. Two large basaltic spurs project eastwards from the main plateau as far as Masame and Taukome. Two further hilly areas occur in the Mamolwane and Botepetepe (1210m) and Hulwane-Phikwe areas. These hills probably represent a resurrected pre-Karoo fossil topography. An arcuate range of low hills runs northwest from Tswaneng to Serowe hill and thence eastwards for several miles. These hills are formed by a resistant post-basalt dyke aligned along a fault. The Taukome-Tebele spur is also aligned along a fault.

Erosional and Depositional Cycles

Several cycles of erosion can be identified. The summit plain of the plateau which forms the oldest erosional surface present, contains a thin veneer of Kalahari sediments which are the depositional equivalents of the denudational cycles present farther east. This older surface corresponds to the African Early-Tertiary cycle of erosion while several Late Tertiary cycles are present forming the younger compound surface below the main escarpment (Jennings 1962). The geological formations are shown in Table 5.

The Waterberg System

A fairly thick succession of unfossiliferous sedimentary rocks builds

hilly country in the Mamolwane, Phikwe and Botepetepe areas. A further small inlier of these pre-Karoo System rocks is exposed 3 km^s northeast of Serowe. Two boreholes drilled just north of Serowe encountered Waterberg System shales below about 33m of sandstone of the Cave Sandstone Stage.

The sedimentary rocks consist of grey and red-banded, grey, black khaki, maroon and pink flaggy siltstones or uniformly coloured shales overlain by fine-grained, red-brown, grey or mottled pink, and grey ferruginous quartzites. The argillaceous beds are usually micaceous and frequently pyritic. There appears to be an upward gradation in colour in the succession from black or dark grey to maroon and finally pink. These sedimentary rocks belong to the locally named Lotsani Shale Formation (Passarge, 1904) and were correlated with the Waterberg System of Du Toit (1954).

The beds dip gently to the northwest at 2-5 degrees but slumping of the shales and possibly the effect of mafic intrusions have resulted in dips of varying amount and direction in places. Green (1963) regards the variable inclination of the shales as being due to large-scale, low-angle false bedding.

In the Phikwe area the northern boundary of the Lotsani Shale Formation is faulted against Eccia Series sandstone of the Karroo System. Coal prospecting boreholes in the vicinity of the Morapule River in the southwestern part of the area have revealed Eccia Series shales and sandstones unconformably overlying shales of the Lotsani Shale Formation. At Sepolamoriri the Cave Sandstone Stage of the Karroo system overlaps onto a pre-Karoo diabase sill intruded into the

Lotsani Shale Formation and younger rocks are generally obscured by a mantle of red sand. It is probable that the Botepetepe-Phikwe and Mamolwane hills formed upstanding pre-Karoo relief and were overlapped by the Cave Sandstone or Eccca Stages of the Karroo System. The base of these pre-Karoo sedimentary rocks is nowhere exposed but in the Palapye area they unconformably overlies rocks of the Basement Complex (Green 1965).

A number of coarse-grained diabase dykes and sills are found intrusive into Waterberg Systems. These mafic intrusives have in places metamorphosed the overlying shales to dense, hard hornfelsic minerals which include cordierite, feldspar, staurolite and sillimanite and in places recrystallisation has resulted in micrographic inter-growths of quartz and feldspar.

The Karroo System

Sedimentary rocks and lavas of the Karroo System occupy about seven-eighths of the area mapped though the rocks of this system are often concealed below a relatively thin cover of younger Kalahari Beds and superficial deposits.

Dwyka Series

Although no rocks representing the Dwyka Series were observed in outcrop in the area mapped, coal borehole P 22 (Green 1967) passed through 9m of the Dwyka Series comprising massive grey shaly mudstone with much siderite spotting, banded reddish varied shale, red and white quartzite and tillite with a pale-coloured or locally reddish matrix. The Dwyka sedimentary rocks and lower members of the Eccca Series are often absent on the eastern margin of the Karroo basin.

Ecca Series

Sandstone, grit and shale of the Ecca Series crop out on Malongwe hill, northwest of Taukome and again at Ramashaba where they are upfaulted against Cave Sandstone. Elsewhere details of the succession are known only from scattered water boreholes and a number of coal prospecting boreholes present in the south east corner of the area.

At Ramashaba the Ecca Series outcrop consists of a small horst of about 1m of coarse-grained, friable, grey-white grit underlain by 0.5m of blue-grey to maroon, finely laminated, medium grained feldspathic sandstone. This in turn is underlain by 1.5m of medium to coarse grained sandstone now mainly recrystallized to quartzite by a dolerite dyke intruded along the fault plane. Three xenoliths of Ecca Series sandstone upto 1m in length were also noted on this dyke.

At Malongwe hill, very coarse-grained, gritty, feldspathic sandstone is exposed under a dolerite sill. The sandstone is indurated and red-brown in colour for a few centimetres from the contact.

As in the Tropsi area (Green, 1963) the lower part of the Ecca Series and Dwyka Series of the Karroo Systems are often not represented. It is probable that the Ecca Series can be subdivided on lithological grounds into a predominantly arenaceous lower stage and a predominantly argillaceous upper stage, but details of the succession are not known because of the lack of exposure in the area and hence no subdivision of the Ecca Series was made for the map of the Geology of the Serowe Area (vide Map 7). Borehole No.1094 which penetrated 70m of brown mudstone and black carbonaceous shale with minor amounts of coal and a 3m thick sandstone band, was probably drilled in the Upper Ecca Stage.

More details of the succession are known in the south east corner of the area at Morapule where a number of coal prospecting boreholes have been drilled (Green, 1961, Poldervaart, 1952 and Van Straten, 1959). The Eccca Series of the Morapule area was divided by Green (1961) into 3 main lithological sub-divisions consisting of an upper argillaceous division, a middle exclusively arenaceous division and a lower division composed mainly of sandy shales and flaggy micaceous siltstone. The lower division is often thin or even absent locally. Van Straten (1959) however considers that a persistent upper siltstone marker horizon encountered in the higher Karroo strata may represent a local facies equivalent of the Middle Eccca Stage sandstone and consequently did not make any division into an upper and middle Eccca Stage, but merely differentiated between the Lower Eccca Series and a Middle and Upper Eccca Series. Van Straten has recognised three coal zones within the uppermost subdivision.

The sedimentary rocks of the Karroo Systems were laid down unconformably on an irregular pre-Karroo topography which gave rise to an overlap of the Upper Eccca and even the Cave Sandstone Stage onto pre-Karroo rocks. The Beaufort and Red Bed Stages are absent in this area and the Eccca Series is overlain by beds of the Cave Sandstone Stage. In the Morapule area the Eccca Series dip gently to the west.

Stormberg Series

Neither the Beaufort Series nor the Molteno Beds Stage are found in the Serowe area and the Stormberg Series is represented by only the Cave Sandstone and the Drakensberg Lava Stages. Basal marls occurring below the Cave Sandstone, however are possibly to be correlated with the Red Beds Stage. Extensive outcrops are found in the vicinity of

the main erosional scarp extending roughly through the centre of the area, and also along the large ephemeral river courses. East and west of the escarpment region, however, the outcrops are generally concealed by a mantle of superficial deposits of Kalahari Beds.

Cave Sandstone Stage

Sedimentary rocks of the Cave Sandstone Stage of the Stormberg Series are found south and east of the main escarpment. They consist of aeolian sandstones with subordinate limestone and marl. The sandstone varies in colour from white and pink to buff, pale yellow, brown and greenish-white. It is generally slightly felspathic, fine-grained and massive. The sandstone is only feebly cemented and the rock therefore is often extremely friable. Bedded varieties do, however, occur towards the top of the succession and large scale crossbedding (within foreset planes upto 13m in length) is of frequent occurrence. Small scale crossbedding was also noted at Nkgalo and Leropo. In the Metsemasweu area the normal fine-grained sandstone contains scattered larger, well rounded 'millet seed' grains. In the Shakge area the Cave Sandstone consists of a closely bedded alternation of coarse and fine sand layers. Occasional tube-like chert bodies resembling fossil bones were noted. In the Metsemasweu area occasional concentrically banded bodies upto 2.5m in length of alternating bands of pink and yellow sandstone are found surrounding a small cherty nucleus. These probably represent deoxidation spheres caused by reduction of ferric oxide around fragments of organic matter and subsequent removal of the iron in the more soluble ferrous forms by percolating water (Tyrrel, 1926). Round or ellipsoidal light-blue to grey and pale green calcareous concretions of upto 7m in diameter

occur at Ramshaba, Metsemasweu and Shakge. Bands of pure limestone upto 0.5m thick were found in a calcareous zone upto 1.0m thick in the Mohekejane area.

Slickensiding, shearing, silification and jointing are common in the vicinity of dykes and it is probable that most dykes were intruded along pre-existing fault or sheer planes. Thin silicified joint planes (1cm in width) are often present some distance from the dykes. Xenoliths of Cave Sandstone upto 8m in diameter, occur fairly frequently in dolerite dykes and in one case in basalt. Columnar jointing in Cave Sandstone is present along dolerite dyke contacts at Tswaneng and Mmamoruntse while large scale octagonal jointing, some 2.5m across, occurs on flat outcrops at Leitho and Tehebetsweu. A number of linear belts of denser vegetation extending for several kilometres and often hundreds of metres wide show up clearly on air photographs and are found on both Cave Sandstone and basalt. These tree lines are developed along zones of closely spaced parallel joint planes along which deeper soil has developed allowing preferential growth of trees and shoots. The tree lines thus mark major joint planes which trend North West- South East or NorthNorth West- South South East.

Sandstone dykelets (remobilised Cave Sandstone) upto 5 cms wide were noted at Mohekejane, Shakge and Mogorosi and rafts of red quartzite upto 0.5m thick and varying considerably in altitude are common in the basalt overlying the Cave Sandstone. These latter appear to be upfloated rafts of sandstone though they may owe their origin to preferential intrusion of basalt along bedding planes near the top of the sandstone.

The Cave Sandstone - Basalt contact varies from an extremely smooth plane to one which undulates markedly. Present-day erosion has frequently exposed basalt lying at a lower level than the Cave Sandstone. Similar extrusion on an uneven landscape of the Cave Sandstone was noted by Van Eeden and others (1955) in the Eastern Lowveld area in the Republic of South Africa. The Cave Sandstone is generally indurated for upto 15 cms in the contact zone and is harder with a red, brown or maroon colouration.

The Cave Sandstone attains a thickness of about 100m and contains thin intercalated maroon shale bands towards the base. The basal sandstone often grades into a pinky marly sandstone. In the Sepolamoriri area and near Serowe the Cave Sandstone overlaps directly onto pre-Karoo diabase and Waterberg System shale. To the south of the area mapped the Cave Sandstone is underlain by pink and maroon or pale blue Eccca Series shales.

Drakensberg Lava Stage

Basaltic lavas crop out all along the escarpment and project eastwards in two major spurs as far as Tswaneng and Taukome. The lavas are overlain by Kalahari Beds on the plateau and drilling has shown that they extend more than 350kms westwards thus confirming Poldervaart's (1952) contention that they probably form one of the largest single areas of Karroo basalt on the African continent. These basalts were termed 'Loalemandelstein' by Passarge (1904) who correctly correlated them with the Batoka basalts of the Victoria Falls and the basalts of the Stormberg Series in South Africa. The basaltic flows were apparently preceeded by a period in which erosion of the Cave

Sandstone took place as the lavas were extruded over a surface with a relief upto 50m.

The basalt varies in thickness but attains a maximum of 120m in the Serowe area. A thickness of 136m was recorded by Poldervaart (1950) 61kms northwest of the mapped area. It is a fine-grained dark grey, brown, black or purple amygdaloidal or massive rock. No intercalated sandstone bands have been noted. The amygdales which vary ranging in size from 30mm to over 15cms in diameter consist of crystalline quartz, chalcedony, agate, chlorite, serpentine, calcite and a variety of zeolites. In places the amygdales consist entirely of oval blackish-green chlorite pellets. Occasionally numerous unfilled vesicles may impart a pumiceous texture to the lava. The basalt frequently shows spheroidal and tabular weathering on exposed faces. Massive varieties are often cut by later irregular intrusions of amygdaloidal basalt though the reverse also occurs. Orange to purple current bedded sandy tuff bands upto 0.75m thick were noted in the Lehatse area, but these do not have any great lateral persistence. Numerous irregular partly indurated tuff-like bodies occur in the same locality and appear to be remobilised tuff bands.

The basalts are mainly theoleiitic types with an intersertal texture. However, subophitic, porphyritic, poikilitic and glomeroporphyritic textures were also noted. They are generally fine to medium grained rocks consisting of lime-soda plagioclase, clinopyroxene and magnetite. Small amounts of olivine occur as euhedral microphenocrysts now generally pseudomorphed by iddingsite, pleochroic green to brown bowlingite with high birefringence, serpentine, or an apparently isotropic green mineral which is probably serphite or chlorophaeite. Orthopyroxene occurs but is uncommon.

Sandstone dykelets upto 6cms wide are fairly common in the basalt near the basalt sandstone contact. In the Sokosi area quartzalbite veinlets less than 30mm in thickness cut the basalt while small veins and pockets of clear calcite were noted in the same area in the vicinity of a fault.

The extensive distribution of the lavas in horizontal flows suggests eruption from fissures rather than central type volcanoes. Some of the dykes found cutting the basalt may have acted as feeders to higher horizons which have since been removed by erosion.

Intrusive Rocks

A number of mafic dykes or sills are found intrusive into both the Waterberg System and the Karroo System. These mafic intrusions which are of two ages, are quite distinct megascopically. The coarse-grained, mafelsic pre-Karroo dykes and sills are found intrusive into shales of the Waterberg System and in the Sepolamoriri area are unconformably overlain by the Cave Sandstone. The younger set of mafic rocks is of post-Karroo (Jurassic) age.

The Karroo dolerites are fine-grained rocks often showing chilled margins. The dykes vary from a few metres to 70 metres in width while the only sill noted in the area occurs at Mahatsi hill and is at least 50m thick. This sill is characterised by large labradorite phenocrysts upto 80mm in length. The dykes often cause silification, slickensiding, shearing and jointing where they cut Cave Sandstone and often contain quartzitic xenoliths of metamorphosed Cave Sandstone upto 8m in length. The dykes are normally well jointed and weathered especially on the contacts. Columnar jointing of dolerite was noted

near Tswaneng and Gaotole, with columns upto 7m long and 15cms to 30cms across, with generally a hexagonal cross-section. Columnar jointing of baked Cave Sandstone on dyke contacts was noted on a smaller scale in the same areas. The dyke margins are seldom regular and pinch and blow considerably.

The Karroo dykes are markedly parallel and trend WestNorthWest - EastSouthEast as they do in the Makhware hills area to the south (Jennings 1963), the Tropsi area to the east (Green 1963) and the Tuli-Sabi trough (Du Toit 1954). The major faults in the area also follow this direction. The dykes can be traced over distances upto 20kms.

In thin sections, the dolerites are fine to medium-grained rocks consisting mainly of calcic plagioclase and one or more pyroxenes. The most common pyroxene is augite with smaller amounts of orthopyroxene. The plagioclase varies in composition but is always calcic. Textures vary from intersertal, subophitic, porphyritic, glomeroporphyritic and in one dyke cutting basalt near Tsebele, to pilotaxitic. Olivine may or may not be present. When it does occur it has generally been deuterically altered to bowlingite, chlorophaeite, serphite or idodingsite. At Serowe a dyke intruded in basalt has an offshoot which follows joints in the basalt and must therefore have been intruded after solidification and jointing of the basalt.

The Serowe-Tswaneng dyke forms a series of low hills because of its resistance to erosion. Amygdales were noted in one locality in this dyke indicating that at the time of intrusion the Karroo cover was probably not very thick.

Kalahari Beds

Overlying the Karroo System forming part of the Kalahari plateau is a relatively thin succession of silcrete, sandstone, limestone, ferricrete and unconsolidated sand. These rocks, excluding the sand of Kalahari type, were termed the Botletle Beds by Passarge (1904) but are now generally referred to as the Kalahari Beds.

The total thickness of the Kalahari Beds probably does not exceed 23m in the escarpment area but increase in thickness in a north-westerly direction, and is 60m thick near Letlhakane (Poldervaart 1950). The following stratigraphic succession has been determined:-

4.	Red, grey and brown sands	About 7m
	_____ Period of Erosion _____	
3.	Ferricrete	30cms - 4m
	_____ Period of Erosion _____	
2.	Pure opaline orchalcedonic rock	2 - 2m
1.	Sandstone, silicified sandstone (silcrete)	
	often with root holes, conglomerate and shale	2 - 10m
	_____ Unconformity _____	

Karoo System

The basal member of the Kalahari Beds is a massive to poorly bedded, white, greenish-white or red brown, soft, friable sandstone normally characterised by numerous tubular holes resembling root holes which cut the sandstone at various angles. Root holes were occasionally found which were filled with a younger, now lithified, red sand. Wayland (1954) regards these tubular holes as being formed by roots at depth (possibly 17-23m) on forested dunes. This sandstone can probably correlated with the 'Pipe' sandstone occurring in Zimbabwe

(Maufe 1938). False bedded, and concentric bonding were noted occasionally. The sandstone is often silicified to form an extremely hard, pale grey, buff to honey-coloured silcrete which breaks with a conchoidal fracture.

The silcretes consist of a poorly-sorted aggregate of well-rounded quartz grains with minor amounts of feldspar and ferromagnesium fragments cemented by chalcedony and occasional opaline silica or ferruginous material. The larger quartz grains are generally better rounded than the smaller ones. Some of the quartz grains show strain extinction. Passarge (1904) probably correctly regarded much of the chalcedonic cement as being devitrified opal. The silcretes cannot be regarded as the silicified base of the sands of Kalahari type as postulated by Lemplugh (1907) as they are often separated from them by several feet of ferricrete. They are thus older silicified desert sands.

In the Tekwane area the sandstone grades laterally into a limestone upto 2m thickness which contains a thin quartzite band and lenses and bands of chert. Green shale pellets are common in the sandstone while an interbedded green shale horizon 30cms thick was noted in the same vicinity.

In the Leropo and Paje areas thin (upto 1m) sandy limestone (calcrete) with small weathered inclusions of basalt were noted overlying the basalt and there are older than the normal 'pipe' sandstone. In the Paje area the limestone is dull white in colour with bands and irregular replacements of silica. Silica was noted replacing calcite rhombs in one instance. The limestone at Paje varies laterally into

a hard conglomerate with rounded pebbles, 60mm to 120mm in diameter, of quartzite or brown limestone. Pebbles of agate and clear quartz are also found. The conglomerate here is overlain by 'pipe' sandstone or pore chalcedony. The 'pipe' sandstone and its associated limestones or conglomerates do not exceed a thickness of 10m.

Overlying the basal 'pipe' sandstone is a thin layer of pure chalcedony which varies from a few centimetres to 2m in thickness. The chalcedony is seldom found in actual contact with the underlying sandstone but generally occurs as tabular fragments on its surface. Where the contact could be observed there was a sharp break from the sandstone to the chalcedony. The rock varies in colour from pink, buff, yellow to dark grey or black. It may be completely massive and chert-like or may have a cellular structure. Root like holes occur occasionally. The Gastropod fossils Planorbis (?), Viviparus (?), and Tiritella, small pelecypoda as well as stains of the aquatic plant Chara were found at Majadinare, Mogorosi and Khubula-Bapedi. These fossils were probably first preserved in a freshwater limestone or marl which is now completely silicified.

A considerable period of erosion took place following the deposition of these beds. During this period the chalcedony was broken up into tabular fragments or, in some places, completely removed by erosion. A few isolated boulders of a younger breccia of chalcedony in a poorly cemented sandy matrix were noted.

Passarge (1904) regarded the silcretes as being Oligocene in age while Newton (1920) regarded the age of fossils from the Gwampa chalcedony found in a similar stratigraphic position to that in the Serowe area

as late Cretaceous, but admitted that the obscure fossiliferous remains were of so restricted a character that they presented little evidence as to their geological age. Wayland (1954), however, regarded these beds as being late Pliocene or early Pleistocene. Dixey (1941) also regarded similar silicified surface deposits in Zambia, Angola and the Congo as being formed during the intense and widespread period of aridity that prevailed during the end-Tertiary and early Pleistocene.

The chachedonic silcrete is overlain with a sharp break by a horizon of ferricrete varying from 30mm to 4m in thickness. The ferricrete consists of ferruginous nodules cemented together and now often partly converted to limonite. It often grades into a cellular, ferruginous sandstone. Ferricrete boulders containing numerous tubular fragments of chalcedony occur in the Tekwane area.

The ferricrete is overlain by 7m or more of fine-grained red, brown or grey unconsolidated sand. These sands of Kalahari type can probably be correlated with the Plateau Sands of Cahen and Lepersonne (1952). A Chelle-Acheulean handaxe was found partly covered by these sands but it is more probable that the handaxe was covered by a subsequent redistribution of the plateau sands and is therefore of little use in dating the sands. Wayland (1953) regards the accumulation of the sands of Kalahari type as having brought to an end the period when the Chelle-Acheul type of culture was evolved in Africa. However, the Chelle-Acheulean tools found by Wayland were found east of the high-lying plateau in sands which are undoubtedly younger than those mantling the plateau. Cooke (1957) regards the Kalahari type sands as probably pliocene in age as does Martin (1950). Mabbut (1957) also regarded the sands as being of Upper Tertiary age.

Superficial Deposits

Large tracts south and east of the escarpment are covered by superficial deposits, consisting of soil, alluvium, gravel, calcrete and sand. Good sections through the superficial deposits were often found in the river beds. A typical section is as follows:

<u>Material</u>	<u>Thickness</u>
Soil	15cms
Grey sand with thin river gravel bands	1.5m
Maroon sand	1m
Red sand with abundant calcrete nodules	1m
<hr/> Period of Erosion <hr/>	
Red sand with occasional calcrete nodules and gravel washes and Chelle-Acheule artifact at base	120cms
<hr/> Period of Erosion <hr/>	
Nodular calcrete and red sand	About 1m

The gravels consist of pebbles of basalt, agate, pre-Karoo sedimentary rocks and chalcedony. The sands are probably partly redistributed plateau sands brought down from the escarpment area by the rivers and by wind action. As much as 7m of 'black turf' soil may overlie older red calcrete sands and gravels in certain areas.

Structure

The structure of the area is comparatively simple with the beds of both the Waterberg and Karroo Systems lying nearly horizontally. Dips of upto 25° do however occur in the Waterberg System in the vicinity of the Phikwe fault as well as anticlinal folding of beds

of similar age in a small outcrop 3kms northeast of Serowe. The Karroo lavas and sandstone dip very gently to the west.

The pre-Karroo sedimentary rocks are intruded by a number of diabase dykes which trend Northnortheast - South SouthWest or East southeast - Westnorthwest. A noticeable feature is the marked parallelism of all post-Karroo dykes, shearing and faulting along an EastSouthEast - WestNorthWest trend.

Two fairly large faults occur between Serowe and Tswaneng hills and in the Sokose-Tebele- Taukome areas. This latter fault forms the westward continuation of the Lechana fault of the Tlopi area (Green 1963). Both faults probably have a throw of 70-80m with downthrow to the south. A dyke is aligned along the Serowe fault over its entire length and partly along the length of the Lechana fault. Faulting also occurs southeast of Shakge, at Phikwe, north of Mabeleapudi at Maila, Lerupo, Ramashaba and possibly north of Taukome. In all the faults excepting Phikwe and Ramashaba, basalt is faulted against Cave Sandstone. At Phikwe Eccca Series sedimentary rocks are faulted against pre-Karroo shale and quartzite. At Ramashaba Middle Eccca Stage shale and grit has been upfaulted against the Cave Sandstone. West of Shakge a narrow zone of the Cave Sandstone occurs along the southern margin of an East-West dolerite dyke, and basalt occurs both south of the Cave Sandstone and north of the dyke. It is not certain whether the dolerite was intruded along a fault plane or whether the intrusion of dolerite carried up a raft of Cave Sandstone with it.

Economic Geology

The area does not show much evidence of mineralization of economic worth apart from coal. No minerals have been located in sufficient quantity to be of economic importance. Small amounts of limestone and calcite occur while ferricrete may occur locally in sufficient quantity to be regarded as a very low grade iron ore.

Coal

A detailed investigation of the coals occurring in the Morapule area has been carried out and has been described by Van Straten (1959). The coal seams occur in three zones and display a constant positional relationship to the Middle Eccle Stage sandstone and an upper siltstone marker horizon. The coal seams of the upper two zones are thin and laterally impersistent and consequently only the basal zone, which is 5-10m thick, is economically important. Individual seams of medium to low-grade, non-coking bituminous coal within this carbonaceous zone reach 6m in thickness. In the central portion of the coalfield the reserves are thought to be of the order of 150 million tonnes. Total reserves are estimated at 300 million tonnes.

Limestone

Limestone bands upto 0.5m thick occur in a calcareous zone 10m thick in the Cave Sandstone stage at Mohekejane, but appear to be laterally impersistent. The small pockets of calcite, some of it approaching Iceland Spar in quality but apparently insufficient quantity to be of any economic importance, are found in shear and fault zones in the basalt.

Iron Ore

Ferricrete may occur in sufficient quantity to be regarded as a very low grade iron ore in the Mogorosi area.

Water Supply

Geological conditions in certain areas are favourable for developing strong ground-water supplies and these are coupled with the presence of extensive areas of fertile land which could possibly be used for limited irrigation of crops. The Cave Sandstone Stage (Stormberg Series, Karroo System) in particular forms a very favourable ground water formation from which high yielding supplies can be obtained. The indurated contact zone with the overlying basalt constitutes one of the most important secondary aquifers in Botswana. Other aquifers are also encountered at greater depths in the Cave Sandstone.

Summary

The oldest rocks present in the area are representatives of the Lotsani Shale Formation which is correlated with the Waterberg System. This formation comprises grey and maroon, flaggy-banded siltstones and pyritic, micaceous, maroon, grey and black shales which crop out near Mamolwane, Phikwe and Botepetepe on the east-central parts of the area and also 3kms north east of Serowe. The shales, which are at least 200m thick, are overlain by 15m of fine-grained brown quartzite in the Phikwe area.

The remainder of the area is underlain by representatives of the Karroo System overlain by the Kalahari beds in the northwestern quadrant. The only outcrops are of the Eccia Series and consist of

coarse felspathic grits, sandstone and shale which probably belong to the Middle Ecca Stage. Knowledge of the Upper Ecca Stage and of the basal Dwyka Series succession is only known from scattered boreholes. The Stormberg Series has the greatest development of the Karroo System in the area. The Cave Sandstone Stage consists of massive pink, white or buff-coloured, fine grained sandstone with some limestone mark and shale and attains a thickness of 100m. The overlying Drakensberg Lava Stage attains a maximum thickness of about 120m. The basalt is a fine-grained grey, black or purple amygdaloid or massive rock. Occasional thin tuff bands occur in the Lehatse area. Both these stages are particularly well expressed along the north-easterly trending escarpment separating the early and late Tertiary denudational cycles.

Intrusions of two ages occur. A pre-Karoo phase of diabasic dykes and sills and a phase of fine-grained Karroo dolerites both of which follow an East-West trend.

Post-Karoo faulting also with a dominant East West trend is present. A portion of the Morapule coalfield falls within the Serowe area while small uneconomical deposits of calcite and limestone are also found.

APPENDIX DA Chronology for Serowe

- 1902 Move to Serowe commenced
Central School opened
Smits Store opened
- 1903 Move to Serowe completed
- 1904 Kgama (later Memorial) School opened
(later rehoused 1916-21)
- 1905 Maboledi ward moved to Tonota
- 1907 Sekgoma (II) sent to Makgadikgadi
- 1911 Masokola regiment formed
1st Wagon repair works opened
- 1915 L.M.S. Church opened
- 1916 Sekgoma (II) returns from Nekati
R. Sepane, Manonnye, Moletshwane dried up. Wells dug
- 1919 Influenza epidemic
- 1923 Death of Kgama III
Mrs Pretorius brings green hedge from Maun
- 1925 Death of Sekgoma II
Sekgoma Memorial Hospital
Serowe-Palapye road constructed
- 1926 Tshekeledi Kgama appointed Regent
Rratshosas banished
- 1927 Post Office opened in temporary buildings
- 1931 Dam built by regimental labour
- 1935 2nd Wagon repair works opened
- 1938 Raditladi exiled
- 1939 Masokola School opened
Tribal granaries commenced

- 1940 Post Office opened in permanent quarters
- 1941 Native Recruiting Corporation opened office in Serowe
- 1943 Tribal Garage opened
- 1944 Mswazi case
- 1946 Census
 - Serowe Elementary Teachers College opened
- 1947 Dispersion of wards agreed in Kgotla
 - Well sunk at New Town
 - Simon Rratshosa School opened
 - Building of Moeng College commenced
- 1948 Stand rents introduced for traders at £15 per year
- 1949 Tribal granaries ended
 - Rifle and Recreation Club
 - Serowe Tribal Maternity Centre opened
- 1950 Seretse Kgama banished
 - Serowe Tribal Maternity Centre closed
 - Stand rents increased to £30
- 1951 Tribe decided against hotel
 - Watsons No.2 store opened in New Town
- 1952 Return of Tshekedi Kgama
- 1953 Guides and Scouts noted
 - New Town school opened
- 1954 Airstrip noted in Annual Report
- 1955 Nshakashogwe people tried for not returning from the lands
- 1956 Return of Seretse Kgama
 - Census
 - Traders security 1 month
 - Tshekedi, Seretse and Rasebolai Kgamane agree to churches

- other than the L.M.S.
- 1st-Garage opened
- Riverside School opened
- 1958 Stand rents increased to £35 per year
- Full-time welfare worker appointed
- 1959 Death of Tshekedi Kgama
- Old stables of the D.C.'s office converted to a prison
- Tshekedi Memorial School opened
- Barclays Bank commenced weekly mobile service
- Mafhetsakgang and Mafholosa regiments formed
- 1960 Drought
- 2nd Garage opened
- Standard Bank commenced weekly mobile service
- Health Centre started with £8,600 from Oxfam
- 1961 Airstrip extended to 300m on one section
- Poor rains, only 10% of normal ploughing
- Introduction of 50kph speed limit for 5kms from Post Office
- 1962 Swaneng Hill School commenced
- 1963 Teachers Training College opened
- St John's Apostolic Church opened
- 1964 D.C. notes Red Cross in Serowe and no need for St Johns Ambulance
- Health and Social Centre combined into Community Centre with a library
- 1965 Retail Co-operative opened
- Textile Brigade commenced
- 1966 Central District Council replaced baNgwato Tribal Administration
- 1967 Standard and Barclays Bank opened permanent full-time operation

- 1967 Post Office moved to larger premises
- 1968 Tribal Land Act
- 1970 St Gabriels School opened
- 1971 Manonnye School opened
- 1972 Serowe gazetted as an area for the compulsory Registration
of Births and Deaths from 25/9/72 Govt. Notice 239 of 1972

APPENDIX - BLIST OF TRADERS AND LICENCES 1966

	<u>No. of licences</u>
Arms and Ammunition	6
Bakers	4
Banks	2
Blacksmith	4
Butcher	10
Pharmacy	1
Garage	2
Petrol Filling Station	2
Insurance Agent	1
Labour Agent	1
Restaurants	14
General Dealers	12
Livestock buyers	9
Livestock Agents	1
Restricted Dealers	3
Hairdresser	1
Driller	1
Buyers of Hides and Skins	4
Buyers of Green Hides	6
Trophy Dealers	2
Hotel	1
Sale of Methylated Spirits	1
Thatchers	3
Shoemakers	4
Tailors	4
Basket maker	1
Carpenter	1
Brick maker	1
Hammer Mills	7
Vehicles for Hire	8
Tribal doctors and herbalists	12

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Source: Compiled from files at Serowe at the District Commissioners Office and the Central District Council.

APPENDIX F LIST OF LICENCE HOLDERS BY CATEGORY, 1966

Arms and Ammunition (6)

Theron

Palmer

Woodford

Page-wood

Watson

B.P. Trading No.1 Store

Bakers (4)

Blackbeard

Sunvalley

Walebowa (Serowe Bakers)

A.J. Smit

Banks (2)

Standard

Barclays

Blacksmiths (4)

H.C. Pretorius (L.M.S. Church)

Van der Colff (Sikwa)

Stoneham

Serowe Wagon Workers

Butchers (10)

Blackbeard

Sunvalley

Theron

Butchers (contd.)

Sehudi

Resheng (Ditlharapa)

Walebowa

Mokgwathi

Bata (Rakgomo)

Selobilwe (Tshosa)

Serowe Central (Kgosing)

Pharmacy (1)

Pharmacy

Garage (2)

Dennis

Wrights

Petrol Filling Stations (2)

Dennis

BRO Filling Station

Insurance Agent (1)

B Steinberg

Labour Agent (1)

N.R.C. Palapye

Restaurants (14)

Watson & Smit (Basimane)

Sunvalley

Restaurants (condt.)

Blackbeard
 Theron (Miss) (West Side)
 Resheng (Ditlharapa)
 Spansplék (Tseledikae)
 Walebowa
 Bata
 Tsogang Sebina (Masilo)
 Diatla
 Selobilwe (Malela)
 Serowe Central Restaurant
 ERO Restaurant
 Van der Colff

General Dealers (12)

Theron
 Serowe Trading No.1 (Steinberg)
 " " No.2 "
 R.A. Bailey Ltd / H.F. Parr
 Palmer
 W.E. Woodford 1
 Wells Woodford 2
 B.P. Trading & Cattle Co. (Smit)
 Gaylord
 Page Wood
 Watson
 Watson (New Town)

Livestock Buyers (9)

Smit
 Palmer
 Steinberg No.1
 Steinberg No.2
 E. Blackbeard
 H.F. Parr
 B.P. Trading (Gaylord)
 Malebowa
 G. Cameron

Livestock Agent (1)

Steinberg

Restricted Dealers (3)

Mainland (Masilo)
 Diatla (Mr Mazile)
 Buy & Cash Store

Hairdresser (1)

B.R. Leeto (African Barber Shop)

Driller (1)

J. Mataboge

Buyers of Hides & Skins (4)

Pagewood
 Gaylord
 Serowe Store (Theron)
 B.P. Trading & Cattle (Smit)

Buyers of Green Hides (6)

Pagewood

R.A. Bailey

Smit

Steinberg

Blackbeard

Gaylord

Trophy Dealers (2)

Blackbeard

Watson

Hotel (1)

Serowe Hotel

Sale of Methylated Spirit (1)

Blackbeard

Thatcher (3)

T. Mmati (Botlaote)

W. Mpetwane

T. Gakelakwe (Dikgatla)

Shoemakers and Repairers

Khumalo

Motsumi

Molebatsi

Serowe City Shoe Repairer

Tailors (4)

Ndlou (Basimane 1)

Moseki

Motswaiso

Kgakge

Basket maker (1)Carpenters (1)

E. Rakgope

Brick maker (1)

S. Ludick

Hammer Mills (7)

Raditladi

Lefhako (Ditlharapa)

Gasemotho

Ramathau

Tlhakanyane

Kebarapele (Botlaote)

Orufheng (Makolobjwane 2)

Vehicles for Hire (8)

Steinberg

Ramma

Nchengwa (Seosenyeng)

Walebowa (Senapa)

Mazile (transferred to Wright, 1964)

Kopo (Basimane 2)

Tape (Rakgomo)

Senai

Tribal doctors and Herbalists (12)

D. Mathabe (Botlaote)

S. Mafala (Bohurutse)

M. Kopo (Basimane 2)

D. Sebina

R. Kedikilwa

M. Moilathero (Malela)

L. Mokgalega (Basimane 1)

N. Mothodi (Mapoka)

R. Keikabetswa

L. Tshekonyawa (Basimane 1)

G. Bogosing

K. Ramotsehe (Sekau)

M. Makate (Malela)

APPENDIX GSerowe - Services and Businesses, 1971

Pop. 15 364 (de facto) 43 186 (de jure)

Dwell. 4 444 (2 593 occ.)

Churches - U.C.C.S.A. (RP), Anglican (RP), Lutheran, R.C. (RP),

Apostolic Church, Zionist Church, Ntlo ya Efangole, S.D.A.

Assemblies of God (RP), D.R.C. (VP).

Health - Hospital, Health Centre, Clinic, Pharmacy, Health Inspector,

Education - 12 Primary Schools, Swaneng Hill School, Night School,

Teachers Training College, Brigade Centre.

Administration - District Council, District Administration, Police

Station, Prison, Senior Sub-tribal Authority and Customary court; D.D.C.;

4 V.D.Cs., Education Officer; Tribal Administration Officer, T.P.Os.,

Building Branch, Community Development, Snr. Electrical Engineer.

Services - MTtO; Lady Khama Centre, Community Centre; 4 Information

assistants, Hotel; Consumer Co-op; Barclay's and Standard Bank; M.L.O.;

Tailor (B.N. Ngwako); Agricultural Show Ground; Funeral (J.R. Moloi);

Shoe Repairers (S. Khumalo & R.S. Ngwako); WS - Bhs, Information Services

Asst. Game Warden. Revenue Office.

Industry - Serowe Textiles, Serowe Engineering, Abattoir, Tannery,

Fence making, Nidco, Farmers & Builders Brigades; Blacksmiths (John

Stoneham & C.M. Pretorious), Boiteko (co-operative manufacturing),

Mmegi Wa Dikgang (job printers); Wright's Transport (borehole drilling)

Clubs - Youth Club; Red Cross; B.C.W.; 4B; Football Clubs - Maphatshwa,

Scouts; Y.W.C.A.

Transport - Buses; Airstrip, Civil Aviation, Serowe Engineering (crank-

shaft grinding, reborring, etc.), Wright's Motor Engineers, CTO fuel

Garages:	Dennis Service Station	R. Blackbeard
	Reliable Filling Station	Muir Bros,
	Rainbow Filling Station	
	Filling Station	R. Sello

Livestock agents and auctioneers -

B.P. Trading & Cattle Co.

Gert du Toit & Megaw (Pty) Ltd.

J.E. Palmer & Co. (Pty) Ltd.

Agriculture - Ad; V.As, 1 Field Officer; Farmers Bridage farm and ranch, Animal Health.

<u>Wholesalers</u>	- Wholesale	C. Blackbeard
	Wholesale	S. Essack
	Ngwato Industrial Distributing Corp.	

Restaurants & Stores with restaurants

Restaurant	O. Dongatso
Central Restaurant & Butchery	Essack
Ground Cafe & Butchery	Kgopa
Mataboge Butchery & Restaurant	J. Mataboge (SGD)
Bata Butchery & Restaurant	P.M. Mazile
Shinga SGD & Restaurant	P.M. Mazile
SGD/Restaurant	A. Molefe
Restaurant	J.R. Moloi
Restaurant/SGD	K.B. Monageu
Restaurant/Butchery	L.M. Mosweu
Grant Restaurant & Butchery	S.P. Muir & Bros.
Tshosa Restaurant & Butchery	K. Selobilwe
Butchery (Restaurant)	K. Selobilwe
Western Butchery/Restaurant/SGD	A.C. Sikunyane
Ero Products (Pty) Ltd. Restaurant, Bakery, GD	M. Smith
SGD (Mainland) - Restaurant	Tsogang Sebina
Restaurant/Butchery/ (Hillside)	M. Walebra
Sunvalley Butchery & Restaurant, Fresh Produce	G. Watson
Green Lagoon Restaurant & Vegetable Shop	

Bottle Stores and hotels

Serowe Hotel/Bar

Bottle Stores

Recreation Club/Bar

Swaneng Co-operative Hotel and bar/bottle Store
(part of the Tshwaragano complex)

G.W. Chase (Gaylord)

F.N. (Gaylord)

Maphatshwa Football Club

Swaneng Consumer Co-op
(N.S. Seretse)Other Stores

R.A. Bailey's Store

Pharmacy

General Dealer

Serowe Supermarket, Butchery

A.B.C. Trading Store

Mogorosi Trading Store

Maphakwane Store

General Dealer, Hides & Skins

J.E. Palmers Stores

Serowe Cash Store

Maaloso Trading Store

Checkers Trading Store

Serowe Trading Store

Swaneng No.2 Co-operative Store

Swaneng No.1 Co-operative Store

Serowe Youth Development Association Shop

G.E. Watson's Store

Newton Trading Store

Small General Dealer

Wells Woodford Store

W.E. Woodford's Store

Tshwaragano Butchery

L.T.K. Stores

Kgopa Enterprises

R.A. Bailey

C. Blackbeard

M.A. Desai

S. Essack, Muir Bros.

A. Khan

B.R. Leeto

M.E. Lesetedi

S.M. Lure, W.H. van Zyl

J.E. Palmer

J.E. Palmer

S. Pillar

T.C.P. Shaw & C.W. Freeman

B. Steinberg

P. van Rensburg

P. van Rensburg

P. van Rensburg

G.E. Watson

G.B. Watson

G.B. Watson (Basimane)

B. Well's Woodford

W.E. Woodford & Co. (Pty)

Swaneng Consumer Co-op.

MTTO - P.O. - Money Order, Savings Bank
Post, Telegraph and Telephone
WS - Bho: Water - Supply -
Boreholes
RP - Resident Priest
VP - Visiting Priest
DDC - District Development Committee
VDC - Village Development Committee
BCW - Botswana Council of Women
CTO - Central Transport Organisation

Source: Botswana Government (1973): A Guide to the Villages of
Botswana, pp. 19 - 20.

APPENDIX H List of Vehicle Licences 1966

Tractors	28
Trailers	17
Trucks	47
Vanettes	33
Pick-up	8
Jeeps	4
Ranch wagon	1
Sedans	32
Station wagon	1
Sports Car	1
Auto cycle	2
Scooter	7
Motor cycle	7
Buses	2
Box car	1

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Source: Compiled from Serowe, District Commissioner Files, 1966

APPENDIX I List of Wards with Major Lands, 1940 & 1966

<u>Lands</u>	<u>1940</u>	<u>1966</u>
<u>Ditimamodimo Section</u>		
Ditimamodimo	Mogatsapôo	Mogatsapôo
	Dithojana, Motlhako	Tshetlhong
	Masame	Dithoyana
Mere	Tswaneng	NakatsaKgama
	Nkweng	Botepetepe
Sethapo	Tshetlhong	Tshetlhong
		Kgaswe
Tshweu	Meremelodi	NakatsaKgama
	Kakamane	Mogome
Ditlharapa	Tshetlhong	Tshetlhong
Botalaote	Tshetlhong	Tshetlhong
Bokome	Kakamane	Kakamane
Magodu	Mfashe	Mogatsapôo
Monaheng	Thwaring	Hulwane
Tshephe	Tshetlhong	Tshetlhong
	Tswaneng	Mahatlhaanare
Tsie	Tshetlhong	Tshetlhong
Seetso	Tswaneng	Hulwane
		Tshetlhong
Maiketso	Tswaneng	Pilikwe
		Nakalatadi
		Kalamare
Mantshele	Tshetlhong	Tshetlhong
Sedihelo	Kakamane	Kgaswe
Kgope	Tswaneng	Tshetlhong
Makopo	Rakampa	Tshetlhong
	Botepetepe	Mahatlhaanare
Matshotlha,	Nkweng, Tswaneng	Nakatsakgama
Tlhalerwana	Ramosaba, Tswaneng	Mahatlhaanare
Molebatse	Taukome	
<u>Basimane Section</u>		
Basimane I	Motolo	Rantsheng
		Tankome

<u>Lands</u>	<u>1940</u>	<u>1966</u>
Bakhurutshe	Mogatsapôo	Mogatsapôo
		Kgaswe
Boomonwa	Khumanego	Phikwe
Basimane II	Botepetepe	Botepetepe
Makanana	Taukome	Rantsheng
Modiega	Diruti	
Ratshumanyane	Mogatsapoo	Mogatsapoo
Bokgapa	Mabuduluge	Phikwe
		Nakalaphala
Sikwa	Nkweng	Nkwe
Seiswana	Kakamane	Mosuosepene
Boo-Seleka	Kgaswe	Kgaswe
Masetedi	Nkweng	Nkwe
Boo-Ratshisi	Thwaring Serule	Kgaswe
	Dithojane	Dithojwane
Bammabi	Mogatsapôo	Radisele
		Mogowe
Motshwana	Mogatsapoo	Matshokwane
Ramoseki	Ditshoswane	Mogome
Boo-Tshosa	Nkweng	Mogatsapôo
Mmualefe	Dithojana	Nakatsakgama
Ramotshubi	Meremelodi	Mabatwe
Bomogaso	Kgaswe	Chadibe
		Taukome
Bomonamo	Mogaksapoo	Mmamorontshe
<u>Maaloso Section</u>		
Maaloso	Kgaswe	Kgaswe
Selolwane	Botepetepe, Tshetlhong Hulwane Masame	Nalalatadi
Motswaiso	Mogatsapôo	Motolong
Diranyane		Mogatsapoo
Masuga	Nkweng	Bikwe
Phokela	Mmamorontshe	Mabolawa
Tshipana	Nkweng	Nakatsakgama
	Mmamorontshe	Bikwe

<u>Lands</u>	<u>1940</u>	<u>1966</u>
<u>Maaloso Section (contd.)</u>		
Gwaila	Kgaswe	Kgaswe
Maineelu	Botepetepe	Bopitika
Bokotelo	Nakatsakgama	Kgaswe
	Tswaneng, Kakamane	Mabolawa
Marobela	Bojela-Khudu, Itsokwane	Bojela-Khudu
Mphelana	Lefatshe, Matsholwane	Mahatlhaanare
Masilo	Mmamorontshe	Mmamorontshe
Chichaua		Itsokwane
Mfhasha	Bojelakhudu, Morongwa Itsokwane Letengwe, Mmabaphumi, Lefatshe Makwa, Dikukumuru, Masolawa, Sokwe	Bojela-Khudu
Kangwa		Masama
Rakgomo	Letetengwe, Tswaneng	Bikwe
Sokwane	Kakamane	Masama
Senapa	Itsokwane, Botepetepe, Mangolwane	Bojela-Khudu
Mokwena	Mmamorontshe, Sokwe	Radisele
Bonyonyo	Mmamorontshe	Mogatsapôo
Dikgatla	Mogatsapôo	Mogatsapôo
Maatso	Sokwe	Kgaswe
		Tshetlhong
Moshamu	Morupule Mototo Mmamorontshe Nakatsakgama	Mmamorontshe
Mothodi	Ramosaba, Matsholwane	Mahatlhaanare
Maphanyane	Taukome	Taukome
		Itsokwane
Mapoka		Segakwana
Nkowane	Itsokwane	Khutswe
Talaojane	Mojakubu	Masama
		Itsokwane
Teko		Morongwa
Maphakwane	Nakalaphala	Nakalaphala
Dinokwane	Matlhape, Nakalaphala Bojelakhudu, Mmamorontshe	Nakalaphala

<u>Lands</u>	<u>1940</u>	<u>1966</u>
<u>Maaloso Section (contd.)</u>		
Makolobjwane . 1		
" 2	Taukome Botepetepe	Taukome
Lekoko	Kakamane	Kgaswe
Mmala	Lefatshwane, Lwale	Mathape
Mabele		Segaknane
Mapitse		Shakge
		Taukome
<u>Maaloso-a-Ngwama Section</u>		
Sesoma	Lefatshe	Moriri
		Nakalaphala
Menyatso	Mogatsapoo	Moriri
	Nkweng	Kgaswe
Mapodise	Mnoko	Pilikwe
Ramaruku	Shakge, Dithojane	Kgaswe
Moitoi	Lefatshe	Lefhatse
Sekgwana	Lefatshe, Taukome	Mabuduloge
Sekas	Mabolawa, Mmamorontshe	
	Shakge, Kgaswe	Nakatsakgama
	Nakalaphala, Bollantoko	Mabulawa
Tshomane	Tswaneng	Bikwe
Wanki (Hwange)	Morongwa	Morongwa
Matshego	Kgaswe	Tshetlhong
		Mabulawa
Mokwenanyane	Lefhatse	Lefhatse
Maalosowana I	Mfashe	Nakalaphala
Makolori	Mogatsapoo	Hulwane
	Botepetepe	Botepetepe
Malela	Matsholwane	Masama
Ramodimo	Mfasha	Mabulawa
Ramathuba	Mongolwane	Bikwe
		Kgaswe
Boothene	Mmamorontshe, Natatsakgama	Bikwe
Tshipana	Nkweng	Mogatsapoo
	Mmamorontshe	Nakatsakgama

<u>Lands</u>	<u>1940</u>	<u>1966</u>
<u>Maaloso-a-Ngwama</u> (contd.)		
Rakgomo	Mogatsapôo	Mogatsapôo
	Mmamosontshe, Nkweng	Nakatsakgama
	Morongwa	
Mothodi	Ramosaba, Matsholwane	Nakatsekgama
Seogenyeng Rasenai	Mmamorontshe	Mmamorontshe
Sebabi	Tebele	Monokela
Modimoeng	Khubulabopedi	Khubulabopedi
Sekga	Shakge	Mahatlhaanare
Sekawana	Tankome	Phikwe
		Mabolawa
Setemere		Lefhatse
Semelamela		Mahatlhaanare
		Bikwe
Seletamotse	Botepetepe	Botepetepe
Modikwana		Hulwane
Semana	Shakge	Nakatsakgama
Sengwato	Botepetepe	Botepetepe
Maalswana 2	Mogorosane	Dithujwana

NOTES

1. 1940 lists taken from Schapera, I (1943) pp. 161-164, Nature Land Tenure in the Bechuanaland Protectorate.
2. 1966 lists from house-to-house survey in Serowe and the Tribal Administration.
3. 1971 lists from Botswana Govt. (1973), A Guide to the Villages of Botswana.

Location of Major Lands

Bojelakhudu:	37km. SW., at foot of Mokgware Hills. Soil : mokata.
Botepetepe:	33km. E.; soil : seloko and mokata.
Dithojana:	13km. out on wagon road to Palapye (SE); soil : mokata.
Itsokwane:	At foot of Mokgware hills (W); soil : mokata.
Kakamane:	30km. out on Palapye wagon road; soil : mokata.
Kgaswe:	23km. SE.; soils : mokata and seloko.
Lefatshe:	17km. W.
Mafafshe:	37km. out on Palapye wagon road; soil : mokata.
Matsholwane:	- same as Mogatsapôô, 25km.W.; soils : mokata and seloko.
Meremelodi:	20km. out on Mahalapye motor road; soil : selôkô.
Mmamorontshe:	25km. SW., on Mogatsapôô road; soil : mokata.
Mogatsapoo:	25km. SW., on Mahalapye road; soils : mokata and selôkô.
Morongwa:	- opposite Mmamorontshe; soil : mokata.
Motolo:	25km. E. on road to Topi; soils : mokata and seloko.
Nakalaphala:	33km. out past Mmamorontshe, SE.; soil : mokata.
Nakatsakgama:	17km. out on Mahalapye road, near mo ^u su-wa-batsetsi; soil : selôkô.
Nkweng:	17km. out on Mahalapye road, at mosu-wa-batsetsi; soil : selôkô.
Ramosaba:	8km. out on Mahalapye road; soils : selôkô and mokatanyana.
Shakge:	8km. SW., soil : selôkô.
Sokwe:	- past Shakge; soil : mokata.
Swaneng:	- hill on Palapye road; soil : mokata.
Taukome:	34km. NE.; soil : selôkô.
Tebele:	25km. NE. (between Paje and Taukome); soil : selôkô.
Tshetlhong:	34km. out on Mayalapye road; soils : mokata and selôkô.

Distances from Serowe in kms.

Source: Schapera: Land Tenure in Bechuanaland Protectorate, p. 164.

ABANDONMENT OF WARD HOLDINGS (SEROWE)

The following examples (all of wards that settled in Serowe when the tribal capital was moved there in 1902) illustrate the reasons why wards have abandoned the holdings originally assigned to them, and indicate also what subsequently happened to these holdings.

Masuga ward, now at Nkweng, formerly ploughed at Nakatsakgama; it abandoned the place in 1924, owing to congestion of people and the encroachment of mothwa (quick grass) upon the fields; the land is now lying unused.

Mmabi ward, now at Mogatsapô^ô, formerly ploughed at Radifemêlô^ô; it abandoned the place during the reign of Kgama (d. 1923), because the land became full of lerura (a strong-smelling weed), and because the crops were continually being spoiled by cattle coming to graze there from the town; the land is now lying unused.

Morwakwena ward, now at Mafafshe, formerly ploughed at Shakge; it abandoned the place in 1938 owing to congestion of people; the land is now being ploughed by others.

Maalosô ward, now at Kgaswe, formerly ploughed at Radifemêlô^ô; it abandoned the place in 1938, because cattle and goats used to graze there and damage the crops; the land is now lying unused.

Maaloswana ward, now at Mafafshe, formerly ploughed at Shakge, close to the river; it abandoned the place in 1938, because cattle coming to drink at the river damaged the growing crops; the land is now lying unused.

Basimane ward, now at Motolo, formerly ploughed at Mabapoga (close to the present graveyard outside Serowe); it abandoned the place in 1914, because of congestion; the land is now unused.

Gwaila ward, now at Kgaswe, formerly ploughed at Ramotaba; it left the place after the accession of Tshekedi (1926) because the land became eroded; the land is now unused.

Sekawana ward, now at Motolo, formerly ploughed at Shakge; it left the place after Tshekedi became Chief, because cattle coming to drink at the river were a continual nuisance, and because the land was becoming eroded; it is now unused.

Mosamu ward, now at Morupule, formerly ploughed at Mmamorontshe; it abandoned the place in 1939, because the land was becoming eroded, and there was not enough to accommodate all the people, and also because birds often ate the growing crops; the land is now being used by a small group of other people.

Makolobywane ward, now at Taukome, formerly ploughed at Metsemasweu (very close to Serowe), from which it was driven in 1924 because of the continual damage done by domestic animals from the town; the parts free of quick grass are now being used by other people.

Khurutshe ward, now at Mogatsapôô, formerly ploughed at Metsemasweu; it abandoned the place during the reign of Kgama, because the fields were continually being invaded by domestic animals from the town, and because children often stole melons, etc., from them; the land is now inhabited by the section of Basimane ward under Boiditswe.

Sebabi ward, now at Tebele, formerly ploughed at Diruti; it abandoned the place after Tshekedi became Chief, because quick grass was spreading rapidly over it; the land is now unused.

Dinokwane ward, now at Matlhape, formerly ploughed at Shakge; it abandoned the place after Tshakedi became Chief, mainly because of congestion, but partly also because cattle coming to drink at the river were a continual nuisance; the land is now used by the Semana ward,

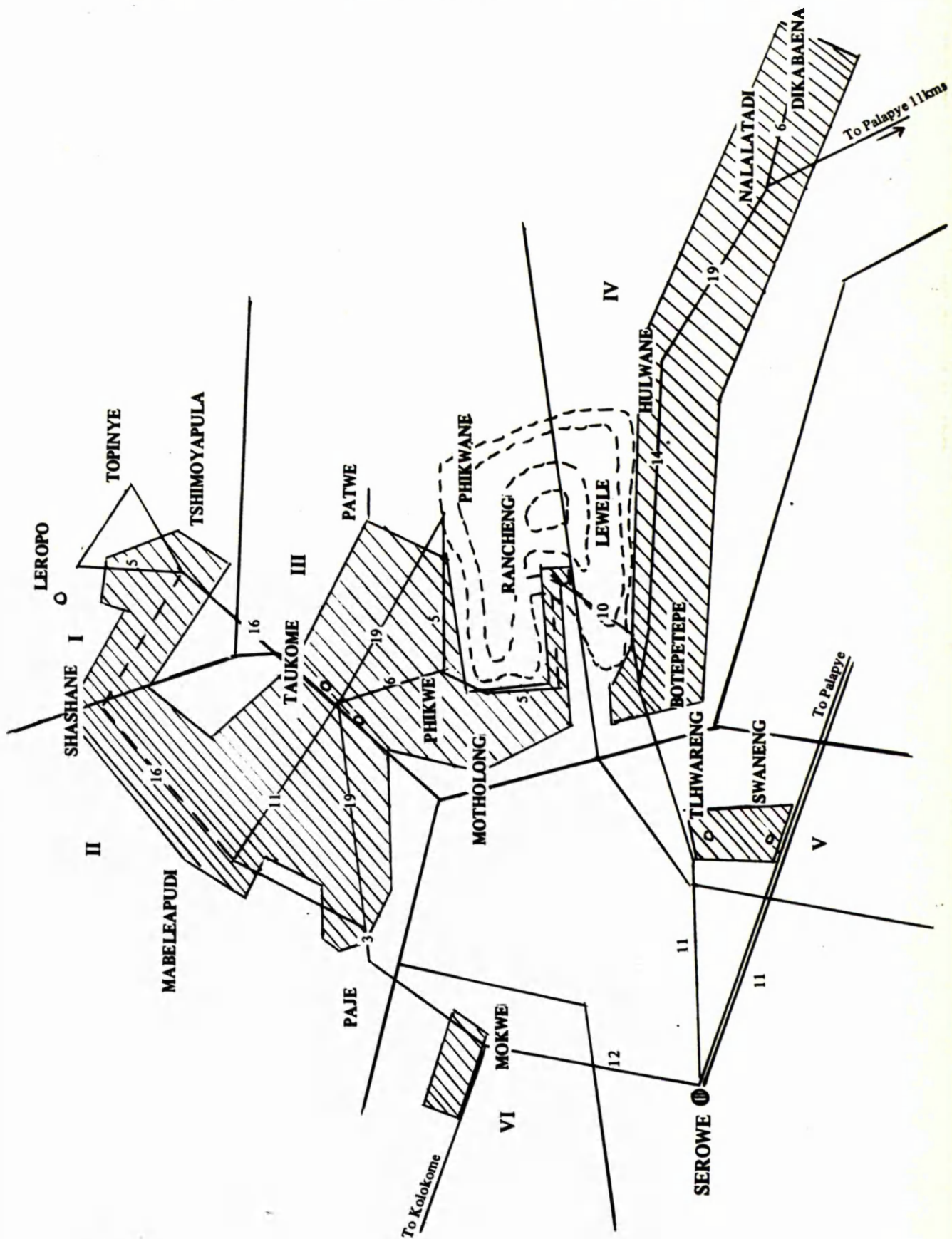
Modimo ward, now at Mafafshe, formerly ploughed at Mmamorontshe; it left the place in 1938 because of overcrowding, and others are now ploughing there.

Kgope ward, now at Mafata-a-nare, formerly ploughed at Swneng; it recently abandoned the place, owing both to congestion and to erosion of the soil; the land is now unused.

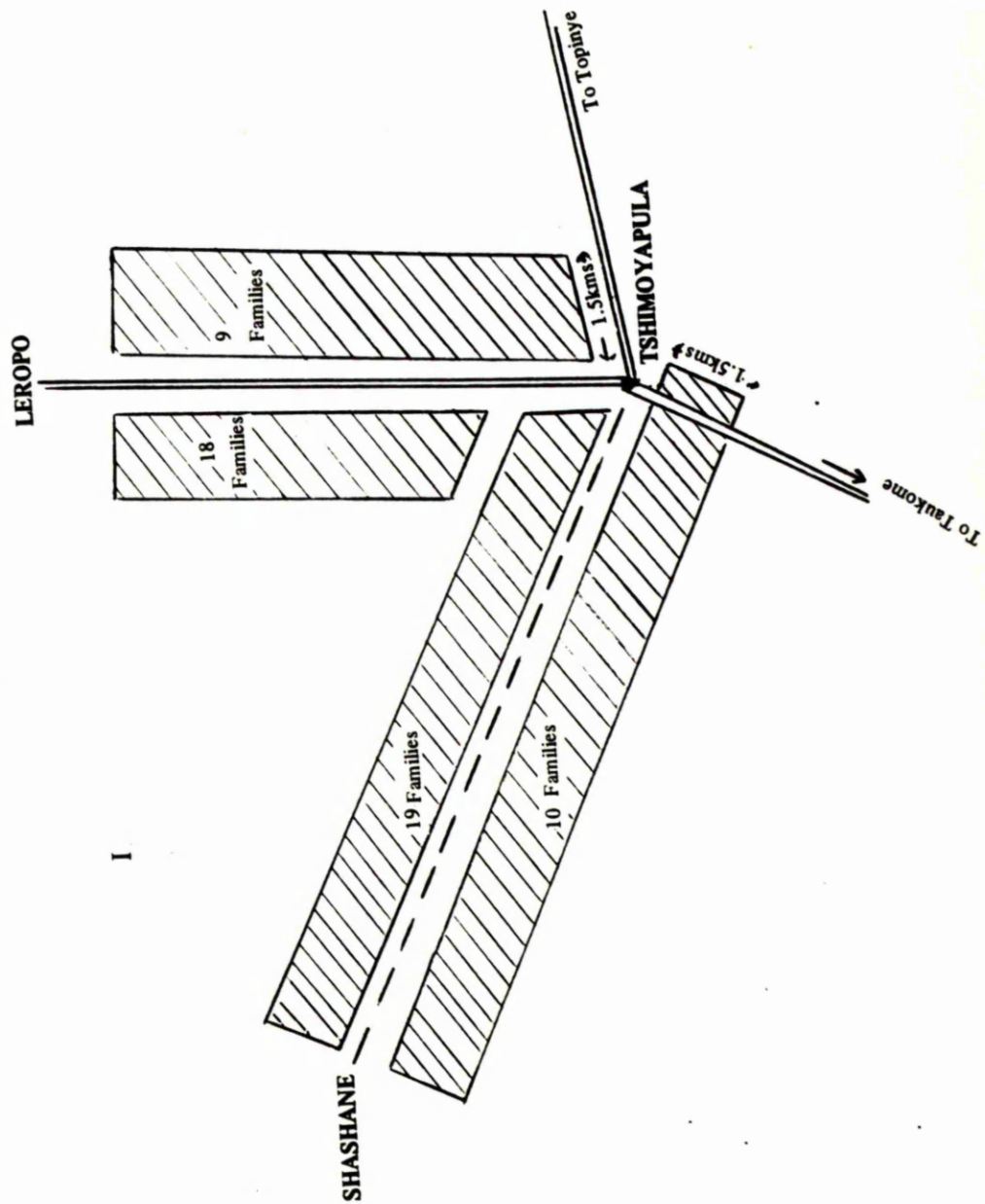
Portion of Mhafswa ward, now at Morongwa, formerly ploughed at Lefstshe; it abandoned the place fairly recently because of congestion and soil erosion; the land is now unused.

Source: Schapera. 1. Land Tenure in Bechuanaland Protectorate,
pp. 165 - 166.

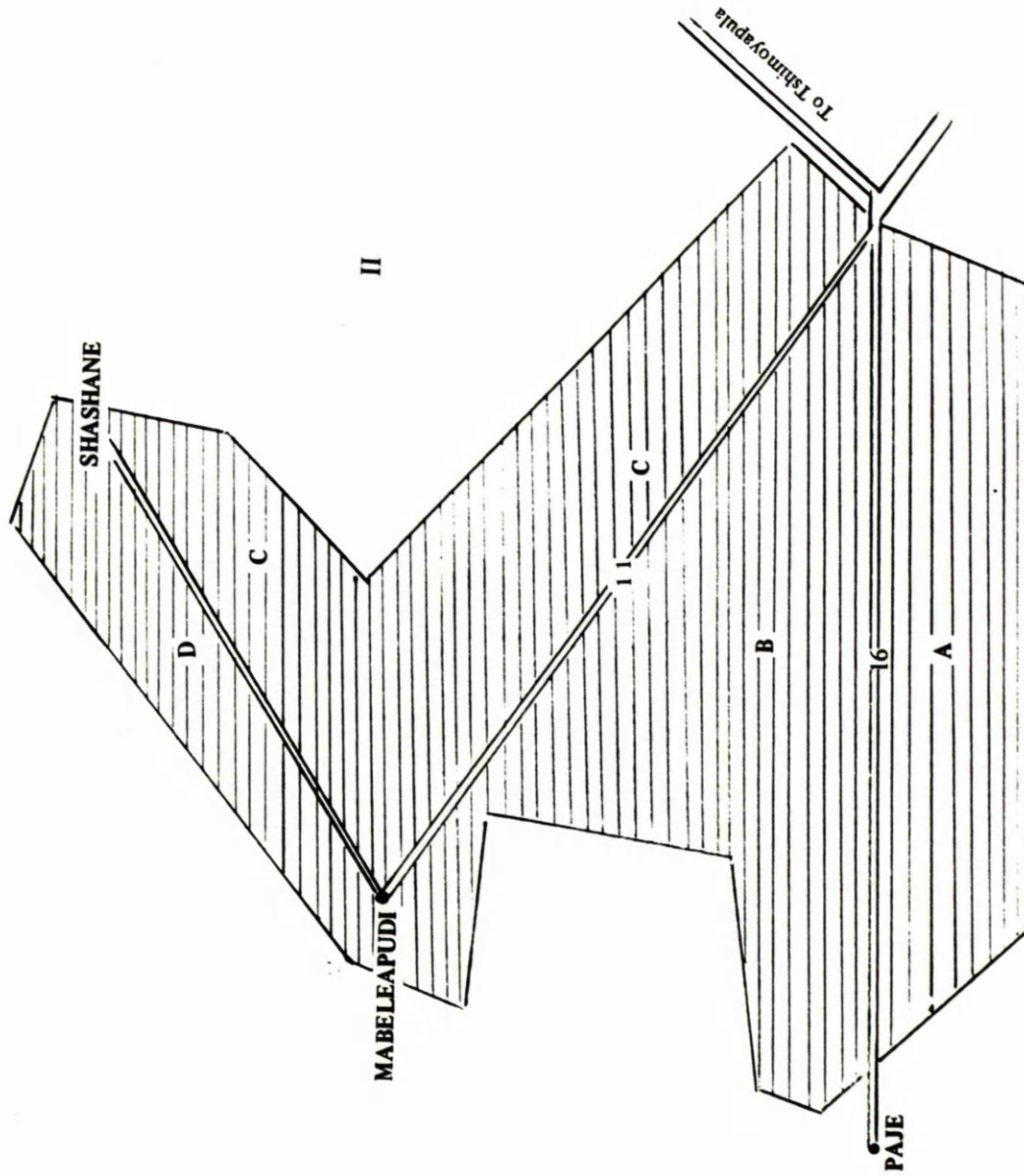
Appendix J Diagrammatic Layout of Selected Lands of Serowe and some villages with users, 1966



SEROWE LANDS I



SEROWE LANDS II



Serowe LandsDiagram 2 Lists of Families37 Lands between Taukome, Paje and MabeleapudiA = a of Taukome - Paje Road - 51 families

Pansiri (s)	Hapneelang (p)	Molokurane (p)
Monnapula (s)	Tshwene (p)	Rapontsho (p)
Odvetre (s)	Oructse (p)	Radigapane (p)
Rakedietse (p)	Mathoka (p)	Olebeng (p)
Tshabile (p)	Tian (p)	Nkaelang (p)
Goabotse (p)	Seate (p)	Maruku (p)
Moehai (s)	Mothongwane (s)	Rabele (p)
Ramochai (s)	Mothose (p)	Thaleng (s)
Baiphanye (p)	Kumokumo (p)	Tolo (s)
Kootshotse (p)	Kooneye (s)	Gnotolwe (s)
Rakgosing (p)	Rasrara (s)	Noge (s)
Ramaitseo (p)	Odirile (p)	Ramwdise (s)
Rammu (p)	Motorokwane (s)	Kemotho (s)
Ramothubane (s)	Ramasino (s)	Lekgome (s)
Modise (p)	Pihelo (s)	Mokenene (s)
Baodubi (p)	Ralethalerwa (s)	Katse (s)
	Kotopo (s)	Phika (s)
		Shakgale (s)

B = N of Taukome - Paje Road = 71 families

Phiri (s)	Shabe (p)	Rabape (s)	Ramohubidu (p)
Gasejasepe (s)	Bogosi (p)	Kelesitae (s)	Keboskile (s)
Montsho (p)	Odubeihile (p)	Rathabano (s)	Dikapolelo (p)
Mhusang (p)	Sepetane (p)	Rabasimane (s)	Lepodise (p)
Gosethata (p)	Radiseo (p)	Gabalebatse (s)	Petro (p)
Bakoko (p)	Masopa (p)	Montsho (s)	Modisaotsile (p)
Mosaditshwene (p)	Manyaku (p)	Rachata (s)	Rautolelo (p)
Sakubona (p)	Segobo (p)	Kabalemoge (s)	Babueleng (p)
Makosi (p)	Ramakaka (p)	Legopelo (s)	Shashane (p)

B = N of Taukome - Paje Road = 71 families (contd.)

Rabaijane (p)	Mogopudi (p)	Hakamaja (s)	Rasesinye (p)
		Moipolai (p)	Osupile (p)
	Sekgaphanyane (p)		
Rakgadimo (s)	Kgweetsang (p)		
Keeletsang (p)	Baipoledi (p)		
Mophakedi (s)	Seekoso (p)		
Mogotho (p)	Gamosi (p)		
Mashaba (p)	Poo (p)		
Molelekwa (p)	Keitsabile (p)		
Radikgama (p)	Sedumedi (p)		
Toree (p)	Sokwa (p)		
Ratantsa (p)	Sepego (p)		
Ditshusi (p)	Ditsele (p)		
Tshwarakgole (p)	Morabela (p)		
Gabaleswa (p)	Moshokgwe (p)		
Rannona (p)	Balapile (m)		
Okwaleng	Maje (m)		

C = 51 families

Barfana	Gobitswe (m)	Raukula (m)
Morake	Rasenpe (m)	Koro (m)
Ealotse	Nelso (m)	Tshiakae (m)
Olesitse	Lekota (m)	Tshwenyego (m)
Majie	Gaerupe	Obenne (m)
Ramatsela	Odubegil	Onnetswe (m)
Setapo	Rabonno (p)	Kabitoi (m)
Raboraga	Mototegi (m)	Kampuru (m)
Sobeyamotane	Rakgetheng (m)	Benjainen (m)
Oboeheleng	Rantsopa (m)	
Tshitomo	Segarubileng (m)	Sethako (m)
Radikgomo	Lekoko (m)	Adris (m)
Kerileng	Shomane (m)	Alfred (m)
Rapudi	Kgomelo (m)	Konjara (m)
Mashabelwa	Mounakala (m)	Makabi (m)

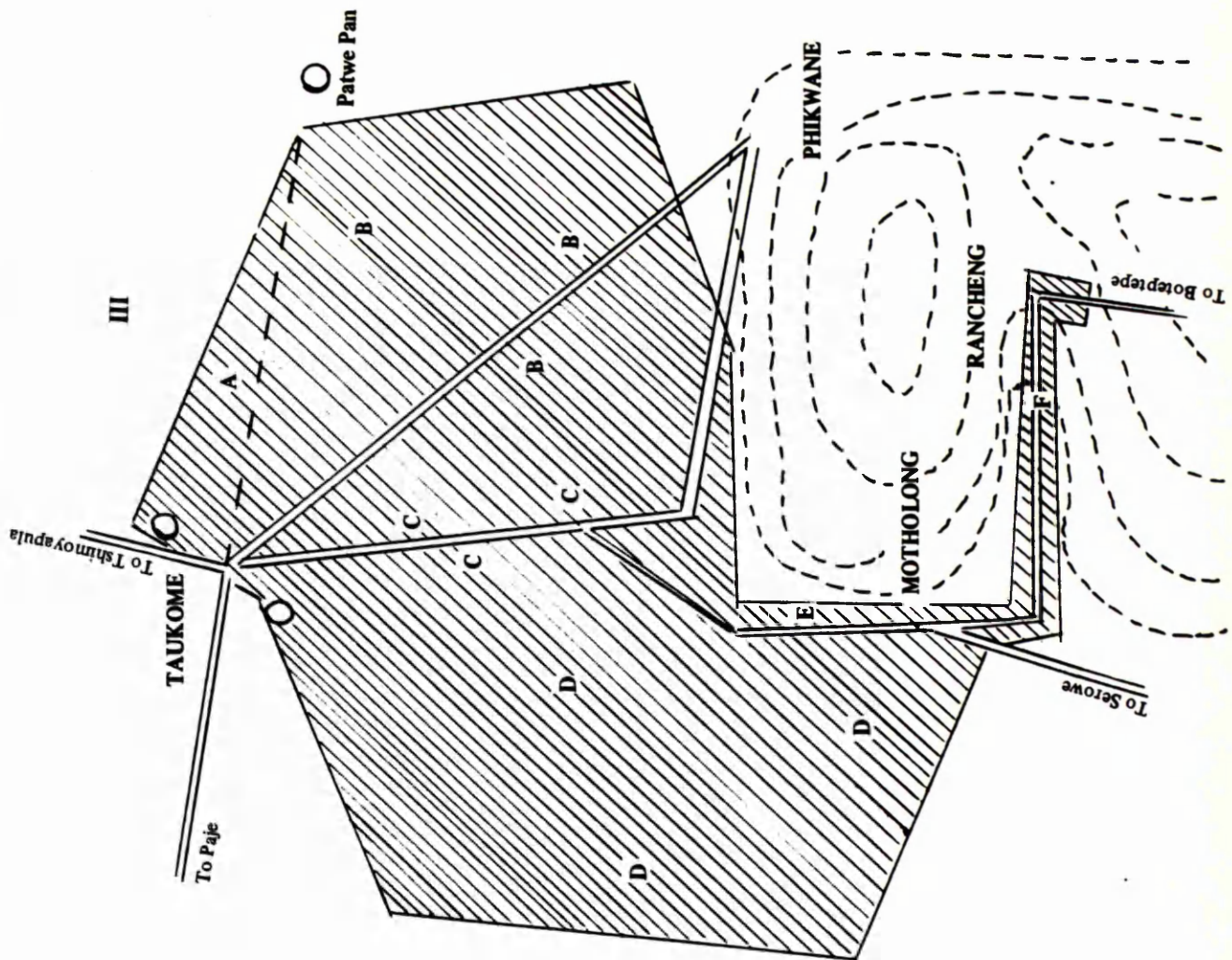
C = 51 families (contd)

Kgosiepelo	Jane (m)	Eripati (m)
Godise	Mpite (m)	Ratouki (m)
	Rauku (m)	Tsogotho (m)

51 families from Mabeleapudi under headman Tibaldo
 plus 27 families from Mabeleapudi under headman Kenaope
 Total 78 families

D 74 families from Mabeleapudi under headman Kenaope

SEROWE LANDS III



40 Serowe Lands around TaukomeA = 16 families

Otisirswe	Didimalong	Radinonane	Kapo
Rampako	Toko	Matope	Motshubehue
Mogapinyana	Reeba	Manyando	Pitswe
Lehang	Msalusi	Khutsabalo	
	Gasemotse		

B = families

Phiri	Jarona	Diane	Marotho
Serea	Tshokola	Nkgawa	Ntaolang
Radibona	Othuhile	Mathabe	Ketsomile
Olebohang	Serogala	Rathenya	Maloita
Radisaka	Motswagote	Kgokgothwane	Keaja
Ketlhaletswe	Ramaseka	Letswapong	Wellu
Seoto	Seloke	Keikohale	
Ntimang	Onamile	Lekule	
Odueho	Rankgamane	Ntusi	

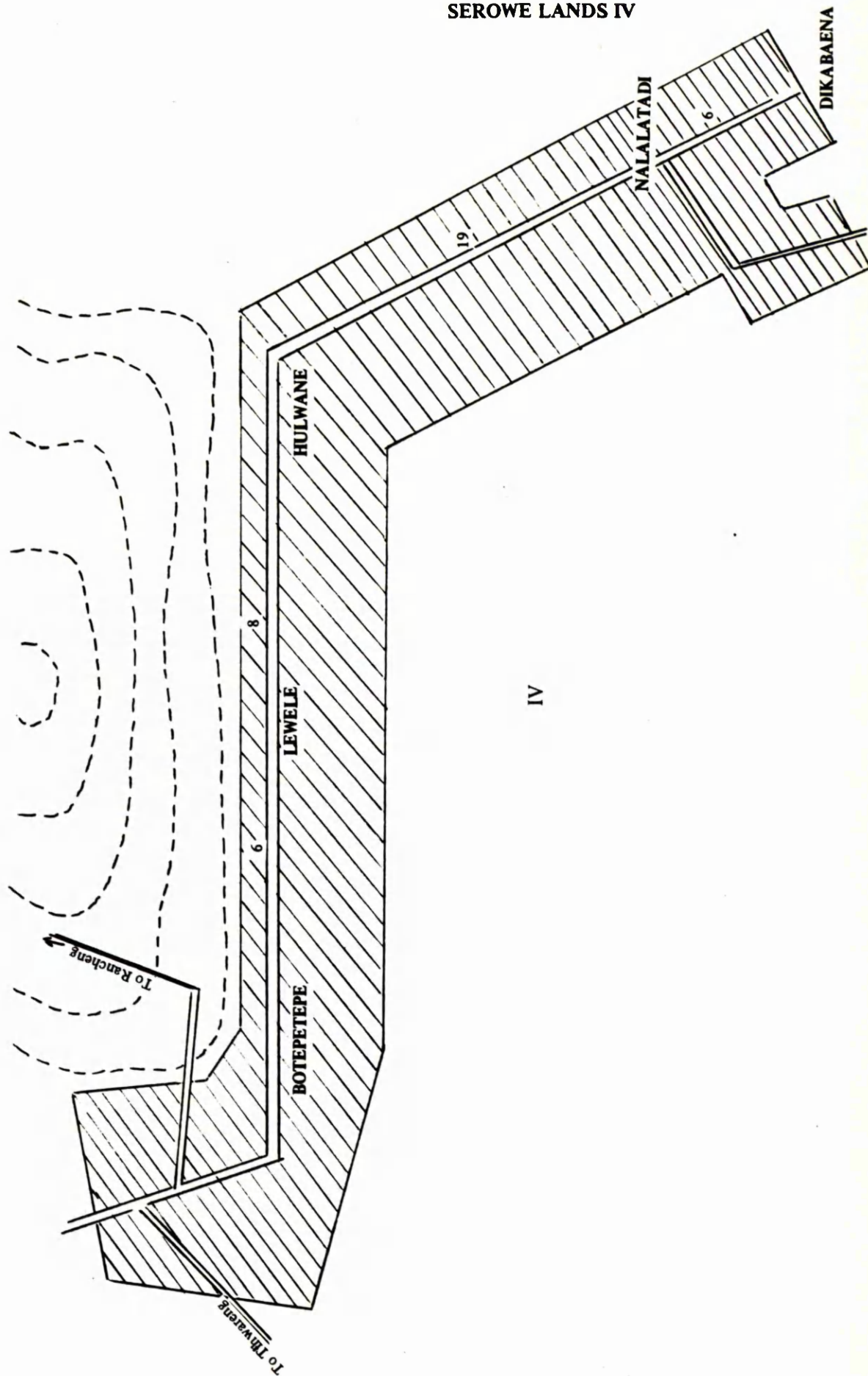
C = 40 families

Omphithetse	Kratsi	Setalemore	Segwabe Rapaye
Dick	Mokupi	Ntshontsho	Phuthego Malebana
Kanboge	Komagamang	Bosomanga	Sethare Mogodu
Khonda	Thebe	Mawyané	Bohitha
Janase	Pitaos	Mokome	Opelokgale
Petso	Mogaetsho	Leapeetswe (Son of Tshakedi Kgama)	
Lemao	Kopang	Ramatsuru	} working on Leapeetswe's Lands
Malasa	Dithebe	Mpelegang	
Legoreng	Lesongwane	Phirinyane	
Lekoto	Dick R.	Pule	
Lesole	Mosarwamotho		

D. = 40 families

E = 16 "

SEROWE LANDS IV



Serowe Lands Around Botepetepe, Hulwane, Nalalatadi and Dikabeana

Botepetepe = 57 families all from Serowe

Sebedi	Toraga	Rabasima
Oipainpiri	Boctumelo	Letsoba
Rebakwena	Koougale	Selekango
Gepelang	Sepikisone	Kgotayabeng
Onalemathao	Osupile	Matsoothe
Mathabe	Mogaetsho	Motshidise
Bathatsi	Legwategwata	Apelo
Dithole	Gabegwe	Koorileng
Seema	Kokotupi	Mokgwetsi
Khumo	Kooduretse	Setiko
Mafoto	Gabatelone	Shobo
Wale	Ntabone	Modotlase
Kemma	Autmetse	Tekaba
Goemelwe	Morati	Gasebolikane
Prince	Matshethane	Keabetole
Keahetole	Kelebonye	Kgatise
Morewagme	Tsopito	Obolitse
Ntsuwane	Mpote	Monnawabosarwa
Mmalesi	Keloletse	Gabake

Hulwane = 71 families all from Serowe

Mnaphage	Sekgomenyane	Baleseng	Kamohelo	Tshokalogo
Mmolawa	Ramtshesane	Time	Pojane	Pebe
Rabaseaka	Mmusi	Rabasinye	Phoo	Resehikae
Saamangwe	Mautshouyane	Gareatshabe	Thobokwe	
Morolong	Pule	Dobo	Nkatse	Gabanaalerwa
Mmenyane	Manyemo	Swabi	Ralekadiba	Molaakgosi
Gahalehatse	Magakgo	Oaheng	Leito	Ntole
Tshitwe	Basuti	Selema	Releutse	Leabe
Tsanyane	Randu	Shashane	Kabelo	
Ramusi	Diane	Gabaikgapole	Eanya	
Seiphimolo	Lekgowa	Sebedi	Gaolehuha	

Hulwane = 71 families all from Serowe (contd)

Matsuwele	Morotsi	Lekgawe	Muniseng
Olekautse	Tombe	Lebutswe	Mogaetsho
Lekang	Lesego	Raesule	Rasetena
Sesinye	Ramtsia	Esili	Seianang
Baitseng	Matshesi	Tanejole	Ramasogo

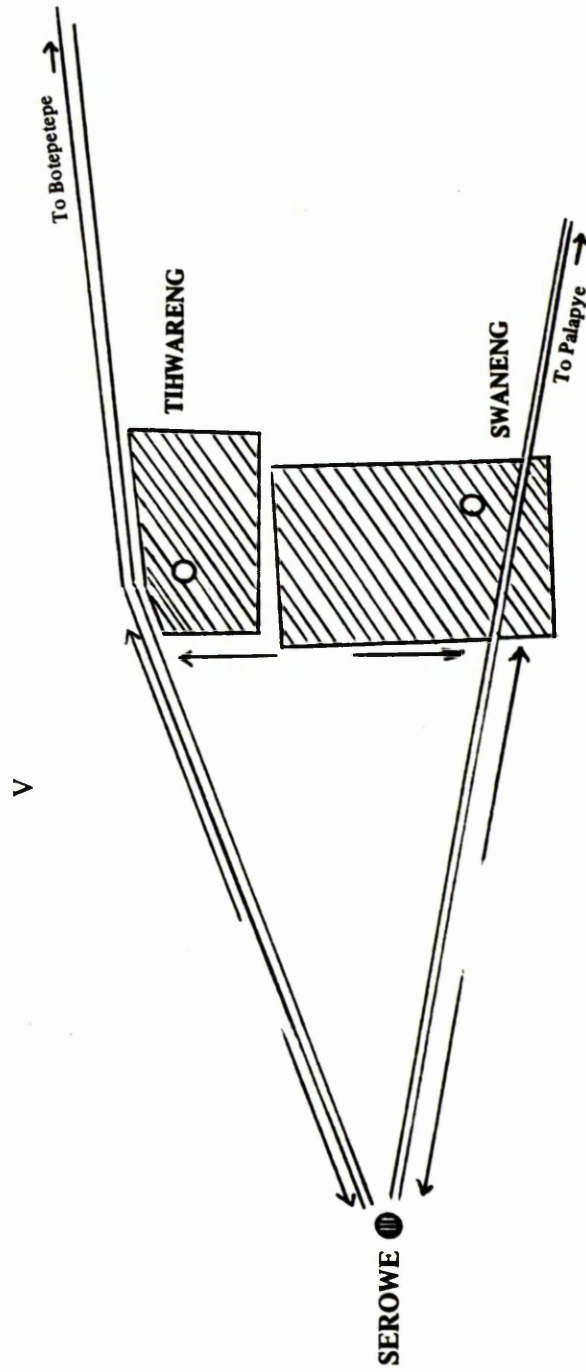
Nalalatadi = 25 families all from Serowe

Ramogapi	Marekwa
Mathokomelo	Ralegareng
Chepete	Gabaatsalwa
Kaisora	Ramatsabutsabu
Ditoko	Ookeditse
Keemisitswe	Ebuleng
Moitri	Tshweu
Lechaina	Motseokae
Johane	Pitase
Lekouspa	Dinokopile
Bosigo	Odirile
Lekang	Ramosano
Rannan	

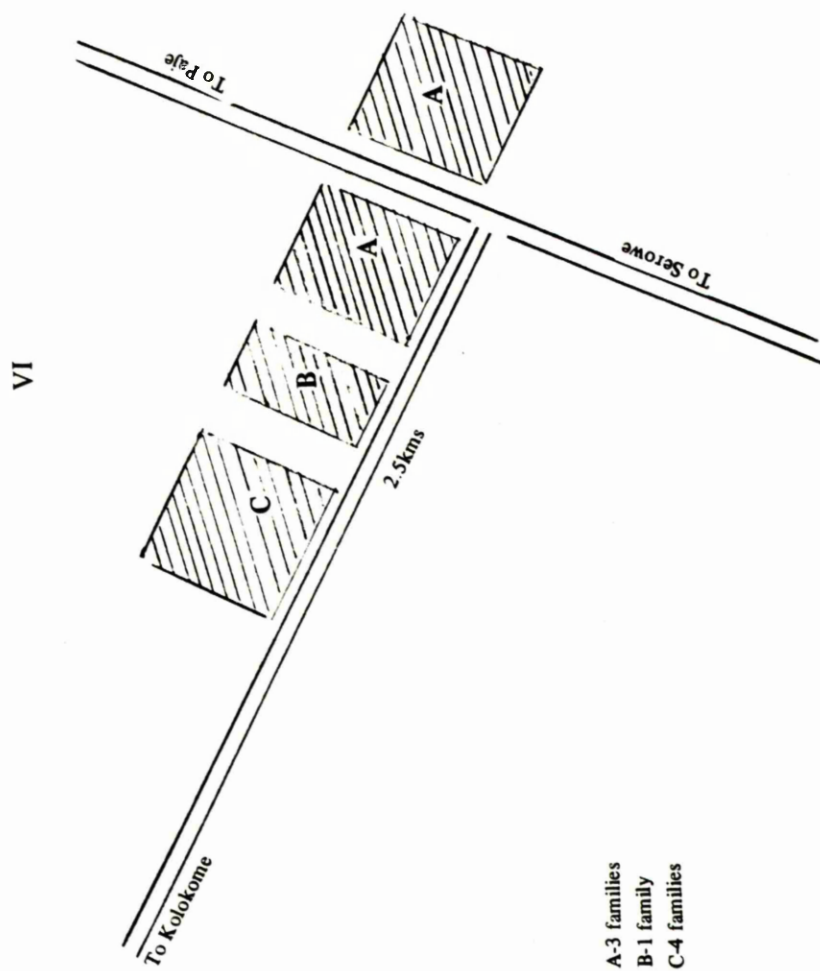
Dikabaena = 7 families all from Serowe

Kgaolo	Khumong	Pitso
Vanas	Thebeetsile	
Majube	Serite	

SEROWE LANDS V



SEROWE LANDS VI



APPENDIX KLists of Wards with major Cattle posts, 1966

<u>WARD</u>	<u>CATTLE POSTS</u>
<u>Ditimamodimo Section</u>	
Ditimamodimo	Machana, Kainangwe
Mere	Mamabule, Seokeng, Motloutsie
Sethapo (Konyana)	Sesulela
Tshweu	Macheng, Seokeng
Ditlharapa	Nata, Serurume
Batalaote	Mosung, Seokeng, Moeng
Bokone	Ranala
Magodu	
Monaheng	Nata, Seokeng
Tshephe	Mokgojwe
Tsie (Konyana)	
Seetso	
Maiketso	Kolokome, Kgophathathe
Mantshela (Konyana)	
Sedihelo	Dithojwane
Kgope	Phuduhudu
Makopo	Seokeng, Mahalapye
Matshotlha	Seokeng, Mahalapye
Tlhalerwana	Letshaneng, Seokeng
Morwakwena	Tamane
Molebatsi	
<u>Basimane Section</u>	
Basimane	Letshwareng, Mmokwe
Bakhurutshe	Makgadikgadi, Shashi
Boommonwa	
Basimane 2	Lechana, Motloutse
Makanana	
Modeiga	
Sethapo	

WARD

Ratshumanyane

Bokgopa

Sikwa

Seiswana

Boo-Seleka

Masetedi

Boo-Ratshisi

BaMmabi

Motshwana

Ramoseki

Boo-Tshosa

Mmualefe

Ramotshubi

Bomogaso

Bomonamo

Maaloso Section

Maaloso

Selolwane

Motswaiso

Diranyane

Masuga

Phokela

Tshipana

Gwaila

Maineela

Bokotelo

Marobela

Mphelana

Masilo

Chichana

Mfhaswa

Sebina

Kangwa

Rakgomo

Sokwane

CATTLE POSTS

Sujwe

Machana

Seruli

Sedibe

Tamasane

Ranala

Taukome

Nata, Letlhakane

Nalalatadi

Motolong

Macheneng, Lebung

Dikgathong

Sujwe

Sowa, Sedibe

Machana

Serokolwane, Radisele

Moshoro, Morale

Letlhakane, Kgalagadi

Itsokwane, Mabolawa

Kudumetse

Ditawana

Moskane, Matshaneng

WARD

Senapa
 Mokwena
 Bonyonyo
 Dikgatla
 Maatso
 Moshamu
 Mothodi
 Maphanyane
 Mapoka
 Nkowane
 Talaojane
 Teko
 Maphakwane
 Dinokwane
 Makolobjwane 1
 Makolobjwane 2
 Lekoko
 Mmala
 Mabele
 Mapitse

Maaloso-a-Ngwana Section

Sesoma
 Menyatso
 Mapodise
 Ramaruku
 Moitoi
 Sekgwana
 Sekao
 Tshomane
 Wanki (Hwange)
 Matshego
 Mokwenanyane
 Maalosowana I
 Mokolori

CATTLE POSTS

Mmite, Seoko

 Phudukudu

 Taukome Setekwane

 Morale
 Nkgodi
 Lephepe, Sua

 Makgadikgadi, Nata

 Lephepe
 Sua, Nkgorotshware

Kutswe, Mosung

 Kadumotse, Lephepe

 Serule, Shashe

 Ntswaneng, Dikaba

 Sekidike
 Tonda, Motloutse

<u>WARD</u>	<u>CATTLE POSTS</u>
Malela	Tswaing
Ramodimo	Dikitilwe
Ramathuba	Sedibe, Lechana
Boothene	
Bothoka	
Tshipana	Kadimotse, Serurume
Rahgamo	Makgadikgadi
Mothodi	
Seosenyeng	
Rasenai	
Sebabi	
Modimoeng	Mabotse, Nkawane
Sekga	Kolokome
Sekawana	Kolokome
Setemere	
Senelamela	
Seletamotse	Topeng, Motloutse
Modikwana	
Semana	
Sengwato	Makgadikgadi
Maaloswana 2	

Source: Compiled from Field Survey in Serowe, District Commissioners
Office and the Bamangwato Tribal Administration

APPENDIX L Tribal Legislation in the baNgwato Reserve, 1872-1940

KGAMA III (1872, 1875-1923)

1872: Prohibited the importation, sale, and consumption of European strong drinks.

1872: Abandoned the traditional sowing festival and substituted a national church ceremony.

1876: Prohibited the manufacture, sale, and consumption of Kafir beer.

1877: Abolished the traditional initiation ceremonies for boys and girls.

1877(?): Prohibited rainmaking, and substituted a national day of prayer for rain.

Abolished the payment of BOGADI. (Before 1880).

Prohibited the movement of wagons, and other forms of secular work, on Sundays. (Before 1880).

Declared that Sarwa (Bushman) slaves were not to be bought or sold, or transferred from one man to another. (Before 1880).

Prohibited the killing of twins, or of a child cutting its upper teeth first.

Prohibited the sale of young cows and heifers to traders and other Europeans. (Before 1880).

Declared that parents should no longer arrange compulsory marriages for their children. (Before 1880).

Declared that men should give their daughters cattle on marriage, and that unmarried daughters should share in the inheritance of their father's estate.

Prohibited dancing of all kinds in the capital at night. (Before 1883).

1894: Prohibited the sale of Kafir corn to traders without the permission of the chief.

1895: Repealed his prohibition against the drinking of Kafir beer, but forbade the sale of beer to alien natives in the employ of European transport riders.

Prohibited the killing of eland, giraffe, and other big game, without the permission of the chief.

1900(?): Abolished the payment of compulsory tribute by servile peoples, and allowed them to acquire and possess property for themselves.

Prohibited the sale of water from wells to travellers and their cattle.

Allowed women to appear for themselves at the chief's court, which had previously not been permitted.

Denounced the "inheritance" of widows, and said that men should beget children for themselves and not for others.

Fixed the standard penalty for the theft of an animal at eight-fold restitution.

Prohibited women and girls from leaving his country by rail without the permission of the chief.

Prohibited the watering of cattle at pools and springs that supplied water for domestic purposes.

Permitted and encouraged marriages between the Ngwato proper and subject peoples like the Kalaka, who had previously been regarded with contempt.

Abolished the practice of burying dead people at home.

Declared that a woman who was deserted without justification by her husband would be entitled to heavy compensation from the latter.

Ordered parents to guard the morals of their children, and said that he would fine severely those who were found prostituting their daughters. Also prohibited girls from going about at night to visit men.

Prohibited veld-burning, and ordered that offenders should be brought to him for trial.

1907(?): Abandoned the traditional claims exercised by the chief over the property of men holding his cattle under the KGAMELO system.

Abandoned the chief's right to have special fields (MASOTLA) cultivated for him every year by the inhabitants of his capital.

1910(?): Renewed his prohibition of beer-drinking.

1913: Prohibited the sale of cattle to traders without written permission from the chief (or some other tribal authority).

Prohibited the killing of the locust bird, stork, and secretary bird, and of the rock-rabbits on Serowe Hill.

Prohibited the cutting of trees in Serowe without special permission from the chief or tribal police. Also prohibited the cutting of large timber trees in certain parts of his reserve.

SEKGOMA II (1923-26)

Fixed prices (a) for the sale of firewood to Europeans (£1 per wagon-load), (b) for the sale of wild animal skins to the traders, (c) for the making of karosses for traders.

TSHEKEDI (acting chief, 1926-)

1928: Imposed an annual levy of 1s.6d. per taxpayer to meet the cost of maintaining a tribal office (the levy was still in force, in 1943 the money now being paid into the tribal Treasury).

1930: Imposed a special levy of one ox per taxpayer, to meet the cost of a voyage to England to interview the Secretary of State about tribal affairs.

1937: Declared that, if grass fires broke out in the veld, the nearest village or cattlepost community would be held responsible for putting them out; failure to do so would be punished.

1939: Imposed a levy of one bag of Kafir corn per man to build up a reserve supply for the tribal granaries. (This was a temporary measure, and was abandoned the following year).

1940: Framed regulations for the use of the tribal boreholes in grazing areas.

Source: Schapera I (1943) Tribal Legislation Among the Tswana of the Bechuanaland Protectorate, pp. 84 - 86.

APPENDIX M

A Chronology of Steps taken to Curtail the
Power of the Chiefs in the Bechuanaland
Protectorate/ Botswana 1885 - 1970

- 1885 Order in Council, Declaration of the Protectorate to 22⁰⁵
 (later extended in 1890, 91, 92 & 99 to include of present-
 day Botswana).
- 1890 Order in Council extended the jurisdiction of the Crown over
 the Protectorate.
- 1891 Order in Council. Created the Bechuanaland Protectorate
 Administration and provided for jurisdiction of courts. Did
 not extend to cases which concerned only baTswana. Prohibited
 the granting of concessions or ownership of land.
- 1893 Concessions Commission.
- 1895 Resident Commissioner established at Mafeking.
- 1896 Proclamation extended the jurisdiction of Assistant Commissioners
 and Resident Magistrates to all civil and criminal cases, except
 homicide. Cases concerning only baTswana were excluded unless
 the change was murder or involved a political disorder.
 Proclamation prohibited the sale of liquor, except Kaffir beer,
 to baTswana.
- 1899 Hut Tax introduced. Chief collected and received 10% of
 total collected.
 Tribal Reserves demarcated by Goold-Adams.
- 1900/
1904 Hut Tax replaced by Poll Tax.
- 1904 Crown Lands created.
 Assistant Resident Magistrate stationed at Serowe.
- 1912 Special Court, at Lobatse, established for major criminal cases.
 Jurisdiction over stock theft case taken over by Resident
 Magistrate.
- 1919 Bechuanaland Native Fund created for education, medical care,
 cattle diseases, stock control, fencing.

Native Advisory Council established partly to advise on the Native Fund. (Ngwato did not attend the NAC until 1932). Appeals allowed from Chief to Administration although Chief sat with the Magistrate.

- 1920 European Advisory Council created.
- 1922/ Resident Magistrates at Francistown, Gaberones, Serowe,
1923 Ngamiland, Kanye, Ghanzi, Lobatse, Molepolole and Kasane.
- 1927 Trial of sorcerers removed from Tribal Tribunals and witchcraft made a penal offence.
- 1930 Board of Advice on Native Education.
- 1931 Commission of Enquiry into the condition of the Masarwa.
- 1932 The brewing of Kgadi prohibited.
- 1933 Tshekedi Kgama suspended.
- 1934 Native Administration Proclamation No.74 provided for the chief to be the legal authority of the respective tribes but the chief had to be recognised by the High Commissioner and the Secretary of State. Only the tribe could depose a chief. Provided for a Tribal Council made up of the Chief and his Councillors (this was intended to formalise an established practice). Chief required to obey the Resident Commissioner or Magistrate. The Chief could issue orders but these could be suspended by the Magistrate. Compulsory tribute for the Chief made illegal. Chief required to obtain permission from the Resident Commissioner to levy monies, and kgotla had to agree. Provided for regimental labour to be used for emergencies, for commercial needs and personal services to the chief.
- Native Tribunals Proclamation No.75 sought to regulate the powers of the chief and established Senior and Junior Tribal Tribunals. The SIT could try all cases except for 9 serious categories such as homicide, rape, assault with grievous harm. The Resident Magistrate could take over a case if the continuance of good order demanded it.
- 1936 District Magistrates renamed District Commissioners.
- 1938 Proclamation No.15 forbade slavery.

Native Treasuries established and Native Fund abolished.
 35% of total Native Tax handed to Native Treasuries and chiefs allocated a stipend. The Chiefs percentage of tax collected was abolished.
 Special Court renamed the High Court and still sat at Lobatse.
 Appeals from Native Tribunals possible through High Commissioner to the Privy Council.

- 1943 Native Administration Proclamation. High Commissioner to appoint chief as Native Authority. High Commissioner could also remove a chief after a Judicial Enquiry. Appointment of Chief ceased to be purely a tribal function. An Administrative Officer could be appointed where necessary. Native Authority given powers to make Rules e.g. on law and order, local services and fees with the approval of the kgoltha and the High Commissioner. Placed on a legal basis the ability of the chief to make laws. Native Courts Proclamation No.33 removed the Senior and Junior Tribal Tribunals and replaced them by a Native Court which established legally the concept of trial by kgotla. Administrative Officer could revise decision of the Native Court and appeals could be directed to the High Court. Native Courts were seen as being the Chief's court, Courts of the Chiefs representatives and Ward or Headman's Court.
- 1948 Graded Levy changed to Graded Tax.
- 1950 Proclamation No.10. High Commissioner could withhold the recognition of a Chief and High Commissioner could appoint a chief.
- 1965 Chieftainship Law. High Commissioner could remove a chief.
- 1966 District Councils created. District Council Law removed the right of chief to regimental labour.
 Local Government Tax Law.
- 1968 Matimela Act.
- 1968/ Tribal Land Boards created.
 1970
- 1970 Chieftainship (Amendment) Act. President of Botswana could remove a chief without waiting for complaints against a chief.

Sources: Hailey (1953) Native Administration in the British African Territories PTV High Commission Territories.
 Silitshena (1979) Chiefly Authority and the Organisation of space in Botswana: Towards an explanation of nucleated settlement among the Tswana, Botswana Notes & Records, Vol.11.

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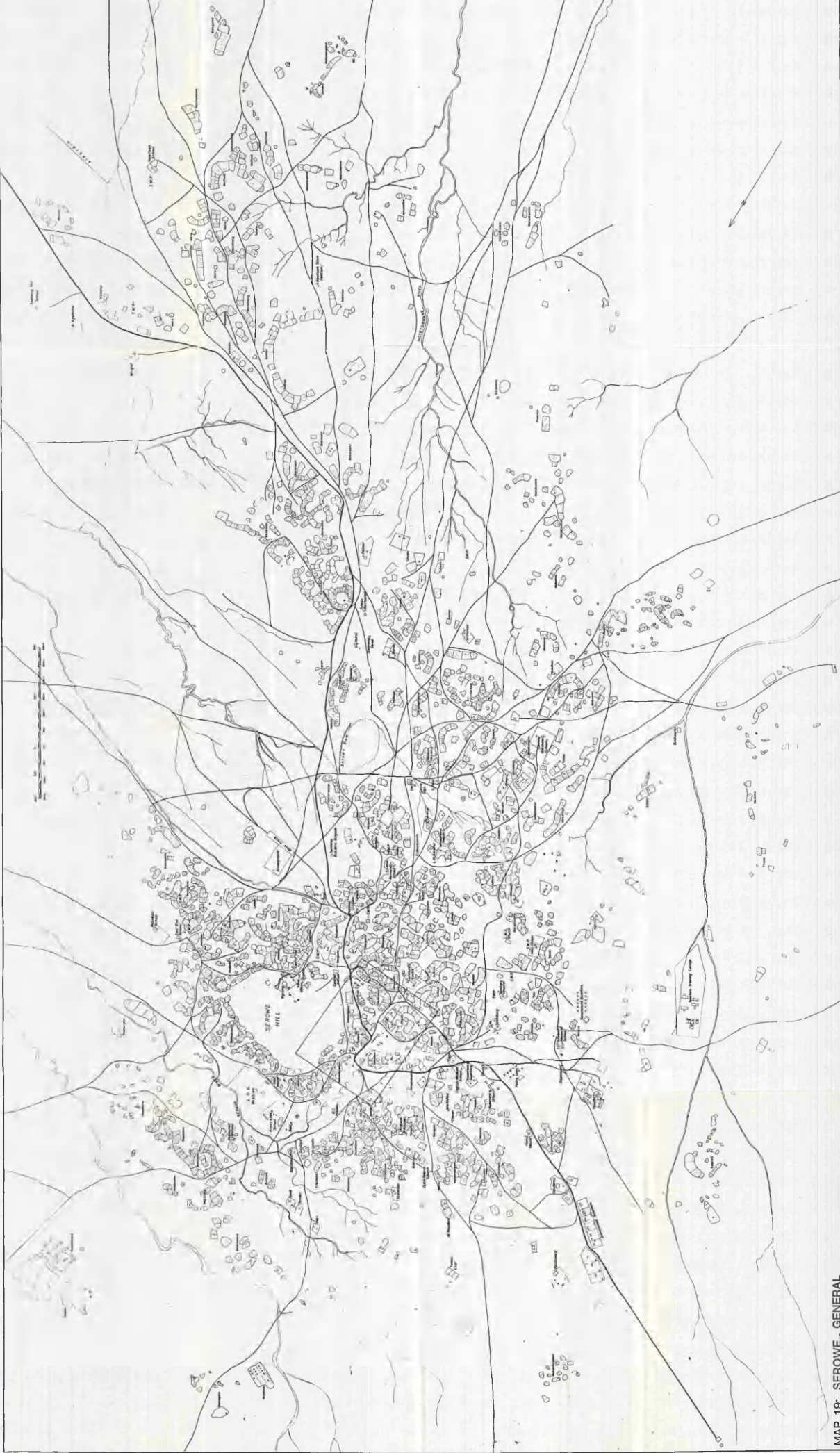
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MAP 19: SEROWE, GENERAL