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Lawrence Adefemi Adeokun

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## ABSTRACT

### ASPECTS OF THE POPULATION GEOGRAPHY OF THE WESTERN AREA, SIERRA LEONE

This thesis is largely based on data edited from original field sheets of the survey of sample households in the Western Area. It provides a description of the structure and distribution of selected population characteristics, an explanation of the patterns observed and an identification of population types and areas using principal components analysis.

In a brief original historical analysis, the population living within what is now the Western Area, prior to the establishment of the 1787 settlement, is estimated to be about 3,000 persons. According to the 1963 census, 195,023 persons lived in the area. The review of population growth in the 19th and 20th centuries and the urbanization experienced, emphasises the significant role played by immigration in population growth and in an understanding of compositional features. The relationship between migration and population characteristics is hypothesised and the discussion of the different characteristics indicates that:

- (1) Age and sex compositions are sensitive to migration but, sex ratio is shown to be a stronger indicator of migratory tendencies shown by various population groups than age structure
- (2) The marital status and the family and household compositions are characteristics based on cultural and traditional practices which only slowly respond to modernising influences. There is some limited evidence of a more traditional attitude to marriage and household composition in the rural communities than in the urban.
- (3) Industrial and occupational structures are largely an outcome of the acquired traits of the population and there is a clustering of persons with particular traits in areas where they can best exploit them. Consequently, urban areas attract the educated, the technically skilled and the professionals. In contrast, the predominance of agriculture in rural areas means that the rural population is largely without a formal education. The effect of the differences in the nature of economic activities and skills is reflected in differences in levels of income by industry, occupation, ethnic or tribal group and by residential area.

Four clusterings of different unit areas, demarcated for the analysis of data, are identified by the use of principal components analysis. First, Freetown and its immediate environs clustered on the 'urban' component to which a high population density, a high proportion of the working population in the professions and nearness to the seat of government (Tower Hill), were strongly contributing parameters. Second, was a cluster identified as a second zone of urbanization and made up of areas adjacent to the urban cluster (Lumley, Mountain district, Wellington) and also containing large centres at a distance from Freetown (Hastings and Waterloo Villages). This second cluster retained some features of the urban component whilst having additional features that are more clearly defined in the third group. The Macdonald group of villages in Waterloo district and Koya district clustered on the 'rural' component with high activity rate, high proportion of the sample married and a high dependency ratio contributing strongly. Finally, York and Mountain district together form the fourth cluster in which the high sex ratio and a high proportion of one-person households are the main contributing parameters.

L. A. ADEOKUN

ASPECTS OF THE POPULATION GEOGRAPHY  
OF THE  
WESTERN AREA, SIERRA LEONE

Thesis submitted for  
the degree of Doctor of Philosophy  
of the University of Durham

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## PREFACE

The main part of this thesis is a study of selected social and demographic characteristics of a sample population in the Western Area of Sierra Leone in the late sixties. The data was obtained from the Central Statistics Office, Freetown, which, between November 1966 and January 1968 executed a series of surveys under the scheme of a General Purpose Household Survey planned to cover the whole country. Details of the survey and the nature of the data extracted from it, and the working hypotheses guiding the use of the data can be found in chapter 1.

Besides the first chapter, there are two others (2 and 3), which are also preparatory. Chapter 2 contains a brief description of the physical and biotic environment aimed at assessing the present limits set to specific aspects of the human occupance of the area by such factors as relief, climate and vegetation cover.

Because of the history of the Western Area, first, as the site for the establishment of Freetown, second, as the recipient of a large population influx in the first half of the 19th century, an attempt is made in chapter 3 to estimate the size of the pre-settlement population. Such an estimate provides a starting point for the discussion in chapter 4 of the population growth recorded in various censuses and estimates published since 1802.

In chapter 5, the discussion of population distribution by residence, using data from the 1963 census, serves

as background to the analysis of the survey data in subsequent chapters. Depending largely on the unpublished material from the survey, chapters 6 to 11 contain descriptions of the spatial distribution of selected population characteristics, an explanation of the factors responsible for or underlying observable patterns, and an analysis of the findings on the characteristics in the light of stated assumptions and the working hypotheses. Age structure, sex composition, marital status, families and households, economic and tribal compositions are considered.

In chapter 12, the main conclusions from the study are summarised and the intervariations among population characteristics are computed by the use of principal components method of analysis in order to identify the population types and areas represented in the Western Area.

The modest aim of this study is to add to the knowledge of the population of the Western Area. Although such knowledge can be of use to economic and social planners, a direct link between population characteristics and development planning is not a central consideration in this study. What has been done is an objective study of the human element in the resources of the country.

I wish to express my sincere gratitude to various individuals and organizations who have made this study possible. Mr. J.C. Dewdney, Reader in Geography, University of Durham, who supervised the study, Messrs C. Benjamin, Rahman and Max MacCarthy and Miss I. Thomas of the Central Statistics Office, Freetown., Dr. P.K.

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CHAPTER 1SOURCES AND NATURE OF DATA

In this chapter, the sources and nature of data are discussed with particular emphasis on the body of unpublished material obtained from the Household Survey conducted by the Central Statistics Office (C.S.O.), Freetown. Some details of the planning and execution of the survey will be provided. Sample design, questionnaire structure and the survey time-table are such details. Reasons for extracting particular details from original field sheets for the analysis of population characteristics intended in this thesis, will be given.

The validation of the sample selection for the survey is carried out at different levels, from the selection of Enumeration Areas (EAs) to the representativeness of the survey results. Finally, the preparation of a format for the presentation of data is carried out against the back-ground of stated aims, assumptions and hypotheses underlying the use of such data.

Sources of data

The documentary sources for this study fall into two groups, the published and the unpublished. As the bibliography will show, sources of the first type are mainly historical such as C.Fyfe's "A History of Sierra Leone" Oxford University Press, 1962; Dr. Winterbottom's "An Account of the Native Africans in the Neighbourhood of Sierra Leone", 2nd Edition with a New Introduction by Hergreaves and Backett, 2 vols., Frank Cass, 1969 and "Adam Afzelius: Sierra Leone Journal 1795-1796" edited by A.P. Kup, Studia Ethnographica Upsaliensia XXVII, 1967.

There are in addition, some published sources which include varying amounts of material on the population of Sierra Leone in general and of the Western Area in particular. The most comprehensive of these is R.R. Kuczynski's "Demographic Survey of the British Colonial Empire, Vol.1, West Africa", Oxford University Press, London, 1948. The specific use to which the different sources have been put are duly acknowledged in the text.

With the exception of the journals, published materials are, at best, to be considered as reliable secondary sources. The contribution of such sources to this study is, however, subordinate to that of the large body of unpublished data collected from the household survey files of the C.S.O. and upon which the study of population characteristics is based.

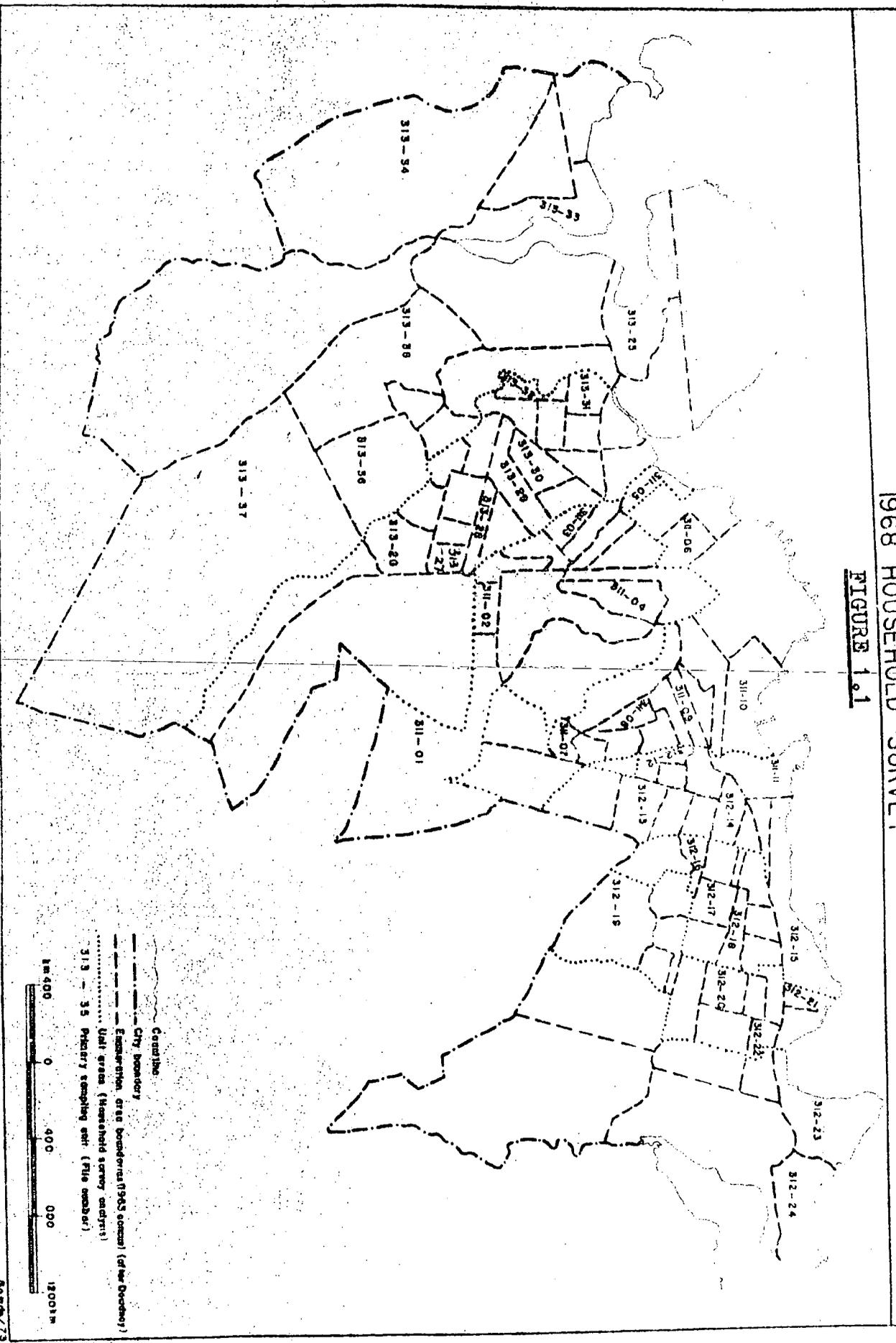
#### The Household Survey

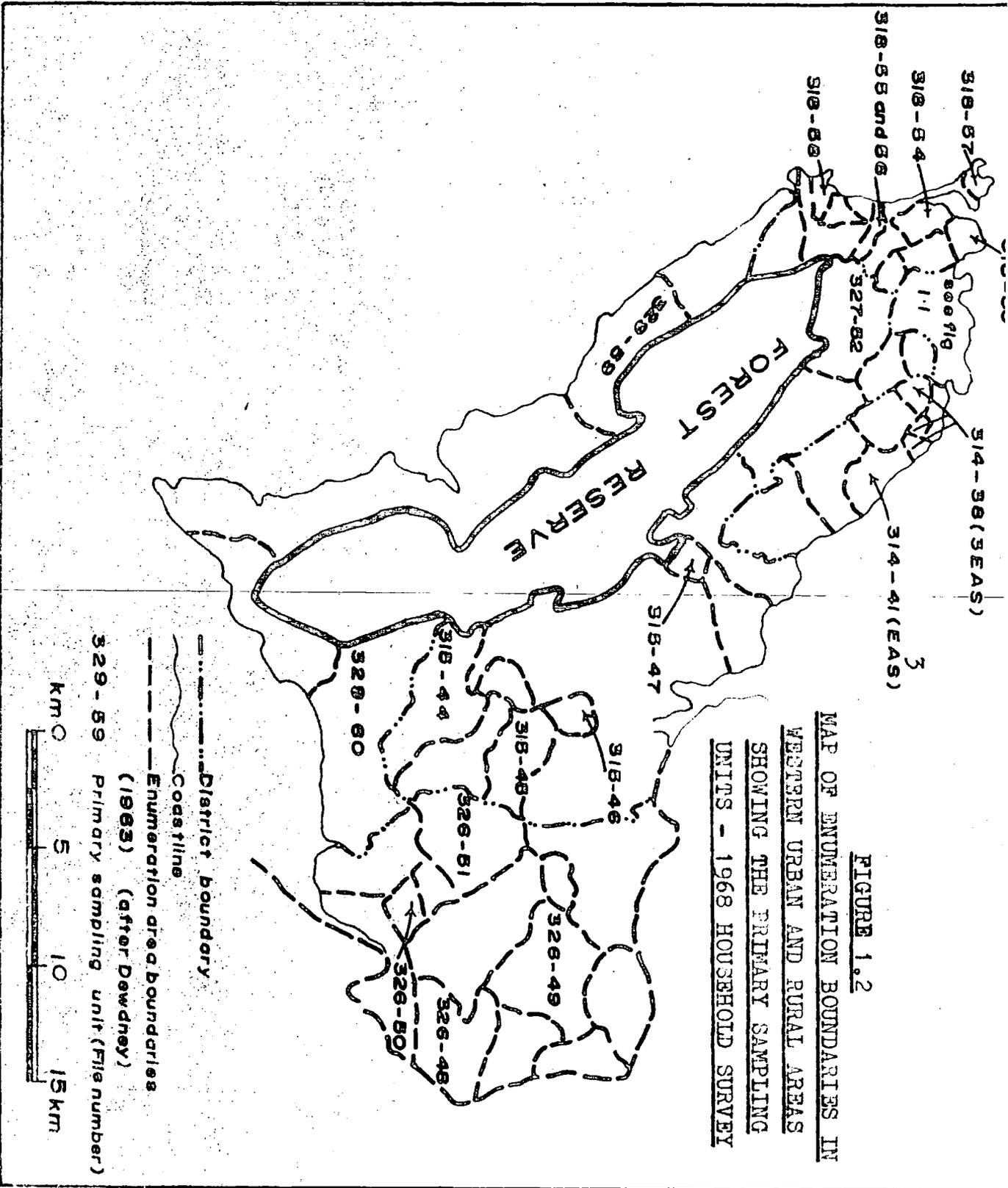
In 1966, the C.S.O. planned a nation-wide survey whose aim was to obtain "a body of statistics describing various important aspects of the people's living conditions". The EAs created for the 1963 census of Sierra Leone formed the basis of the sample selection. The 183 such EAs in the Western Area were 'arranged in a geographical order', that is, listed into three residential groups namely, Freetown, other urban places, and rural area. One-third of the EAs were systematically selected as the Primary Sampling Units, (Figure 1.1). A complete listing of the dwelling units in the selected EAs was made and one-third of these units were randomly selected for inclusion in the survey. All Households in selected dwelling units were then surveyed.<sup>1</sup>

From November to December, 1966 and approximately a year later, in the last two months of 1967, enumerators went to the selected dwelling units. In the first round they

MAP OF FREETOWN ENUMERATION BOUNDARIES SHOWING THE PRIMARY SAMPLING UNITS  
1968 HOUSEHOLD SURVEY

FIGURE 1.1





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administered a three part schedule comprising a dwelling unit questionnaire, a demographic questionnaire and an ownership questionnaire. A complete set of these three questionnaires (Forms A,B,C) constitute Appendix 1.1. In the second round the demographic questionnaire was administered as a follow-up to the investigation of household composition in the first round.<sup>2</sup>

The dwelling unit questionnaire collected details of the size, construction material, condition, tenancy and facilities available in each dwelling unit. Since the data culled from this schedule touches only marginally on the discussion of family and household composition in chapter 9, further comments will wait.

The ownership of household effects, domestic animals and production of craft and farm produce surveyed on Form C, has not been involved in this study. Consequently, attention is now turned to Form B so that the structure of the demographic questionnaire, and the criteria for extracting parts of the information made available by the two rounds of the survey, can be explained.

#### The Demographic Survey - Form B

This 17-item questionnaire can be divided into five sections:

- (a) Personal data - items 1 to 11 collected the personal data of every member of the household
- (b) Reason for unemployment - item 12 referred to those who were not employed at the time of the interview and asked for the reason for unemployment. There are six pre-coded reasons provided.
- (c) Fertility - items 13 to 15 required females aged 14 years and above to supply details of live-births and survival of children; in addition, item 16 required information on the present status of such females asking if they were pregnant, nursing or neither at the time of the interview.

- (d) Mortality - Between item 16 and 17, an unnumbered item requested the personal details of all household members who died within the last 12 months, and finally,
- (e) Agricultural earnings - item 17 collected details of combined household earnings from agricultural and livestock products during the last agricultural season.

The only modification to Form B for the second round of the survey was an additional column in the personal data section which asked for the place of origin of those who were not enumerated in the previous round and the destination of those who left the household after being enumerated in the first round.<sup>3</sup>

Other details which were available on each form included the name of settlement, EA number, street address, number of household sharing the dwelling unit, the date of the interview and the name of the interviewer.

An inspection of the questionnaire structure and the final report published by the C.S.O. made two things <sup>a</sup>apparent. These were that the data collected was of the nature needed for this study and that the analysis to which such data will be subjected will in no way duplicate the broad details contained in the official publication.<sup>4</sup> Access to original field sheets was, therefore, requested and this was readily granted.

#### Editing

The decision as to what to include or reject was based on the following guidelines:

- (i) The second round of the demographic survey will form the data source for this study. This was to allow a cross-checking with the first round as to the reliability of some responses.
- (ii) Questionnaires for both rounds should be completed. Cases of households which were duly returned as vacant in the first round, but for which a

questionnaire was completed in the second round would be accepted. So would those returned as vacant in both rounds. A household duly returned as vacant in the second round would be recorded as vacant irrespective of its previous composition.<sup>5</sup>

- (iii) The general quality of the responses to the various sections of the questionnaire should be consistently adequate for intended analysis.

Of the initial 61 EAs, <sup>the</sup> file for one, EA No. 314/43, could not be found.<sup>6</sup> After screening the remaining files containing 3,022 households, 19 households were rejected. Of those rejected, 13 were in Freetown, four in other urban places and two in the rural area. The highest number rejected from any one EA was three and these were from one of the larger Freetown EAs. The total number of accepted households was 3,003. Vacant households numbered 224 and the 2,779 occupied households had 11,998 persons living in them.

The personal data, excluding names of each individual, (items 2-11, Form B) and the reason for unemployment given by those not in employment were extracted.<sup>c</sup> Although the high hopes of analysing migration data from responses to enquiry on this ~~topic~~ in the second round was not justified,<sup>7</sup> it was possible to indicate individuals who had moved into households since the first round.

Since this study concentrates more on population characteristics, the fertility and mortality records were viewed primarily as a means of assessing the reliability of other responses. For a start, the usual 12-month interval employed for the analysis of such records had not everywhere elapsed when the second round of the survey was carried out.<sup>8</sup> In addition the view of those who took an active part <sup>the execution</sup> in ~~of~~ the survey was that the quality of responses to these events were

somewhat poorer than those for the section on personal data.<sup>9</sup> Such<sup>a</sup> view is consistent with the experience, elsewhere, in projects which involved the collection of personal data, fertility and mortality records.<sup>10</sup> These records have, therefore, not been included in the data source.

The coding of the data and supervision of the punching, listing and preliminary tabulations were carried out by this writer in the C.S.O., Freetown during the last quarter of 1969.

#### Validation of Sample Size

In spite of the reliance on data collected by the C.S.O., it is relevant to assess the adequacy of the data source for the purpose for which it is intended. The discussion which follows will set limits to the extent to which the estimates obtained from the survey result can be relied on when such estimates are applied to the total population of the Western Area.

Table 1.1 shows the number and proportions of EAs, households and individuals included in this study for each of the residential areas. Because of the missing file for one EA, the distribution shown on Table 1.1 differs slightly from that of the initial sample.

Table 1.1

#### NUMBER AND PROPORTION OF SAMPLING UNITS BY RESIDENCE

Residence	Enumeration Areas		Households		Population	
	No.	%	No.	%	No.	%
FREETOWN	37	61.6	2,093	69.7	8,311	69.2
W. URBAN	16	26.7	707	23.5	2,850	23.8
W. RURAL	7	11.7	203	6.8	837	7.0
Western Area	60	100.0	3,003	100.0	11,998	100.0

Source: Author's analysis

It was on the strength of the distribution of households in each of the residential areas that the C.S.O. validated the

sample selection as follows:

"The total number of households in the sample was 3,071 divided as follows: Freetown - 2,106, urban places - 760, rural areas - 205. Since the sample was drawn systematically over the entire Province (Western Area) at the same sampling rate, this indicates that about 68% of the population live within the city boundaries, 25% live in other urban places, and 7% live in the rural areas."<sup>11</sup>

The similarity between the distribution shown by the survey sample and the population distribution returned by the 1963 census no doubt reinforced confidence in the sampling procedure. The 195,023 persons returned in the Western Area were divided as follows: Freetown - 127,917 (65.6%), urban places - 40,147 (20.6%), and rural areas - 26,959 (13.8%). But the apparent reliability shown by the distribution of two of the units of sampling, households and population, cannot be arbitrarily extended to cover the selection of EAs used as the Primary Sampling Units, or the detailed social and demographic estimates obtained from the survey results.

Table 1.2 shows the frequency distribution of the 60 EAs, included in this study, by the classes of the number of households. The largest EA had 88 households selected, and the smallest, eight households. The mean number of households per EA was 50. Given the wide variation in number of households, the test applied here is to define the number of EAs that needs to be selected to give a true mean number of households within  $\pm 5$  per cent of the sample mean, that is, at the 95 per cent probability level. In other words, will the size of the sample yield a standard error of 2.5 ?

The calculation of the standard deviation in the number of households and the application of Bessel's Correction<sup>12</sup> showed that 53 EAs would have been adequate at the specified degree of accuracy.

With regards to the reliability of estimates of geograph-

Table 1.2

FREQUENCY DISTRIBUTION OF ENUMERATION AREAS BY NUMBER OF HOUSEHOLDS

1968

Number of Households (Classes)	Number of Enumeration Areas
80 - 89	2
70 - 79	8
60 - 69	8
50 - 59	16
40 - 49	11
30 - 39	7
20 - 29	4
10 - 19	2
under 10	2
All Classes	60

Source: Author's analysis

ical, social and other characteristics obtained from the survey results, the Final Report<sup>13</sup> notes that,

"It is more difficult to develop a reliable estimate for characteristics that occurs only infrequently, such as the percent of farmers living in Freetown, than it is to estimate a more common characteristic such as the percent of sales workers."

and that

"The relative errors in the survey results due to sampling have not been calculated. On the basis of similar surveys in other places it is estimated that the sampling error in average total income and expenditure will not be in excess of plus or minus 5%, and in general, that level of error might be applied in the evaluation of most of the survey results."

Instead of adopting the general  $\pm 5\%$  margin, sampling errors for a range of estimated proportions and sample sizes upon which such proportions are based have been calculated. The relation of sampling error to sample size and proportion is shown in the formula which was used for computing the various values shown on Table 1.3:

$$\frac{2\sqrt{p(1-p)}}{n}$$

where  $p$  is the proportion under consideration and  $n$  is the sample size. Although the sampling was not random at all stages, the relationship expressed in the formula is adequate.<sup>14</sup> In using Table 1.3 the figures represent the position of twice the standard deviation on either side (i.e. plus or minus) of the sample estimate in order to obtain the 95 per cent level of confidence that the corresponding population parameter will lie in the range.

To illustrate the application of the sample error to actual data, the age structure of the survey sample is shown against that of the total population of the Western Area in 1963, (Table 1.4). Ten-year interval is employed as adequate

Table 1.3

APPROXIMATE SAMPLING ERROR OF PERCENTAGES APPLICABLE TO THE WESTERN AREA  
HOUSEHOLD SURVEY RESULT - 1968

Estimated Percentage	Sample Size upon which Percentage is Based													
	50	100	200	300	400	500	700	1000	1500	2000	3000	4000	5000	6000
50	14.1	10.0	7.1	5.8	5.0	4.5	3.8	3.2	2.5	2.2	1.8	1.6	1.4	1.2
40 - 60	13.8	9.7	6.9	5.7	4.9	4.4	3.7	3.1	2.4	2.2	1.7	1.5	1.1	1.0
30 - 70	12.9	9.1	6.5	5.3	4.6	4.1	3.5	2.9	2.2	2.1	1.6	1.4	0.8	0.7
20 - 80	11.1	8.0	5.7	4.6	4.0	3.6	3.0	2.5	2.0	1.8	1.4	1.3	0.6	0.4
10 - 90	8.4	6.0	4.3	3.5	3.0	2.7	2.3	1.9	1.4	1.3	1.0	0.9	0.4	0.2
5 - 95	6.1	4.3	3.1	2.5	2.2	2.0	1.6	1.4	1.1	1.0	0.8	0.7	0.1	0.1

Note: The figures in this table represent the value that must be added (+) or subtracted (-) to/from the estimates obtained from the survey result to give a 95% level of confidence that the corresponding parameter lies within the range. For further explanation of the use of the table, see text and footnote no. 14.

for smoothing out the effects of age reporting. The actual difference for each age-class is shown against the appropriate sampling error, based on the number and proportion of sample population at the age-class.

Table 1.4

AGE STRUCTURE AND SAMPLING ERROR - 1968 SURVEY RESULT COMPARED TO THE 1963 CENSUS RETURNS <sup>15</sup>

Age-Class	1963		1968		Difference %	Sampling Error (%)
	No.	%	No.	%		
0 - 9	52,264	26.8	3,202	26.7	0.1	1.4
10 - 19	36,706	18.8	2,426	20.2	1.4	1.6
20 - 29	36,317	18.6	2,057	17.1	1.5	1.3
30 - 39	28,266	14.5	1,741	14.5	0.0	1.4
40 - 49	18,941	9.7	1,349	11.2	1.5	1.6
50 - 59	10,788	5.5	608	5.1	0.4	1.8
60 & above	11,741	6.0	615	5.2	0.8	1.8
All Classes	195,023	100.0	11,998	100.0	-	-

Source: For 1963 data see footnote no. 15

Data for 1968, author's analysis

Note: Sampling Errors can be calculated individually or read off Table 1.3

The evidence for the reliability of age data provided by this comparison is impressive. The actual difference between proportions at each age-class is less than the sampling error, or nearly equal, at the age-classes. Another illustration will further clarify the application of the sample error, this time, with regards to the sex-ratio of the sample population. The 6,183 males make up 51.5 per cent of the sample. That proportion plus or minus the sampling error of 1.0 has a 95 per cent probability of including the actual parameter which in 1963 was 52.7 per cent.

Beside the application of the sampling error, an additional condition is that, if the analysis of any topic reveals gaps in the structure of the topic, then the

classification employed will be altered to remove such gaps. For example, a discussion of the age composition of the major tribes, with more than 10 per cent of the sample each, may be feasible in five or 10-year intervals, whilst the discussion of the same topic for the minor tribes may be carried out in wider age-groups in order to obtain meaningful results.

#### DATA ORGANIZATION AND WORKING HYPOTHESES

The preparation of a format for the presentation of data raises the question: What are the assumptions and hypotheses upon which such a format is based? The stated aims of this study are to provide a description of population characteristics in the Western Area, to explain the causes and consequences of the patterns exhibited and, through the analysis of the intervariation of characteristics, to obtain an identification of population types and areas.

Four assumptions were made as to the principles guiding the variation in population characteristics from place to place. Whilst they are based specifically on observations made in the Western Area, they are applicable to other areas where similar economic and social conditions exist. These are:

- i. That the universe from which the sample is drawn has some distinguishing characteristics against which variations of its sub-divisions can be measured. For example, the Western Area has a young population, and there is a middle bulge in its age structure which exists side by side with a scarcity of old people. Variations occur in parts of the Western Area, especially with regards to the extent of the bulge, which is the symptom of an in-migrant area.
- ii. That the variation in population characteristics is highly influenced by the place of residence.<sup>16</sup>
- iii. That the basis of the second assumption is the correlation between variations in level of socio-economic activities and the sizes of communities. The selectivity of such activities as to age, sex and other population characteristics, produces the structural variations from urban to rural areas.

- iv. That migration is the medium through which population size, distribution and composition are adjusted to the location and demands of social and economic activities.<sup>17</sup>

Arising out of these assumptions are the following hypotheses that may be proven or modified on evidence:

- (a) Population characteristics which are sensitive to migration exhibit a pattern which shows a graduation from urban to rural residence. The steepness of the variation depends on the strength of the inter-action between the urban and rural areas which produced the migration. Age and sex are two such characteristics.
- (b) Population characteristics which are only slowly altered by modernisation show a higher rate of occurrence in rural areas with a gradual decline in occurrence towards urban areas. Marital status and family and household composition are in this category.
- (c) Population characteristics based on acquired traits will exhibit some clustering of persons possessing such traits in areas where they can best exploit them. Economic characteristics, depending as they are, on literacy, opportunity for employment and income levels, come to mind.

Because of the autocorrelation between place of residence and levels of social and economic activities, the analysis of the intervariation between population characteristics by the use of principal components analysis should produce groups of association (components) among characteristics that enable different residential types to be distinguished. Such components should also reveal the extent to which the demarcation of unit areas for the analysis of data along the line of residential pattern is justified.

#### Unit Areas

Freetown contains 69.3 per cent of the sample. But it is not merely because of its high proportion of the sample that it was found necessary to sub-divide the city into sections. Like other urban centres, its social and economic activities are spatially differentiated. It has a business

district,<sup>18</sup> its fashionable quarters, and its parcels of high density, low income housing. Consequently, it is expected that the zonation of activities will be reflected in the spatial pattern of population characteristics. Eight sections (Figure 1.3) are recognised. In general, the sections run from north to south, such a zonation takes into account a broad uniformity in the character of the different sections and has been based on the contiguity of EAs as well.

In the rest of the Western Area, there are two districts made up wholly of other urban centres. Wilberforce district is divided into its four components - Murray Twn, Wilberforce, Lumley and Goderich. And Kissy district is divided into its two components - Kissy Village and Wellington Village.

Because it has been possible to identify the sample from individual settlements, other centres with populations of more than 1,000 in the 1963 census have been carved out of the districts to which they belong irrespective of the classification of such districts as rural. Consequently, Waterloo district has been divided into two urban units (Hastings, Waterloo Village) and one rural unit area - Waterloo rural which is largely made up of the Macdonald group of villages to the south of Waterloo Village.

Of the three other rural districts, the Mountain district, with its survey sample of 107, and York district with 283, remain single units.<sup>20</sup> Koya district, however, presents some problems. Songo, its main settlement, has been variously listed as having more than 1,000 inhabitants and less.<sup>21</sup> In spite of the ambiguity of Songo classifying as urban, the northern parts of Koya district, close to the main road to the rest of Sierra Leone and extending from Mile 2 to Songo, is markedly different in character from the rest of the district and there is a case for separating it.

**FIGURE 1.3**

**A MAP OF FREETOWN AND THE WESTERN AREA SHOWING THE 21 UNIT AREAS DEMARCATED FOR THE ANALYSIS OF THE 1968 HOUSEHOLD SURVEY RESULTS**

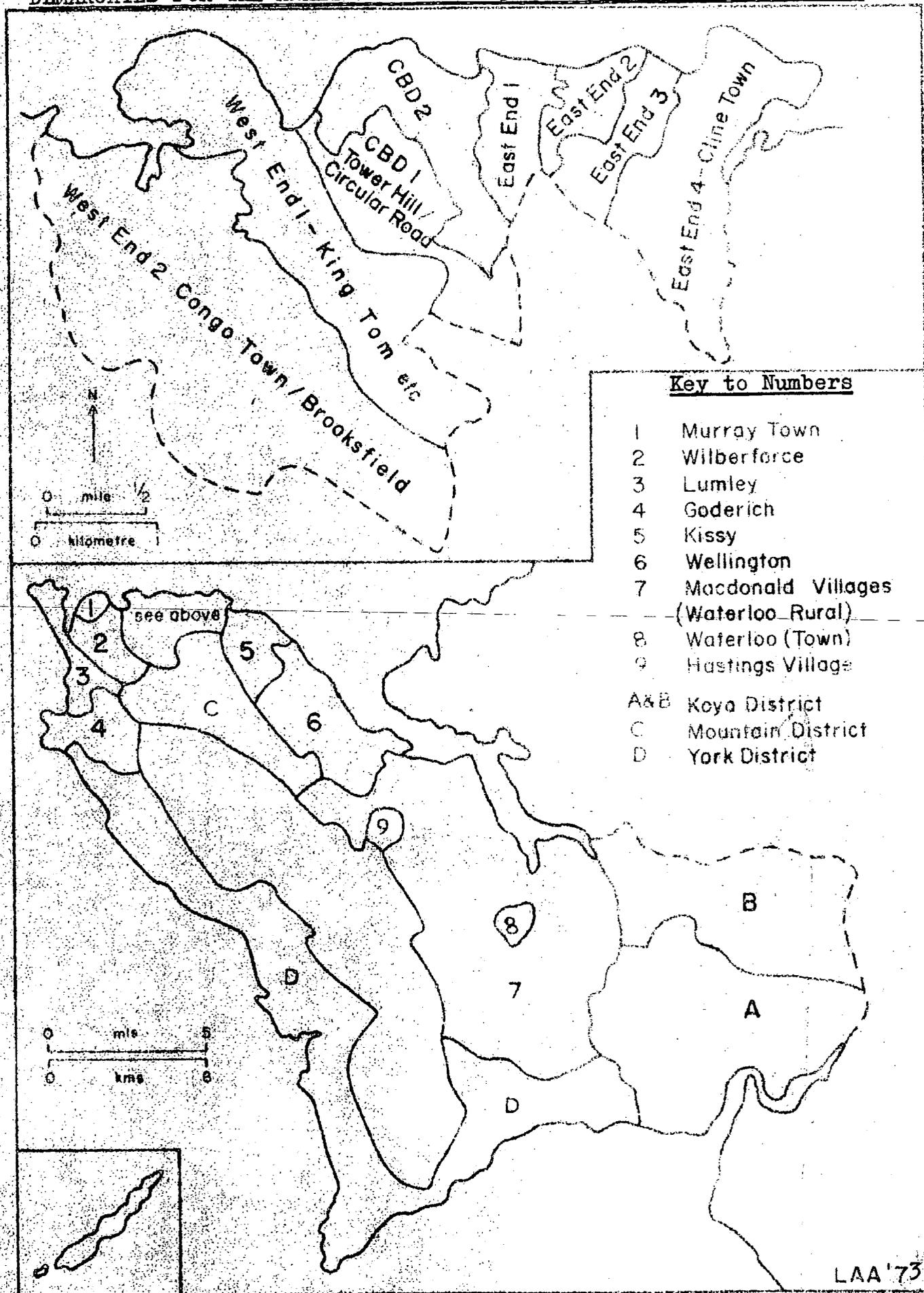


Table 1.5 shows the distribution of the sample by the demarcated 21 unit areas:

Table 1.5

SAMPLE SIZE IN EACH OF THE 21 UNIT AREAS

UNIT AREA <sup>22</sup>	Sample Size	Percentage
CBD 1 - TOWER HILL/CIRCULAR RD.	1,082	9.0
CBD 2 - COMMERCIAL AREA	1,188	10.0
EAST END 1 - BOMBAY STREET	1,060	8.8
EAST END 2 - SAVAGE SQUARE	1,073	8.9
EAST END 3 - KENNEDY STREET	895	7.5
EAST END 4 - CLINE TOWN	1,036	8.6
WEST END 1 - KING TOM/	847	7.1
WEST END 2 - CONGO TOWN	1,130	9.4
<b>FREETOWN</b>	<b>8,311</b>	<b>69.3</b>
MURRAY TOWN	218	1.8
WILBERFORCE	214	1.8
LUMLEY	208	1.7
GODERICH	157	1.3
KISSY	771	6.4
WELLINGTON	389	3.2
WATERLOO RURAL (Macdonald Villages)	354	3.0
WATERLOO VILLAGES	157	1.3
HASTINGS VILLAGE	382	3.2
<b>WESTERN URBAN</b>	<b>2,850</b>	<b>23.7</b>
NORTH/KOYA DISTRICT	100	0.8
SOUTH/KOYA DISTRICT	347	2.9
MOUNTAIN DISTRICT	107	0.9
YORK DISTRICT	283	2.4
<b>WESTERN RURAL</b>	<b>837</b>	<b>7.0</b>
<b>WESTERN AREA TOTAL</b>	<b>11,998</b>	<b>100.0</b>

Source: Author's analysis

Data will be presented for each of the residential areas - Freetown, Western Urban (other urban places) and Western Rural areas, and where necessary, estimates will be provided for each of the 21 unit areas. The validity of the residence based format for the analysis of data should be proven or modified on evidence.

It is against the background of the stated aims, assumptions and hypotheses that selected topics will be

discussed. The application of principal components analysis, in the last chapter, should bring together the trends shown of the for each characteristics into a pattern of association. Such components will form the basis of recognising population types and the grouping of unit areas by such types.

NOTES AND REFERENCES

CHAPTER 1

1. C.S.O., Freetown Household Survey of the Western Area November, 1966 - January, 1968 - Final Report, pp. 1-19. provide the official statement on the planning and execution of the survey but to these have been added very detailed discussions with Messers Rahman and Labor both of whom were, in 1969 and again in 1973, able to supply information or correct others. A xerox-copy of the Instructions to Enumerators was also made available to this writer.
2. Between the first and second round, other surveys on expenditure pattern were carried out - ibid. p. 2. The survey time table was disturbed by events arising from the General Elections held in 1967 - idem. The second round of the survey overran into January 1968.
3. idem. mentioned briefly as 'migration'. The modification took the form of two questions in the personal data section. It asked of individuals if they were in the household in the 'previous interview' and of the head of household if the household was in the dwelling unit at the previous interview. Although in analysing the data on migration the assumption was that a year had elapsed between the first and second round - see ibid. p.19, I am assured that in practice the enumerators checked households and household members against the first round rather than pay attention to the convention of reference to a calendar year.
4. A list of the 29 tabulations in the final report can be inspected in Appendix. 1.2
5. This is consistent with making the second round the data source and, when information is available on the destination of the previous occupiers, account is taken of this, as part of the body of data on migration.
6. On evidence from the dwelling unit files which were kept separately, it would appear that the lost file contained 40 dwelling units selected from Oku Town and Old Wharf on the outskirts of Wellington.
7. Where a whole household had moved out of <sup>a</sup> dwelling unit, it was often difficult to tell its destination. This limitation casts doubt on the reliability of the comments on the movement of households and individuals carried in the final report - C.S.O., op. cit., pp. 18-19
8. In spite of the statement to the contrary, ibid., p. 2, there are instances where the interval between the first and second interview was 11 months. Consequently a number of infants aged 11 months were present at both rounds.
9. Mr. Labor was Supervisor in both rounds and in discussions with him, October 1969 - June 1970, explained the difficulties encountered, especially by male interviewers

in collecting fertility records.

10. This was the writer's field observation in supervising the Fertility Family and Family Planning Survey (FFFP-KAP Project 1970) - in the Western Phase of the Nigeria Project, in the Institute of Population and Manpower Studies, University of Ife. The tendency in a household survey in which the fertility and mortality record is incidental is for interviewers to make less effort to obtain as accurate a record as would be the case in a more specific survey such as the FFFP-KAP Project.
11. C.S.O. op. cit., pp. 1-2
12. Gregory, S. Statistical Methods and the Geographer, Longmans, 1962, pp. 78-89.
13. C.S.O. op. cit., p. 19.
14. See a similar application of sampling error in Report on The West Malaysian Family Survey 1966-1967, National Family Planning Board, Kuala Lumpur, Malaysia, pp. 44-61. The figures on Table 1.3 are lower limits of the error if the sample were selected by unrestricted random sample.
15. Sierra Leone, C.S.O., 1963 Population Census of Sierra Leone, Freetown, 1965 Vol. 1, Table 9, p. 47.
16. Dow, T.E., 'Fertility and Family Planning in Sierra Leone' in Studies in Family Planning, Vol. 2, no. 8 August 1971 pp. 153-165 provided a specific validation of this assumption with regards to Fertility and Family Planning. In the absence of other studies covering the population characteristics of the Western Area, the assumptions may be regarded <sup>as</sup> intuitive at this stage.
17. Herrick, B.H., Urban Migration and Economic Development in Chile, M.I.T. Press 1966, pp. 10-22 contain an excellent resume of the theory of migration and see Adekun, L.A. Some Studies in Migration as a Response to Economic Development in Sierra Leone, M.A. dissertation, University of Durham, 1969 which is a modest attempt at relating broad variations in the population characteristics of the Sierra Leone population to the location of economic activities and development areas.
18. McKay, J. 'Freetown' in Sierra Leone in Maps (ed. Clarke, J.I.) University of London Press, 1966, pp. 58-59., and 'The Central Business District of Freetown' (Abstract) in Journal of the West African Science Association, Vol. pp. 72-73 by the same author.
19. Tasso is considered as a sub-unit of Kissy District. Although no sample was selected from the island, it will be assigned values obtained for Wellington for the purpose of mapping.
20. Banana Islands are regarded as part of York District although no sample was selected from the islands.

21. A handcount by the present writer showed that Songo had a population of 1,082 in 1963. Harvey, M.E. Urban Growth in Sierra Leone, Vol. 1, Ph.D. Thesis. University of Durham, 1966, p. 422 lists Songo as having 1,062, but Sierra Leone C.S.O., op. cit., Vol. 1, Table 6 does not list Songo as having 1,000 or more inhabitants. Enquiries at the C.S.O. Freetown by this writer in July, 1973 did not yield a conclusive explanation except that it confirms that part of Songo Town, north of the railway station, is outside the Western Areas.
22. Each of the 21 Unit Areas will in the text be referred to by the names shown on this Table 1.5 and on the corresponding map Figure 1.3.

## CHAPTER 2

### THE NATURAL ENVIRONMENT

The object of this presentation of the main features of the natural environment is to provide a background to the description of population distribution and the analysis of the spatial patterns of various population characteristics. It is not to be recognised as establishing a partition between physical and human elements. While it is true that 'land' exerts direct influence on "man", the relationship between man and his environment is, however, sufficiently intricate to make a discussion of the effects of relief, climate, vegetation and soil on his activities a valid pre-requisite of the study of his behaviour in response to and in spite of the environment.

#### Location and Size

The Western Area is made up of the Peninsula Mountains, the Koya lowland and two outlying islands - Tasso and the Banana. It is located on the west-facing coast of Sierra Leone, Figure 2.1. The area is bounded to the north by the Sierra Leone River which is, in effect, the estuary of the Rivers Rokel, Bunce and Port Loko Creek. Tasso Island is some 10 miles up the Rokel River and the Banana Islands are situated three miles southeast of Cape Shilling. All parts of the Western Area lie between  $8^{\circ}\text{N}$  and  $9^{\circ}\text{N}$ .

The peninsula<sup>1</sup> is 256.6 square miles and the outlying islands are 6 square miles - Tasso Island (2.1 sq. miles), Banana Islands (3.88 sq. miles).<sup>2</sup> The total area of the Western Area, at 261.6 square miles, is equal to 0.9 per cent of the national territory of Sierra Leone. According to the 1963 census, this area had a population of 195,023

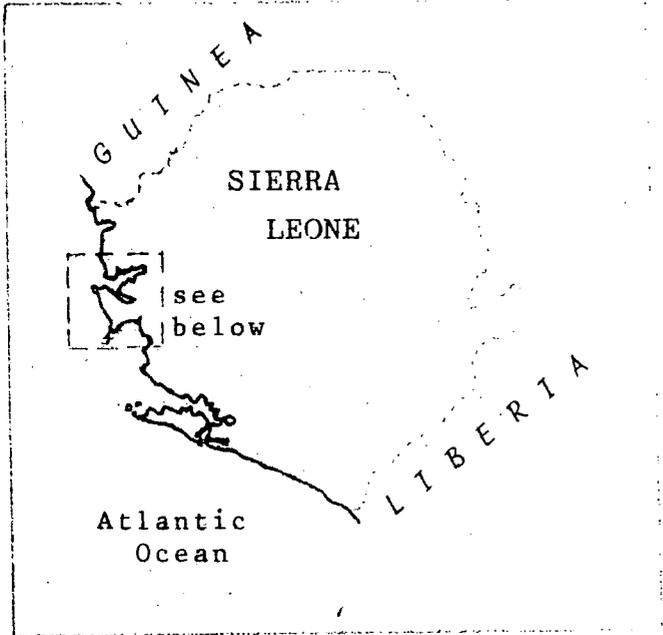
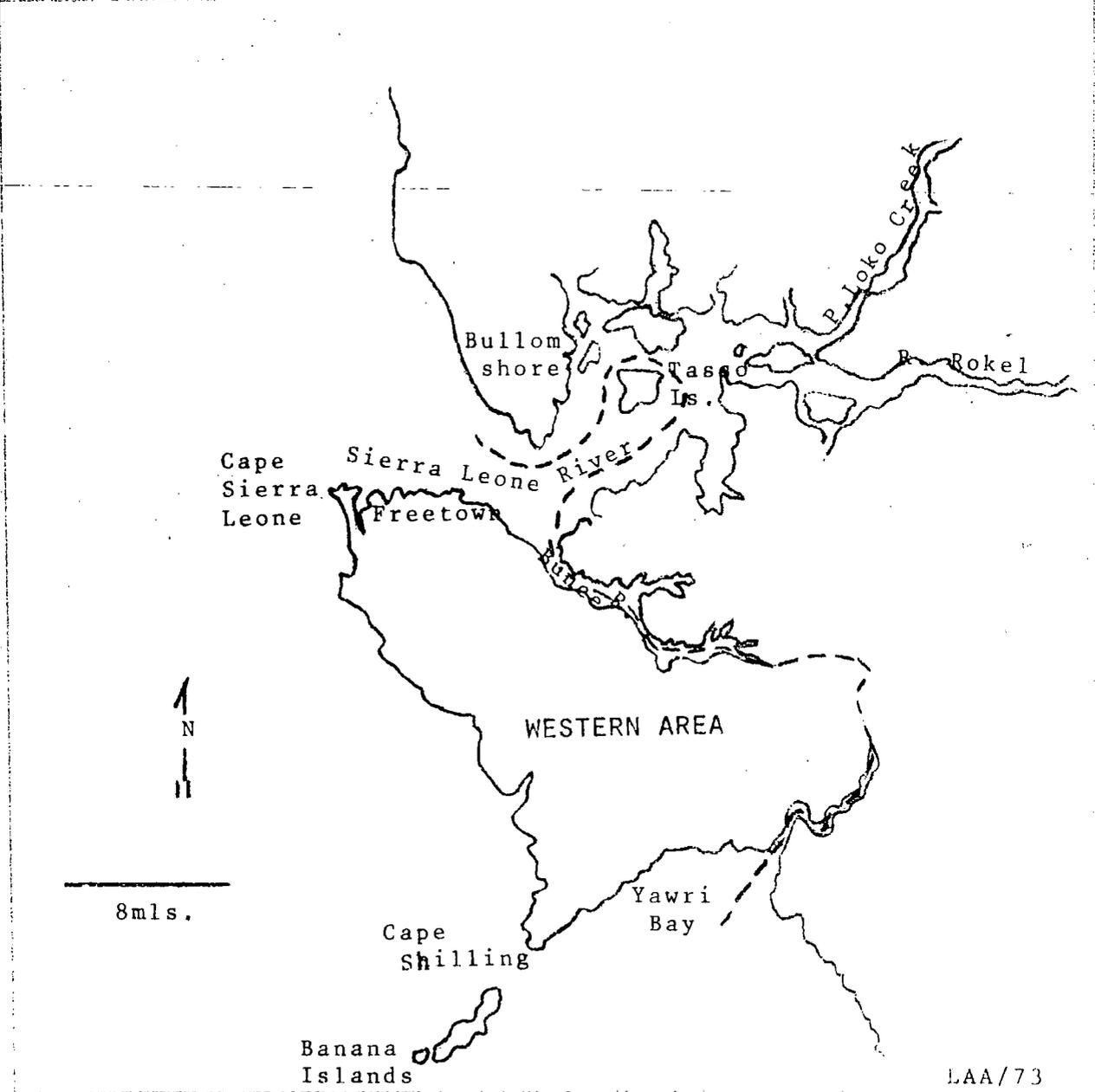


FIGURE 2.1

WESTERN AREA  
GENERAL LOCATION



which was 8.9 per cent of the total population of the country.

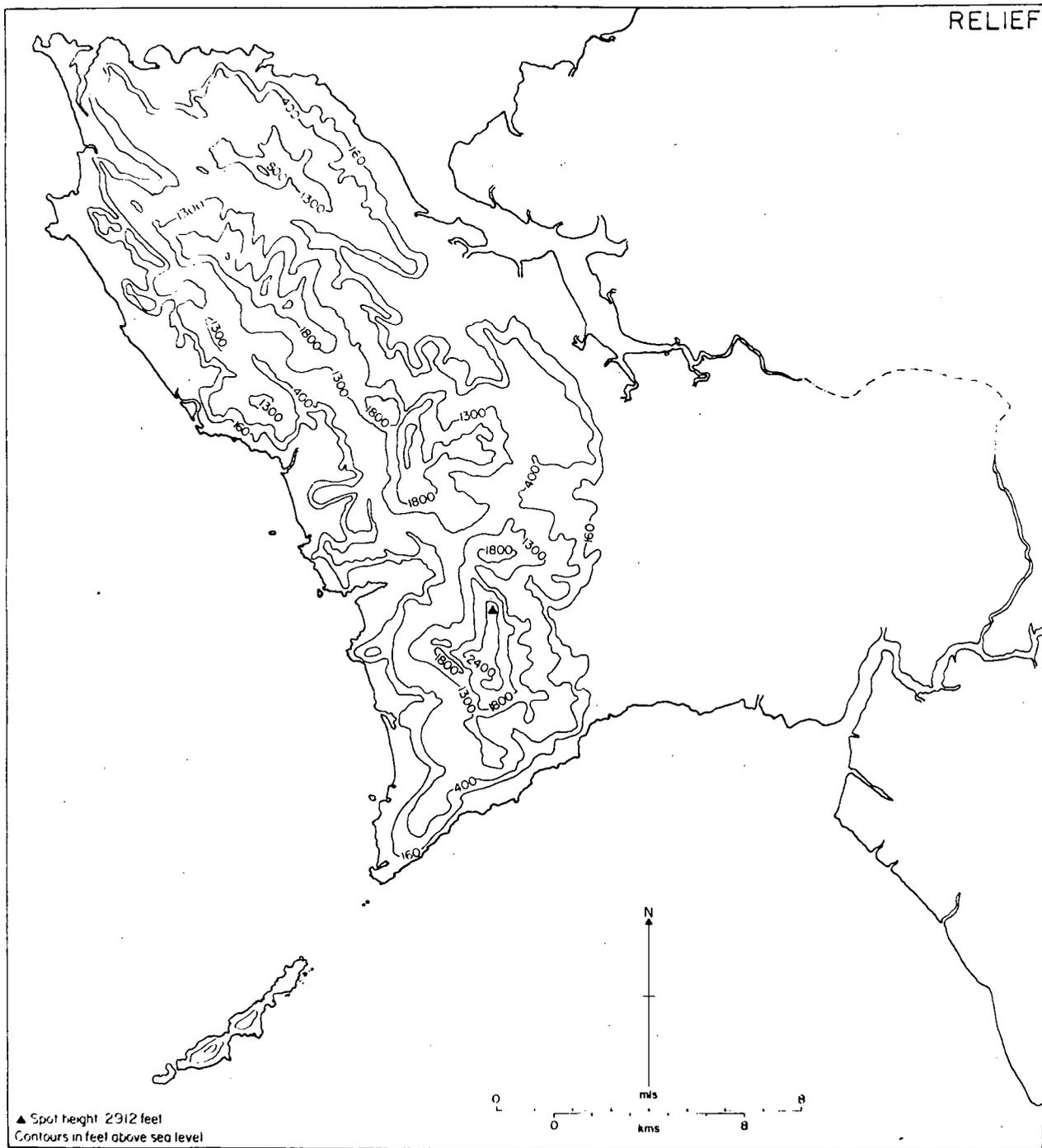
### Relief and Drainage

The map of relief (Figure 2.2) is based on some selected and interpolated contours.<sup>3</sup> The selection of the three highest contours - 2400, 1800 and 1300 ft. respectively, was guided by the fact that these give an idea of the main features of the terrain in the Peninsula Mountains. The 400 foot line is significant in the sense that it forms the present boundary to the expansion of settlements from the coastal area. With the exception of the Mountain district villages, with a combined population of 2,963<sup>4</sup> (less than 1.0 per cent of the 1963 population of the Western Area),<sup>4</sup> all major settlements and other population clusters are situated below the 400 foot contour. The interpolation of the 160<sup>0</sup> foot line was based on the consideration that this formed the break of slope between the raised beaches<sup>5</sup> and the mountain slopes and as such is important to an interpretation of the salient features of the relief.

Although more than half of the Western Area is below 160 ft., the dominant feature is the mountain ranges. With a peak of 2,912 ft. at Packet Hill and a number of others over 2,000 ft. in height, the 23-mile range extends from Mount Aureol to Cape Shilling and off-shore to the Banana Islands. The width of the mountain ranges varies from three miles at the Guna/Kosso Town axis to some seven miles at the York/Waterloo axis.

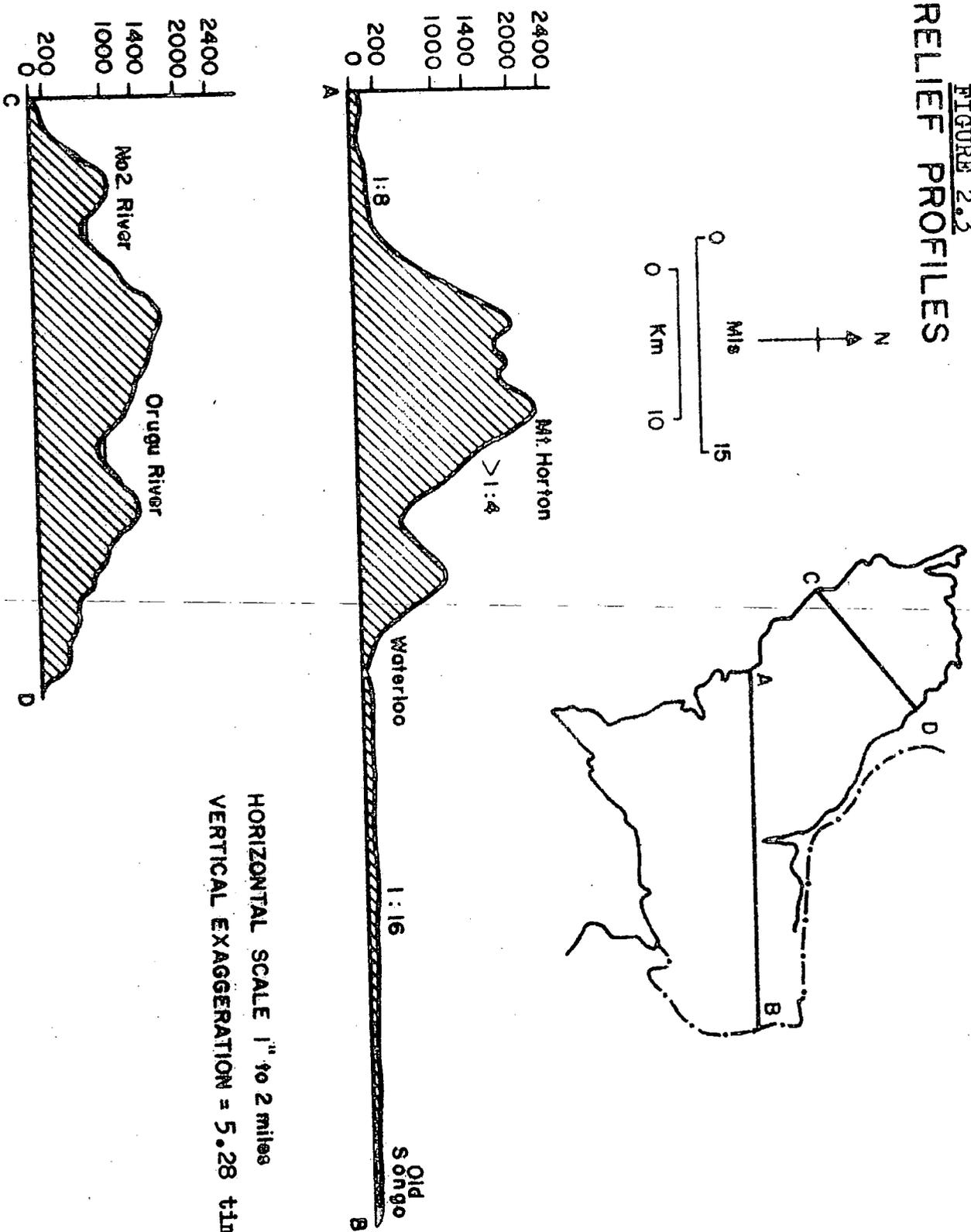
As the diagram of the various relief profiles (Figure 2.3) reveals, the real variation in surface roughness occurs, not on the north/south but on the east/west axis. This is consistent with the drainage pattern (Figure 2.4), which is

RELIEF



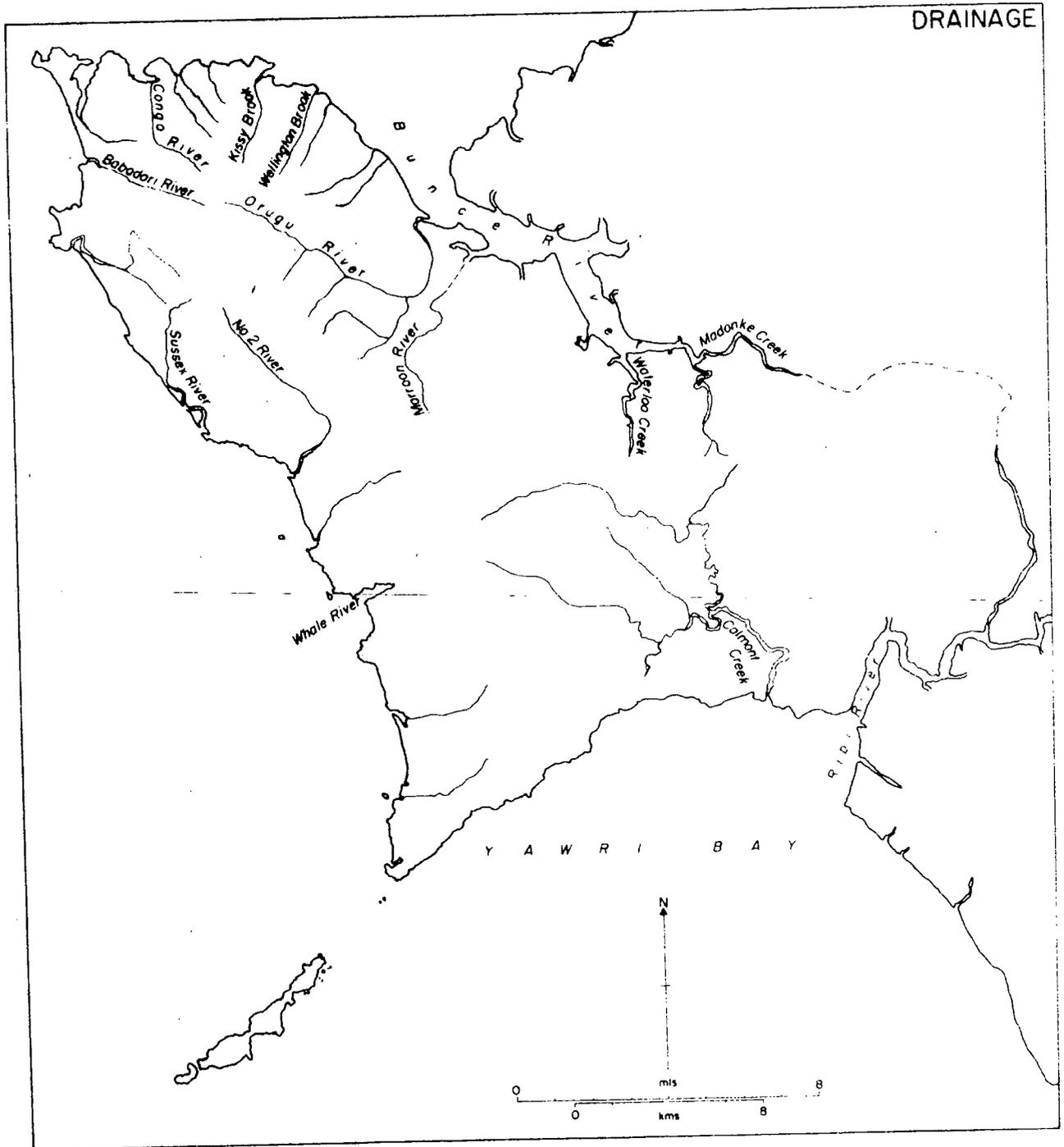
▲ Spot height 2912 feet  
Contours in feet above sea level

FIGURE 2.3  
RELIEF PROFILES



HORIZONTAL SCALE 1" to 2 miles  
VERTICAL EXAGGERATION = 5.28 times

FIGURE 2.4



largely oriented on the east/west axis, with the south to north streams of the northern slope forming an exception. Another feature of the relief is the presence of the two sub-ridges shown on the profile 'C-D'. The north-east ridge is the result of the separation of a range extending from Wilberforce spur to Allen Town spur from the main block by the Orugu and Congo River valleys. The other is the Bwango-Banga range which is cut off by the Adonkia and No.2 river valleys. In spite of these irregularities, the most typical view of the Peninsula Mountain, however, remains the north-south profile which emphasises the height of the range.

If the mountain range is the most dominant feature, the most significant from the point of view of the effect it has on the settlement pattern is the distribution of lowlands and gentle relief. The definition of gentle relief used here is slopes which have a gradient of 1:8 or about  $4\frac{1}{2}^{\circ}$ . Such slopes give a visual impression of being flat to undulating. The origins of such slopes have received attention elsewhere.<sup>6</sup> What is attempted here is to point out briefly the relationship between their distribution and the broad elements of population distribution in the area.

The distribution of gentle slopes is peripheral to the mountain range. These slopes are made up of three morphological types. First, is a series of raised beaches sloping down from a back of 160 ft., with lower level backs at 35 to 40ft. Second, are other flat areas, at roughly similar altitudes with the raised beaches, cut across the gabbro of the mountain range. The third type are the areas of coastal accumulation.<sup>7</sup> Above the 160ft. line, other flat areas can also be found. These are the summit flats and alluvial valleys.

The intensity of human occupation varies significantly from area to area in response to the morphology. The highest densities are to be found on the raised beaches. This is particularly true of Freetown and its suburbs. The summit flats and alluvial valleys account for some small direct occupation but contribute to the agricultural land, especially, of the Mountain district. The direct occupation of the coastal accumulation is also very negligible except in the Koya lowland.

The Koya lowland is the neck of land linking the Peninsula Mountains with the mainland. It is made up of part of Waterloo district and the whole of Koya district. It is everywhere below 160ft., and although it accounts for less than 40 per cent of the Western Area, it accounts for more than 80 per cent of areas of gentle relief. The gentle relief, in association with the nature of the soil, capable of producing good crops of swamp rice, and the nearness to urban market for the sale of agricultural surpluses has resulted in the area having one of the highest rural population densities in Sierra Leone.<sup>8</sup>

### Climate

The main features of the climate of the Western Area are a high incidence and amount of rainfall, a severe dry season and a marked seasonal variation in the relative humidity and temperature regime.

Although the rainy season extends from May to November, (May being the first month with an average of more than 4 in.),<sup>9</sup> more than 80 per cent of the annual rainfall occurs in the five month period from May to September.<sup>10</sup> All parts of the Western Area receive an annual rainfall in excess of

120 in., but there is a rapid increase from the Koya lowland to the western slopes of the Peninsula Mountains, where annual rainfall is more than 200 in.

In spite of the high rainfall, the severity of the dry season,<sup>11</sup> coupled with a great run-off and the limited catchment areas, result in a seasonal variation in the regime of the rivers and streams. All but the smallest streams manage an all the year round flow, but there is great fluctuation in the flow of the bigger rivers. Consequently, the provision of water for the growing population of Freetown and its suburbs remained a problem until the construction of the Guma Dam on the upper reaches of the No.2 River.

The general steepness of the mountain slopes rule out a consideration of the navigability of the main rivers except in as much as the mouths of a few offer shelter to small fishing boats. This is particularly true of the Western coast. The Calmont and Ribi Creeks, south of the Koya lowlands, are scenes of limited fishing activities in the wet season and the shallow waters of the Yawri Bay provide more rewarding all-year fishing.

The variation in the amount of sunshine, the effects of relief and that of nearness to the sea are the main factors responsible for the marked variation in the relative humidity and temperature regime.<sup>12</sup> The Peninsula Mountains experience lower mean daily maximum and mean daily minimum temperature than other coastal areas of Sierra Leone. In the Koya lowland and on the fringes of the mountains, conditions approximate those of other coastal areas of Sierra Leone. There is a seasonal variation in the mean monthly temperature; both mean maximum and minimum show peaks in April and troughs

in the months of July and August when cloud cover and the associated reduction in insolation of the sun are obvious explanations.<sup>13</sup>

Very humid conditions prevail at all times of the year but seasonal and daily variations occur. The relative humidity is higher in the rainy season than in the dry and the mean at the early hours of the morning higher than for the afternoon.<sup>14</sup>

In the context of West Africa as a whole, and of Sierra Leone in particular, these climatic conditions are by no means extreme conditions for a coastal area, except, probably, for the amount of rainfall in the Peninsula Mountains. It is, therefore, difficult to make a case that climatic conditions have directly influenced the intensity of the human occupation of the area. But in as much as these conditions directly affect soil conditions and vegetation types and, indirectly, affect farming and fishing practices, they form a valid part of the assessment of the natural environment.

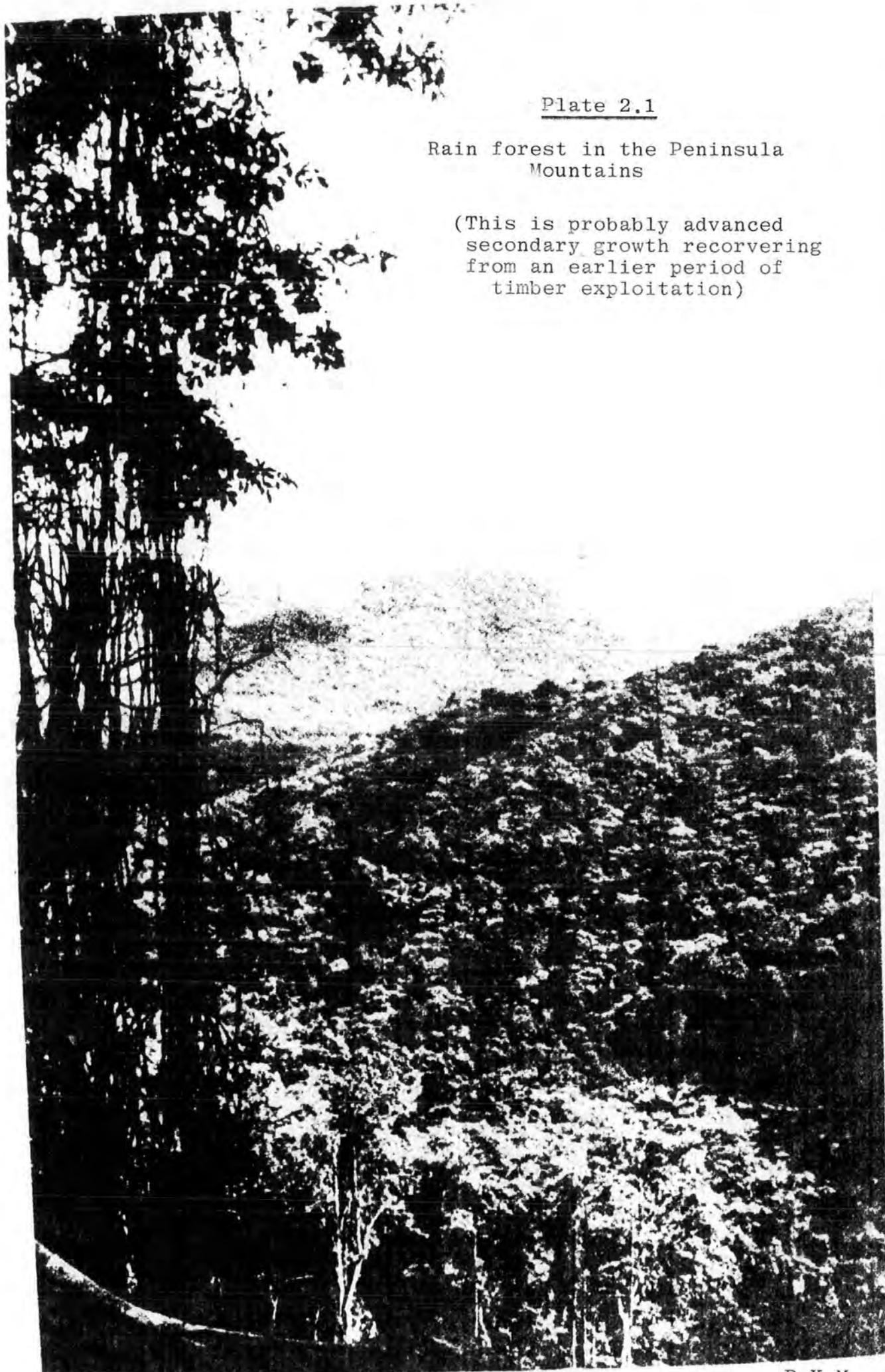
#### Vegetation and Soil

For such a small territory, the Western Area has quite a variety of vegetation types. On the mountain tops are thick forest growth (Plate 2.1), which are probably of secondary growth recovering from an earlier period of timber exploitation.<sup>15</sup> Most of the forest is now conserved in a forest reserve. The limits of the forest reserve coincide with the mountain tops; at lower levels and on the raised beaches have developed secondary forest mixed with grasses on the hillocks and interfluves and gives <sup>way</sup> to riverain grass and mangrove in the river-sides and in the swamps respectively.

Plate 2.1

Rain forest in the Peninsula  
Mountains

(This is probably advanced  
secondary growth recovering  
from an earlier period of  
timber exploitation)



The primary explanation of this variety lies in the effects of relief, thickness of soil and climatic conditions on the distribution of vegetation. To this must then be added the effect of human activities on vegetation.<sup>16</sup>

The gabbroid rocks of the Peninsula Mountains have been weathered to produce a mantle which varies considerably as to depth and composition. In the mountain summits, weathering has taken place to depths of 100 ft. or more and on these have developed the luxuriant forest growth.<sup>17</sup> Elsewhere, on the mountain slopes, the mantle is thinner and the bed rock is occasionally exposed. The groundwater is also less on these slopes. Vegetation on the slopes therefore varies from woodland to patchy grasses and shrubs.

On the sedimentary material of the Bullom series and on the raised beaches around the Peninsula Mountains have been developed lateritic hardpans and on these grow grasses. When, with some difficulty, the hardpans are broken, a pale purple, infertile soil is exposed on which the hardy cassava can be grown. Where, as in the Koya lowland and in the alluvial valleys, the sandy soils have been mixed with clay and groundwater is considerably higher than on slopes, the soil is higher infertility. On such soils are vegetables grown for the urban market, (Plate 2-2).

Areas of riverain grass and fresh-water swamps have also been cleared to allow the growing of rice. This is the case in the Ribí Creeks.

### Summary

The discussion of the natural environment has established some broad issues concerning the effect of physical factors on the occupation of the area.

First, it has shown that relief is one of the strong

Plate 2.2 Market gardening in stream beds of the Mountain district and in the alluvial valleys.

P.K.M.



influences on population distribution. However, relief alone cannot account for nearly 70.0 per cent of the total population of the Western Area living on the northern slopes of the Peninsula Mountains. The presence of one of West Africa's few natural harbours, the development of Freetown as the major political, economic and cultural centre in Sierra Leone and the attending advantages are factors which may be briefly mentioned here.

Second, the location of the Western Area close to the equator, the coastal location, the altitude and aspect of the Peninsula Mountains are the main factors that were shown to affect the amount of rainfall, the temperature regime and the relative humidity. Climatic conditions were shown to influence the distribution of vegetation and soil types as well as variations in groundwater, and these conditions can be said to be the ultimate determinants of agricultural practices. The wide use of cassava on slopes, the growing of vegetables in alluvial valleys and the use of rice in cleared riverain grass and in freshwater swamp are some of the land use responses to climatic conditions.

Finally, the one concrete limit set to direct human occupation, in the form of permanent settlement, is the creation of the forest reserve. That it coincides with mountain summits provides an interesting situation in which government action overlaps with <sup>the</sup> relief factor, in setting limits to human occupation. To appreciate fully how detailed distributional and compositional variations occur, the demographic history and an analysis of the survey data are presented in subsequent chapters.

NOTES AND REFERENCES

CHAPTER 2

1. The term 'peninsula' is used here in a geomorphological context. The application of this term to administrative area, especially in the early days of the Colony of Sierra Leone, can be confusing. As will be shown in chapter 3, the colony did not cover the whole peninsula until 1861. Consequently, peninsula, here, should be interpreted as the combination of the Peninsula Mountains and the Koya lowland, terms which will be used specifically in the rest of this study.
2. All measurements made on the 1:63,360 map of the vicinity of Freetown, sheets 2 and 3, and listed in Appendix. 2.1
3. Contour selection and interpolation based on same map above.
4. Handcount by this writer, 1964, C.S.O., Freetown.
5. Gregory, S. 'The raised beaches of the peninsula area of Sierra Leone' I.E.G. Transactions and Papers No. 31, December 1962, p. 15.
6. Ibid., pp. 15-22
7. Ibid., p. 21.
8. Siddle, D.J., 'Distribution of Rural Settlement' in Sierra Leone in Maps (ed. Clarke, J.I.) University of London Press, 1966, pp. 26-27.
9. Gregory, S. 'Rainfall' Ibid., pp. 20-21
10. Williams, G.J. 'The Guma Valley Scheme, Sierra Leone' Geography No. 50, 1965, p. 163.
11. See maps of Dry Season Rainfall and Reliability in Footnote no. 9 above.
12. Mitchell, P.K. 'Temperature, sunshine, humidity, wind' in Sierra Leone in Maps (op.cit.), pp. 22-23. (Clarke, ed.)
13. C.S.O., Freetown Annual Statistical Digest 1968, Sierra Leone Government, Table 6, compare Kertright (p.8) and Falconbridge (p.7) with other inland stations.
14. Ibid., Table 7, p. 9.
15. Williams, op. cit., p. 165 and see Fyfe, C. A History of Sierra Leone, Oxford University Press, 1966 p. 125 and other places for the exploitation of timber.
16. Clarke, J.I. 'Vegetation' in Sierra Leone in Maps (Clarke, ed) op. cit., p. 24.
17. Williams, op. cit., p. 165; see also footnote no. 5 above.

CHAPTER 3

THE PRE-SETTLEMENT POPULATION

"The Freetown site was, therefore, inhabited long before any settlement from Europe was founded. The foundation of the settlement merely added to the existing African population: it did not populate an empty region."<sup>1</sup>

There can be no doubt that this conclusion is justified on the strength of the various allusions to native settlements in different parts of the Western Area. But in spite of the wealth of details available on the post-settlement population, especially of the Freetown site, knowledge about the size of the indigenous population in the Koya lowland remained very limited until 1868.<sup>2</sup>

In this chapter, an attempt will be made to estimate the size and probable distribution of the population in the Western Area just before the establishment of the first settlement in 1787. There are three reasons behind this attempt. First: the Koya lowland did not at any time receive an appreciable number of official settlers.<sup>3</sup> This was due partly to the fact that all the major categories of settlers<sup>4</sup> had arrived in the colony before the annexation of Koya lowland and partly because the lowland was a friction zone between the colony and the native population beyond. Consequently, the only direct input from the colony consisted of a garrison at the native town called Songo, which was then renamed Prince Alfred's Town.<sup>5</sup>

Second: the population of the Koya lowland accounted for 66 per cent of the total population of the Western Area in 1868. Although this proportion had dropped to less than a third in 1963, a knowledge of the size and probable distribution prior to the establishment of the 1787 settlement

should help in the analysis of the subsequent population growth carried out in chapter 4.

The third reason is that such a reconstruction of the pre-settlement population has, to the knowledge of this writer, not been attempted elsewhere, much as this will appear relevant to an appreciation of the significant role which migration has played in population change in the Western Area.

### Methodology

In the absence of direct population statistics for the relevant period, the methodology employed is necessarily simple and circumspect. A brief summary of the references to settlement pattern and size along the coast of Sierra Leone before 1787 will precede a more detailed review of written and cartographic evidence relating to the Western Area, at and soon after that date.

From the two groups of evidence will be formulated some assumptions which will guide the computation of the estimated population. In conclusion, opinion as to the probable distribution and the extent to which this indigenous element can be identified in subsequent analysis of population growth will be offered. As will be shown, not much more than considered conjecture can be offered on available evidence. But such conjecture will be of sufficient probability as to justify the exercise.

### Early Sources

The general impression gained from references to population along the coast was that it was distributed in small to medium-sized villages. Settlements along the coast of Sierra Leone at the beginning of the 16th century, mentioned in such sources, ranged in size from 150 to 100 inhabitants.<sup>6</sup>

Except for subsequent development of much larger agglomerations brought about by the establishment of the settlement and, later, colony of Sierra Leone and the recent upsurge of economic activities in parts of the country, it is still true that the majority of the country's population is distributed in similar-sized settlements.<sup>7</sup>

There is also evidence that, in time of war, rapid shifts of population did occur and resulted in the emergence of very large settlements. For example, Bonga, a settlement 'on the south side of the Sierra Leone channel' in a state of fortification contained 10,000 inhabitants in 1568.<sup>8</sup>

It is also fairly conclusive that, by the end of the 18th century, the main tribes (Temne, Bullom and Mende) were already established in and around the peninsula. The Temnes occupied the Bullom shore and the northern part of the Peninsula Mountains, presumably after pushing the Bulloms out.<sup>9</sup> The Bullom retained their hold on the shores of the Yawri Bay and the southern littoral of Sierra Leone.<sup>10</sup> And the Mendes were at least close to the Koya lowland and well established in the area they now occupy, as Rodney suggests.<sup>11</sup>

#### Written Sources

Three separate accounts of conditions in and around the colony are reviewed here. First is that of Mrs. Falconbridge covering the years 1791-1793.<sup>12</sup> Second is the journal of Adam Afzelius.<sup>13</sup> He arrived in Sierra Leone in March 1792, a year before the departure of Mrs. Falconbridge. Unfortunately, his journal for the 1792/3 period, which should have provided corroboratory evidence to that of Mrs. Falconbridge, was lost in the attack on Freetown by the French squadron in September 1794. The extant part of his journal, 1795/6, however, provides a source which is con-

temporaneous with that of Thomas Winterbottom<sup>14</sup> who arrived in Freetown in July, 1792, when Mrs. Falconbridge was still there, and left in 1796, just a little earlier than Afzelius. The three sources, together, cover the six-year period from 1791 to 1796. Although the analysis of the evidence provided will be comparative, it is desirable to give brief indications of the general quality of each source.

In assessing the overall quality of written sources for historical demography, it would appear that the shorter the period between observation and the recording of phenomena the greater the reliability. It is, on the other hand, apparent that such records will only be as reliable as the judgement of the observer who made them in the first place.

Mrs. Falconbridge was the wife of an agent of the St. George's Bay Company who was sent out in 1791 to collect the dispersed settlers who left the 1787 settlement, make peace with the natives and resettle them again. Consequently, she was thrown into immediate contact with the native population. Her curious and observant nature, coupled with the immediacy of her correspondence, compensate for the fact that her attention was largely focused on events on the immediate shores of the Sierra Leone River. From the details of the events of her daily life, it is apparent that her immobility was typical of the experiences of the early settlers. Her 'world' extended by hearsay, from Port Loko to the Banana Islands and by diet, to the Caramanca River from where she obtained an occasional supply of oysters.<sup>15</sup>

Afzelius kept a journal with, essentially, daily entries. His main interest was in botany and consequently, the accounts of the various plants dominate his journal.

But he considered himself as part of a larger scheme to expand the geographic knowledge of this part of Africa.<sup>16</sup> Consequently, his accounts contain a large amount of detail of the physical environment. He lived for some time on the Banana Islands, and in travels as far north as Rio Pongas and as far into the Peninsula Mountains as present-day Gloucester, he was able to make observations in fields as diverse as surveys and anthropology.

Winterbottom was the most travelled of the three writers. Besides a first-hand knowledge of the Banana Islands and the immediate environs of the peninsula, he travelled as far afield as Baireira in Madingo country. In addition, he was said to have travelled by water to Port Loko in March 1794, and from there walked 44 miles to visit Chief Smart at Rokon.<sup>17</sup> It was in the organization of his many observations into a coherent account, written during his last two years in Sierra Leone and another three in Britain,<sup>18</sup> that he appears to have lost some of the finer details so evident in the other sources. There is, however, no doubt that the material found in this source is the result of careful sifting of information.

Three types of evidence relating to the occupance of the peninsula are considered. First is the naming, location and description of native settlements. Second is statements on comparative settlement patterns in the different ecological and ethnographic regions along the coast in general. And third is a general impression of the intensity of occupation of the Peninsula Mountains, on the one hand, and of the Koya lowland on the other.

Settlements which are named fall into two categories; there are those located in the peninsula and those located

outside it. Settlements of the first category will receive the greater attention. But when settlements of the second category are given a full description, they contribute appreciably to a better understanding of conditions in the peninsula.

One trait which all the sources have in common is that the quantity of details provided on native villages is in direct ratio to the distance of such places from the Freetown site. Mrs. Falconbridge made mention of Granville Town, of which she was one of the earliest inhabitants, in connection with the re-occupation of an abandoned native village which the dispersed settlers occupied in 1791:

"Here was a small village, with seventeen pretty good huts, which the natives had ~~and~~ evacuated from a persuasion they were infected by some evil spirits; but as they made no objection to our occupying them, we gladly took possession, considering it a fortunate circumstance to have such temporary shelter for the whole of our people."<sup>19</sup>

Afzelius and Winterbottom spent some time in the Banana Islands but provided no description of the settlements there, but to the little-travelled Mrs. Falconbridge, the Islands turned out to be the climax of her impressions of native villages:

"It is a small Island, but a wonderful productive healthful spot, throngly habited by clean, tidy, sociable, and obliging people. They have a town much larger and more regularly built than any other native town I have yet seen ....."<sup>20</sup>

With reference to the native villages on the southern shores of the Sierra Leone River, that is, the tract of land extending from Cape Sierra Leone to the entrance of Bunce River, the picture is more complete, and consists largely of listed villages. In 1791, there would appear to have been some seven or eight such villages beside the

one that became Granville Town:

"Half a mile below us (Granville Town) is the town of one Pa Duffee; two miles lower down is King Jemmy's; and beyond him is Queen Yamacumba's, and two or three small places; a mile above us Signor Domingo lives, and a little higher one Pa Will.<sup>21</sup>

Afzelius also mentioned a number of villages, not included in Mrs. Falconbridge's description. His mention of villages were often in connection with events which he witnessed and, consequently, his accounts were often detailed. Such were his accounts of Prince George's Town which leaves no doubt that it was sited on the west side of Pirate's Bay. His description of Jemmy Queen's Town, which he visited in 1795, is also sufficiently clear to distinguish the village from King Jemmy

"His town or rather village consisting of very few houses, not above 20, is situated on a peninsula on the west side of White Man's Bay - His own habitations are built on the very point, which is <sup>an</sup> elevated spot near the waterside, consisting of three houses, one to occupy in the day time, the second to sleep in and the third a kitchen, all very good and pretty large, and the two first mentioned an oblong square.

From his house is not seen anything of his village, the view being intercepted by a small hill covered with some wood. This village is built on a low swampy and consequently unhealthy ground between the two creeks of the sea, which are overgrown of Mangrove, particularly on the N. side. On the S. side is the landing place".<sup>22</sup>

In addition, he mentioned Pa Dembo's place (Pa Demba) as being within half a mile of Freetown.<sup>23</sup> The two other places he mentioned - Robin Dick and Douglas are difficult to locate.<sup>24</sup>

The only mention of villages on the ~~F~~reetown site in Winterbottom was in connection with a general description of the site from the vantage point of Thornton Hill, now

Tower Hill, and he mentioned two villages, presumably the only two he could see.<sup>25</sup> Between the two other sources, the number of villages around Freetown can be put at between eight and 12, assuming that those villages that cannot be located by this writer are not names for some of those that are located and shown on Fig. 3.1.

Away from the Peninsula, each of the writers gave an account of the islands in the Sierra Leone River. These islands were directly involved in the slave trade and the rapid changes in the fortunes of the slave traders were reflected in the changes in the prosperity of associated villages.

Mrs. Falconbridge visited Gambia Island in 1791 when it was occupied by a French slave dealer, Renniew, and commented on the swampy and unhealthy conditions of the factory site.<sup>26</sup> By January 1796, it was still occupied,<sup>27</sup> but when Winterbottom wrote about it, at a later date, it was unoccupied.<sup>28</sup> Similarly, Robanna the seat of King Naimbana was described in 1791 in the following terms:

"It consists of about twenty houses irregularly placed, built of the same materials, but in superior way to those of Adam's town; - the whole of them are either occupied by the King's wives and servants, or appropriated as warehouses".<sup>29</sup>

Robanna also possessed a flourishing salt works.<sup>30</sup> Afzelius also mentioned the village in connection with the marriage of Elliot who was Secretary to King Naimbana.<sup>31</sup> But in Winterbottom's account it sounded less impressive; on the island

".....there is a small town of the natives and a few straggling houses, built to guard the rice plantations."<sup>32</sup>

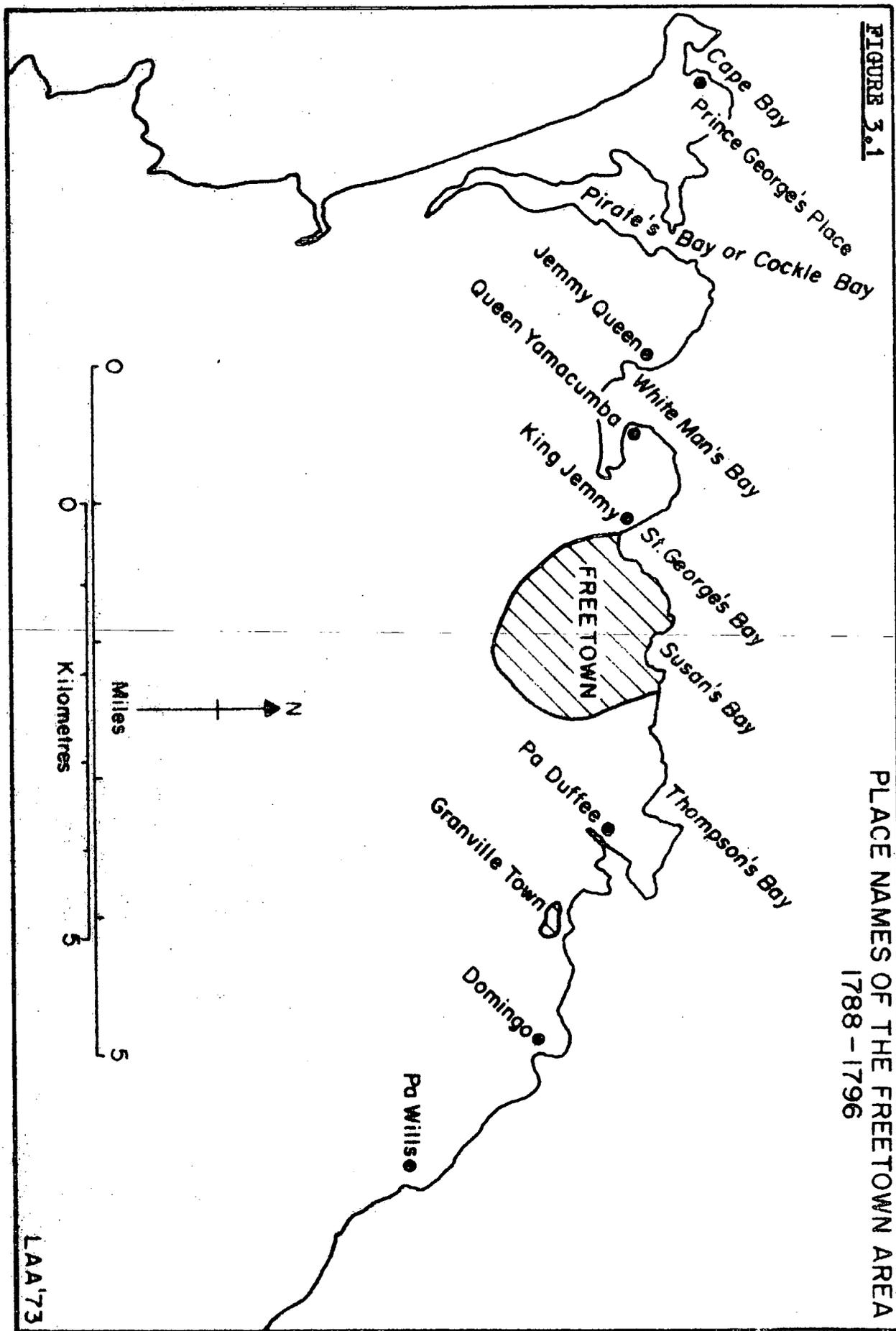


FIGURE 3.1

PLACE NAMES OF THE FREETOWN AREA  
1788 - 1796

LAA'73

Apart from the mention of a few distant places, some visited, the details of individual settlements are scanty. But all the sources agree in one thing, that the Bullom shores were more fertile and more densely populated than the southern shores.<sup>33</sup> In addition, the ethnographic interests of both Afzelius and Winterbottom resulted in their careful description of the distribution of the various tribes. Although such descriptions were not aimed at a quantification of the population, they serve the purpose of indicating those areas which were occupied.

Afzelius made a distinction between the Bulloms as a tribe and the Bullom shores which they, in part, occupied along with the Temnes. He also provided a useful comment on the distribution of the Bulloms:

"The Bulloms, live in the Banana, Plantain and Turtle Islands and on the main (i.e., the main land) from Cape False to Sherbro".

Thus he indicated that, not only were the western shores of the peninsula occupied, but also, by implication, the southern shores of the Koya lowland.<sup>34</sup> This conclusion is partly reinforced by Winterbottom when he wrote of the clash between the Temnes and the Bulloms:

"This nation (i.e., the Temnes) formerly lived at a distance from the sea coast; but being of a warlike and active disposition, they forced themselves down the river Sierra Leone, among the Bulloms, who formerly possessed the whole region from the Kisse (River Scarcies) to the Sherbro."<sup>35</sup>

By this indirect approach, it is established that the whole of the coastal lowlands around the peninsula did have some settlements prior to the arrival of the settlers from Europe.

With reference to the knowledge of the Peninsula Mountains and the Koya lowland as two distinct physical

regions the two male writers had the advantage of their scientific education over Mrs. Falconbridge. Of the Koya lowland, she wrote:

"The tract of country now called Sierra Leone is a Peninsula one half of the year, and an island the other - that is, during the rains the isthmus is overflowed."<sup>36</sup>

No doubt parts of the Koya lowland are swampy and her visit to ~~Gambia~~ Island must have reinforced the false impression that the area was all swampy and by implication uninhabited. Her account of the interior of the mountains depended largely on hearsay; of the wild life, she was content to repeat the myth of tigers and lions inhabiting the mountains.<sup>37</sup> In contrast, the allusion to the Koya lowland contained in the two other sources show a clearer conception of the environment, but there are no concrete details.

The report of a wild variety of coffee growing in the mountains took Afzelius as far as present day Gloucester.<sup>38</sup> Winterbottom was also able to draw on the knowledge of his brother, Matthew, who with Watts travelled extensively in the Futa Jalon area.<sup>39</sup> When he wrote the following:

"The towns or rather villages of the Bulloms and Timmanese, (Temnes) and the same may be said of most of the towns on the sea coast, are in general small and seldom consist of more than forty or fifty houses, but as we advance inland they become more populous."<sup>40</sup>

he certainly included the villages on the Yawri Bay and provides one of the most useful pieces of information by setting an upper limit to the size of native settlement around the peninsula. Elsewhere, he supplied information on housing.<sup>41</sup> Finally, in an intellectual exercise at providing a quantification of population density, he wrote:

"... the population of the Windward Coast of Africa is extremely small: it would be very difficult to determine what may be the proportion of inhabitants to a given extent of country; but probably it is not so much as in the least populous country in Europe. Mr. Smeathman confirms this remark; he observes that this country is so thinly peopled, "that we rarely find a town containing two or three hundred inhabitants within ten or fifteen leagues of another of the same population. The finest rivers will not have towns upon them, where, perhaps, there are a hundred persons, within a long tide's distance of each other."<sup>42</sup>

In this last statement, Winterbottom noted the agreement of Wadstrom, a Swedish cartographer, who drew one of the most important extant maps of the Sierra Leone River and the neighbouring territory.

#### Cartographic Sources

Although Cape Sierra Leone was discovered in 1462, it was not until the middle of the 17th century that the physical features of the coast assumed a proportional and reasonable accuracy on maps.<sup>43</sup> Even then, the small scales on which such maps were drawn and the more political inclination and interests of the publishers meant that demographic information was limited. Consequently, local maps of the peninsula form the basis of further discussions and estimates.

Of the various local maps which have come to the attention of this writer, (see list of maps - Appendix 2/1), three deserve some comments. They are the ones which contain the mapping and naming of some settlements, and were drawn and published soon after the founding of the 1787 settlement. First is "A Survey of the Entrance of the Sierra Leone River" based on a survey by Captain Thompson. It was probably drawn in 1787.<sup>44</sup> It has 13 settlements marked on the north-

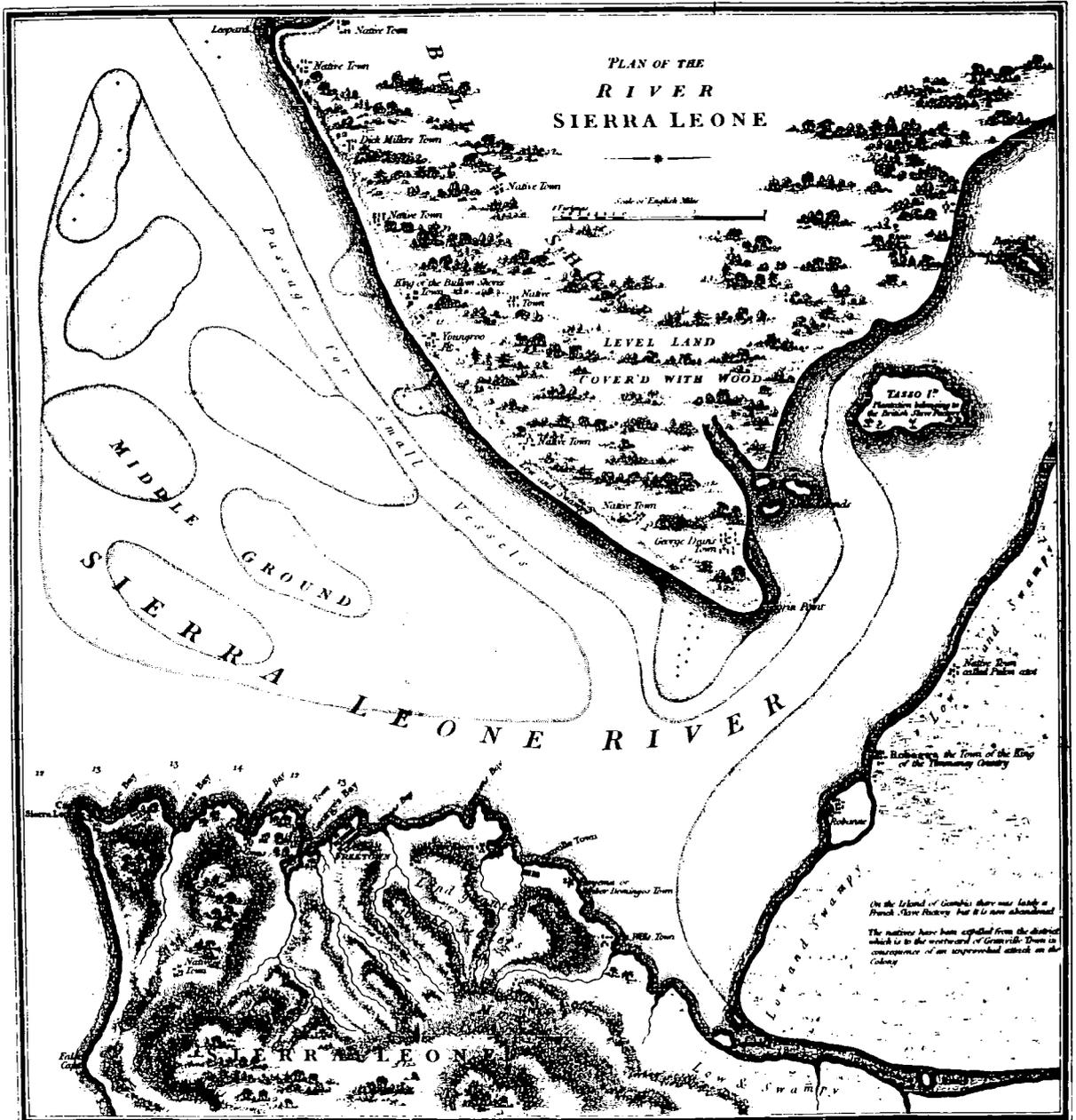
ern coast of the peninsula, one on the Bullom shore and two on the eastern shore of the Bunce River. Second is "A Central Sketch of the Harbour of Sierra Leone pointing out the Situation of the New Colony" and signed by C.B. Wadstrom. It was published on September 1st, 1793.<sup>45</sup> This map carried an inset titled 'A Plan of Freetown'. It also carried a comment:

"NB This sketch differs from that inserted in the report of the Directors in some particulars in which I have followed the corrections of Mr. Dawes and of Capt. Gother. But after all, as no regular survey of this harbour has ever been made, it can scarcely be supposed sufficiently accurate for nautical purposes."

The map by Dawes, on which Wadstrom based his, is the third. It was titled 'Plan of the River Sierra Leone.' As regards the mapping and naming of settlements, Wadstrom's map approximates very closely to Dawes', except that he named the Town of Runaway Slaves and Pa Maquoit's Town where Dawes used the general term 'Native Town'.

The decision as to which of these three maps to use for the purpose of quantifying settlement and population size and distribution was based on the degree of accuracy shown in the execution of the coastlines and the location of settlements. As will be shown later, in this chapter, the most crucial area is the Bullom shore. And it is here that the slightly smaller scale of Wadstrom's map and the use of elaborate title drawing resulted in a noticeable squashing of details. In addition, the depiction of the various bays and capes of the southern shore in Dawes' map is generally superior to Wadstrom's. But by far the greatest advantage of employing Dawes' map (Figure 3.2) is that the clarity of details on the Bullom shore makes the analysis which follows possible.

**FIGURE 3.2**  
**COPY OF THE PLAN OF THE RIVER SIERRA LEONE**  
 by William Bawes



(Photocopy at 2/3 the original)  
 Source: see text

The general similarity between the physical, ethnographic and ecologic features of the Bullom shore and the Koya lowland is the underlying principle behind the analysis.

### Quantification

There are four units with which this exercise is concerned, ~~the units are~~ they are:

- (a) the Bullom shore;
- (b) the Freetown site (i.e. the portion of the peninsula shown on Dawes' map;
- (c) the Koya lowland, here defined as parts of the peninsula east of the Waterloo/Tumbu axis and
- (d) the rest of the Peninsula Mountains, not shown on Dawes' map

By calculating the settlement per unit area of the Bullom shore an index of native settlement density will be obtained. A similar index will be computed for the Freetown site to show the validity of the recurring statement that the Bullom shore was more densely settled. Next, the Bullom based index will be applied to the Koya lowland. Modifications of the answer thus obtained will be based on a number of stated assumptions as to the comparative intensity of occupancy of the Bullom shore and the Koya lowland. The high and low indices of settlement density will form the basis of estimating the number of settlements and the population in the different units of the Western Area. The use of mathematical symbols is convenient.

Table 3.1 shows the areas of the four units in acres. For units a and b the actual areas on Dawes' map are shown and the proportion of a to b is used for determining the limits, of that part of the Bullom shore shown, on a modern 1 inch map covering all four units and upon which the final areas are based.

TABLE 3.1

THE ACREAGE OF THE FOUR UNITS OF THE BULLOM SHORE AND  
PENINSULA

Units (symbols)	Actual area on Dawes' map	Area on 1" map (acres)	Computed Area (acres)
Bullom shore (a)	8.54 inches	n.a. <sup>46</sup>	19,410
Freetown site (b)	13.12 inches	29,820	29,820
Koya lowland (c)	n.a	54,550	54,550
Rest of Peni. (d)	n.a		

With an area of 19,410 acres and 11 settlements shown on the Bullom shores, the index of settlement density is:

$$\frac{19,410}{11} = 1,765 \text{ acres}$$

that is, one settlement to 1,765 acres.

In order to test the reliability of the statement that the Bullom shore was more densely settled than the Freetown site the index of settlement density is now used to compute the expected number of settlements that should be in the Freetown site:

$$\text{area b} = 29,820$$

$$\text{index} = 1,765$$

and for the Freetown site

$$\frac{29,820}{1,765} = 16.8 \text{ or approximately } 17 \text{ settlements}$$

Granted that allowance has not been made for the mountainous nature of parts of the Freetown site, the figure of 17 settlements, which nearly doubles the 10 native settlements found on the site, would appear to support the general impression given of the Bullom shore in the written sources.

Another useful test of the Bullom based index is to

see how it compares with observable settlement distribution in Sierra Leone today. Siddle has pointed out that:

"The dominant unit of settlement in Sierra Leone today is the village with between 30 and 1,000 inhabitants. There are over 6,000 such settlements in the country, ~~an~~ average of one for every four square miles (2,560 acres) of national territory....."<sup>47</sup>

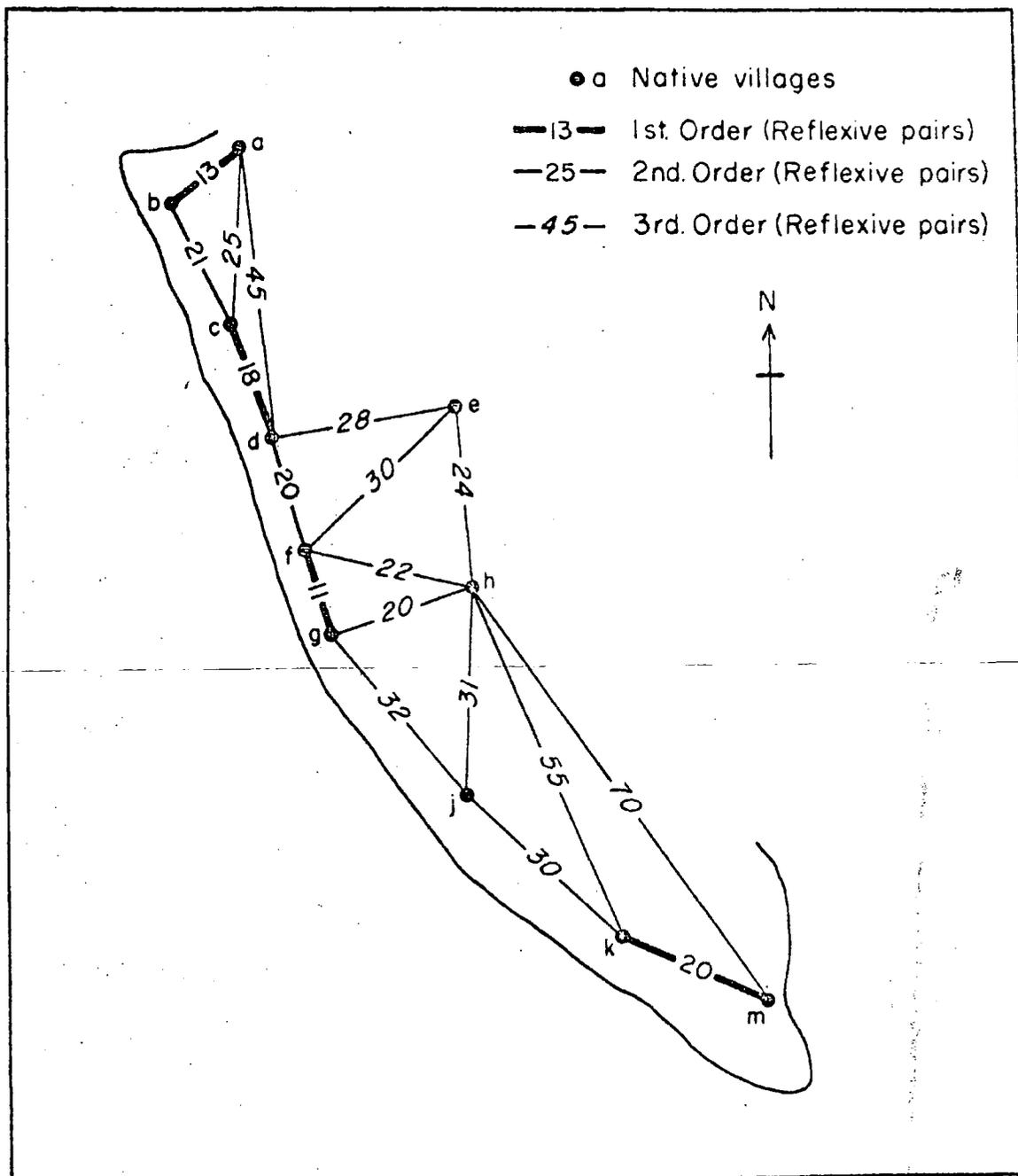
This average further confirms that the Bullom shore, with one village to every 1,765 acres in 1787, was indeed densely settled. Elsewhere<sup>48</sup> Siddle computed a mean walking radius of between 1.0 and 1.5 miles for each settlement within a given 'cell' and the supporting evidence shows the radius to approximate to the reality of settlement spacing in parts of Sierra Leone today. Employing nearest-neighbour analysis for the 1787 Bullom situation, the evidence shown on Fig. 3.3 and accompanying Table 3.2 points to a grouped pattern. Four of the nine coastal settlements are reflexive pairs, and the mean walking radius, based here on the average distance separating first order neighbours, halved, stands at 0.6 miles.

Finally, before extending the Bullom shore index to other units, a few basic assumptions need explaining. These assumptions are a codification of the few guidelines which emerged from the discussion of the written and cartographic sources:

- (i) The superior location of the Bullom shore vis-a-vis the Sierra Leone River trade route, extending over a period of two centuries, placed it at an advantage over most of the peninsula facing away from the axis of trade.
- (ii) The largest settlements will be assumed to have about 30 huts each, such a figure being close to the impression of what constitutes an upper limit of known native settlements in the area.

Figure 3.3

Location of Villages and Outline of Bullom Shore traced from the original 'Plan of the River Sierra Leone' by William Dawes



NEAREST NEIGHBOUR ANALYSIS: All measurements in 'mm' and from the centre of each village

TABLE 3.2: CALCULATION OF MEAN WALKING DISTANCE

	a	b	c	d	e	f	g	h	j	k	m	Σmm	$\bar{x}$ mm
1st. Order	13	13	18	18	24	11	11	20	30	20	20	198	18
2nd. Order	25	21	21	20	28	20	20	22	31	30	50	288	26
3rd. Order	45	39	25	28	30	22	31	24	32	55	70	401	37

The mean walking radius based on the 1st. Order neighbours and expressed in miles =

$$\frac{1.12}{2} = 0.56 \text{ miles.}$$

- (iii) The medium sized will be assumed to be of about 15 huts, this being the approximate size most frequently mentioned.
- (iv) The smallest ones, little more than family farmhouse, will be assumed to have about six huts each.
- (v) With reference to the numerical relationship in the occurrence of the settlements of the various sizes, the high estimate will assume a '1 : 2 : 4' hierarchical relationship which is a simple conversion of a K-value of 7.
- (vi) The low estimate will ignore the largest settlement size and for the two others, assume that there will be two of the smallest sizes to every one of the medium. Such an arrangement is close to a K = 3, and is also based on field observation in the present Koya lowland. With the exception of villages founded in the 19th century and those located near the road or rail system, most Koya villages have between six and 15 huts each.<sup>49</sup>
- (vii) Each hut will be assumed to contain five people. When allowance is made for the small sizes of huts,<sup>50</sup> the tribal living arrangement which is flexible with respect to housing, and for such demographic factors as the practice of polygamy,<sup>51</sup> the high incidence of infant mortality and the general state of health, families could not have been very large. An average of five persons to each hut, therefore, cannot be far from the reality.
- (viii) Finally, because of the limited lowland area on the west coast of the peninsula and the scarcity of references to the occupation of the area, the strip of lowland from False Cape to Tumbu in the Yawri Bay will, in each estimate, be assumed to contain as many people as are computed for the 10 villages situated on the Freetown site.

Applying the index of one settlement to 1,765 acres of territory to the Koya area, the expected number of settlements is:

$$\frac{54,550}{1,765} = 30.9 \text{ or approximately } 31.$$

Banana Islands had only one settlement which in every estimate, will be assigned the largest settlement size.<sup>52</sup> This, in effect, brings the total number of computed and assigned native settlements to 52. Tasso Island was for the period under consideration, unoccupied.

Table 3.3 shows the details of the high and low population estimates for the units b, c, and d and for Banana Islands. The average of the two estimates stands at 2,655 inhabitants. It is in the generalised distribution of these settlements and the estimated population, rather than in the exact location that account is now taken of the limitations of the environment.

The physical environment cannot be said to have been drastically altered over the centuries, except in as much as the construction of a road and rail network has altered the direction and extent of social and economic contacts between the various units of the Western Area. Consequently, present pattern of such contacts and their effect on distribution can form the basis of understanding the historical situation. The increase in contact between the Freetown site and other parts of the peninsula has been primarily to the advantage of the Koya lowland. This is because the lowland is on the path of trade and other links between the peninsula and the rest of Sierra Leone. The corresponding disadvantage of the west coast facing away from both the former Sierra Leone River trade route and the subsequent land route, has meant a lower intensity in the occupation of the area.

It would appear that the relationship between the west coast (now York District) and the Koya lowland (made up of Waterloo and Koya Districts), on the one hand and the Freetown site, on the other, has not altered over the centuries. In the 1963 census of Sierra Leone, York District had 5,125 inhabitants whilst the two districts making up the Koya lowland had 19,188.<sup>53</sup> The proportion of

TABLE 3.3.

HIGH AND LOW ESTIMATES OF THE PRE-SETTLEMENT POPULATION

HIGH ESTIMATE (K = 7)

Unit	No of settlements	Breakdown of Settlement '1:2: 4'	Estimate of Population Sizes 150: 75: 30	Total
Koya area	31	4:9:18	600:675:540	1815
Part peninsula	10	1:2: 7	150:150:210	510
Rest of Mountain area	10	1:2: 7	150:150:210	510
Banana Islands	1	1:-: -	150: - : -	150
<b>Total</b>	<b>52</b>	<b>7:13:32</b>	<b>1050:975:960</b>	<b>2985</b>

LOW ESTIMATE (K = 3)

Unit	No of settlements	Breakdown of Settlement '1: 2'	Estimate of Population Sizes 75: 30	Total
Koya area	31	10:21	750:630	1380
Part peninsula	10	3: 7	225:210	435
Rest of Mountain area	10	3: 7	225:210	435
Banana Islands	1	1: -	75: -	75
<b>Total</b>	<b>52</b>	<b>17:35</b>	<b>1275:1050</b>	<b>2325</b>

Source : Author's Analysis

1:3.8 for the 1963 figures is encouragingly close to the proportions of 1:3.3 and 1:3.5 shown for the high and low estimates for 1787.

In conclusion, two main points are made about the quantification and discussions. First, it is against the estimate of about 3,000 inhabitants that the significance of the very rapid population growth discussed in the next chapter can be fully appreciated. It is, perhaps unfortunate that, as will be shown, the early censuses executed in the beginning of the 19th century covered only parts of the Peninsula and by the time the Koya lowland came into the then Colony, the 'indigenous' population which form the topic of this chapter may be said to have filtered into various classificatory categories which make its identification difficult.

Second, it would appear that changes in settlement pattern have been more of intensity rather than a transformation, either in the direction of larger settlements or of re-grouping into radically different spacing pattern. This statement, of course, has special relevance to the Koya lowland, where the advent of urbanisation, on the Freetown site, and the absence of exploitative industry, such as mining, has left the basic settlement pattern of the agriculture/fishing community largely unaltered.

NOTES AND REFERENCESCHAPTER 3

1. Fyfe, C., and Jones, E., (eds.) Freetown: A Symposium, Sierra Leone University Press, 1968, p.1.
2. The Koya Lowland was included in the Sierra Leone colony along with the Bai Kanta lease in 1861 and the first enumeration of the territory was in 1968. See details of the acquisition in chapter 4, footnote number
3. Fyfe, C., A History of Sierra Leone, Oxford University Press, 1962 p. 311
4. There were settlers from Europe (Black Poor and some white settlers), settlers from the West Indies (Maroons, Nova Scotians), and the recaptives from slave vessels.
5. Fyfe, C., op. cit. p. 311
6. Rodney, W., History of the Upper Guinea 1545-1800, Clarendon Press, Oxford, 1970, p. 27.
7. According to the 1963 census of Sierra Leone 74.7 per cent of the total population lived in settlements with less than 1,000 inhabitants. The distribution of the rural settlements are shown by Siddie, D.J., 'Distribution of Rural Settlement' in Clarke, J.I., (Ed.) Sierra Leone in Maps, University of London Press, 1966, pp. 60/1.
8. Rodney, op. cit., p. 53.
9. Fyfe, C., A Short History of Sierra Leone, Longmans, 1962, p. 27.
10. Ibid., p. 23, the Ya-Kumba family belonged to the Bullom.
11. Rodney, op. cit., p. 60.
12. Falconbridge, Mrs. A.M., Voyages to Sierra Leone: 1791-1792-1793, London, 1794. All references to this source refer to this first edition and not to the 2nd edition by L.I. Highman, 1802, or to the Franc Cass & Co. Ltd., reprint of 1969. A xerox-copy of the 1st edition is available in the Bishop Cousin's Library, University of Durham, Durham City, England.
13. Kup, A.P., (ed.) Adam Afzelius: Sierra Leone Journal 1795-96, p. XI. Further references to this source will be under the abbreviation 'Afzelius' and page references will be followed by a column reference 'a' or 'b'.
14. Winterbottom, T.M. An Account of the Native Africans in the Neighbourhood of Sierra Leone, 2nd Edition with a New Introduction by John D. Hargreaves and E.M. Backett, 2 vols., Frank Cass, 1969.

15. Falconbridge, op. cit., p. 37 Pa Bosson's Town is the same as Port Loko and in ibid. p. 187 reference is made to Caramanca River.
16. Rodney, op. cit., p. 36. In spite of the wrong spelling of the name in the text and in the index (p. 279), there is no doubt that the botanist referred to is Adam Afzelius.
17. See Afzelius, op. cit., p. 77<sup>b</sup> and Winterbottom, op. cit. New Introduction, p. xiv
18. Ibid., p. xii
19. Falconbridge, op. cit., p. 55. In this one statement, an insight is gained into the idea of village size and the influence of the supernatural on settlement pattern.
20. Ibid., p. 109
21. Ibid., p. 67 brackets added by the present writer but underscore is in conformity with the emphasis in the text. I also take this opportunity of thanking Dr. P.K. Mitchell, for bringing a map containing the location of Queen Yamacumba and some other native settlements based on a survey by Captain Thompson and listed in Appendix to my attention.
22. Afzelius, op. cit., p. 22 a/b
23. Ibid., p. 63b
24. Ibid., p. 24b (Robin Dick) and p. 19a (Douglas)
25. Winterbottom, op. cit., vol. 1, p. 32.
26. Falconbridge, op. cit., pp. 79-80
27. Afzelius, op. cit., p. 60a
28. Winterbottom, op. cit., vol. I, p. 18
29. Falconbridge, op. cit., p. 32.
30. Ibid., p. 53.
31. Afzelius, op. cit., p. 20a and Falconbridge, op. cit. p. 31.
32. Winterbottom, op. cit., vol. I, p. 19.
33. Ibid., p. 80. Falconbridge, op. cit. p. 75 and Afzelius op. cit., pp. 9b-10a.
34. Afzelius, ibid., p. 11a plainly reveals that one could walk from Cape Shilling to Freetown, and also mentioned a village mid-way along the coast, belonging to Cleveland.

35. Winterbottom, op. cit. vol. I p. 4; for a contemporary location of the River Scarcies, see Afzelius, op. cit., opposite p. 32.
36. Falconbridge, op. cit., p. 66.
37. Ibid., pp. 63-64.
38. Afzelius, op. cit., p. 65b.
39. Winterbottom, op. cit., vol. I New Introduction, p. xvii and see Map showing the route of Watt and Winterbottom's journey opposite p. 1 idem.
40. Ibid., pp. 80-81.
41. Idem.
42. Ibid., p. 149.
43. Klem, E., (ed.) Stones, Margaret and Jeffry (translations), Africa on Maps dating from the Twelfth to the Eighteenth Century. Edition Leipzig, Deutsche Staatbibliothek, 1968 various maps but especially maps No 46, 52 and 58 deserve some attention.
44. This map, acknowledged in footnote no.21 is listed in Appendix.2.1
45. Reproduced in Afzelius, op. cit., opposite p. 112.
46. Not applicable because the computed area of the portion of the Bullom shore shown on Dawes' map was based on its proportion to the area of the Freetown site.
47. Siddle, D.J., 'Location Theory and the Subsistence Economy: The Spacing of Rural Settlement in Sierra Leone', Journal of Tropical Geography, 31, December 1970, pp. 79-90 has been of tremendous value in the development of this analysis.
48. Ibid., p...
49. On a field trip with students of the Department of Geography, Fourah Bay College, Freetown in December 1969, the present writer conducted a household survey of randomly selected villages in the Koya lowland. Only three of the ten villages visited had above fifteen houses. Two of the three, Campbell Town and Joe Town, are both post-1787 settlements. The third, Tissana, is a flourishing fishing village in the Yawri Bay.
50. Winterbottom, op. cit., vol. I pp. 81ff. and Harvey, M., 'Rural House Types' in Clarke, J.I., (ed.) op. cit., pp. 64-65, and the present writer's own observation confirm that houses of the traditional type are very small with the enclosed areas in the smallest being no more than 200 sq. ft.

51. Winterbottom, op. cit., vol. I, pp. 147 ff, on the effect of polygamy on population growth.
52. This is consistent with the impression given by Falconbridge, footnote no. 20 above.
53. Handcount by present writer C.S.O., Freetown, 1964.

## CHAPTER 4

### POPULATION GROWTH 1787 - 1963

From an estimated population of 3,000 in 1787, the Western Area reached 195,023 in 1963. Discussion of the 42 censuses and estimates published between 1802 and 1963<sup>1</sup> falls into two periods. First, is the period extending from 1802 to 1860, for which the data available are not readily adequate for determining an accurate rate of population growth. This is because the figures did not refer to all parts of the Western Area and, consequently, are not directly comparable to those returned in the second period extending from 1868 to 1963. In addition to the changes in territorial extent of the colony which took place in the first period, there are also changes made as to what groups of people were eligible for inclusion in population counts and estimates.

In this chapter, a brief account of the territorial changes is given. Attention is also drawn to specific administrative decisions that affected the eligibility of various groups of people living in the colony. The effect of such changes and decisions on data is also explained. Such data are then adjusted, however in a limited way, taking into account the different parts of the Western Area and groups of people excluded from the censuses. Next the data from the decennial and other censuses held during the second period are presented. Finally, the population growth over the entire period, from 1787 to 1963 is discussed.

#### PERIOD I (1802-1860)

##### Territorial Changes and Census Coverage

The incorporation of all parts of the Western Area into

the former Colony of Sierra Leone took place in five phases and extended over 74 years, (1787 - 1861). First, was the original land grant on which the 1787 settlement was established.<sup>2</sup> Second was the extension of the land grant to the northern half of the Peninsula Mountains in July 1807.<sup>3</sup> Third, was the acquisition of the rest of the mountains and Banana Islands in 1819/20.<sup>4</sup> Fourth, was the inclusion of Tasso Island which was ceded along with the Bai Mauro Strip in 1824.<sup>5</sup> And fifth, was the inclusion of the Koya lowland in the Bai Kanta 'lease' of 1861.<sup>6</sup> The five phases are shown along with other territorial changes in the out-stations of the colony on Figure 4.1

Before discussing the effects of these changes on data, two other historical events touching on the coverage achieved in censuses should be listed.

One, is the circumstances which led to the Abolition of slave trade and the influx of Liberated Africans into the colony.<sup>7</sup> The influx began in 1808 and ended by 1855.<sup>8</sup> It resulted in the creation of the Liberated Africans Department through which recaptives were channelled to various settlements founded or designated for them. Figure 4.2 shows some of the villages established under the Liberated African policy and the dates on which they were founded or designated.<sup>9</sup>

The other event was the creation of parishes in 1817.<sup>10</sup> These parishes were the fore-runners of the census districts created for the execution and presentation of census data in 1826/27.<sup>27</sup> They appear to have survived until the execution of the decennial censuses from 1871 to 1931.<sup>12</sup>

FIGURE 4.1

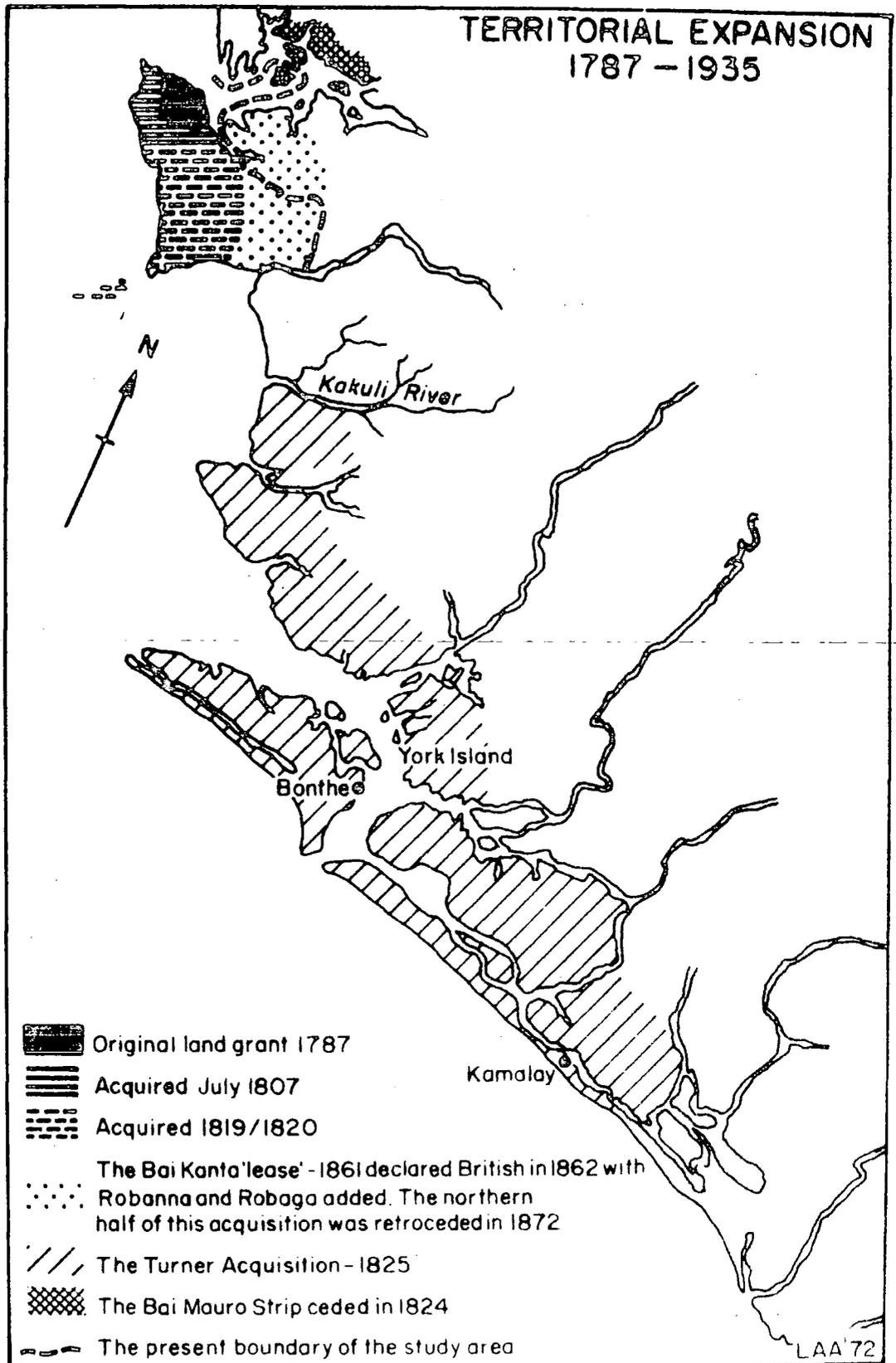


FIGURE 4.2

LIBERATED AFRICAN SETTLEMENTS

(Dates refer to year of founding or designation of each settlement)

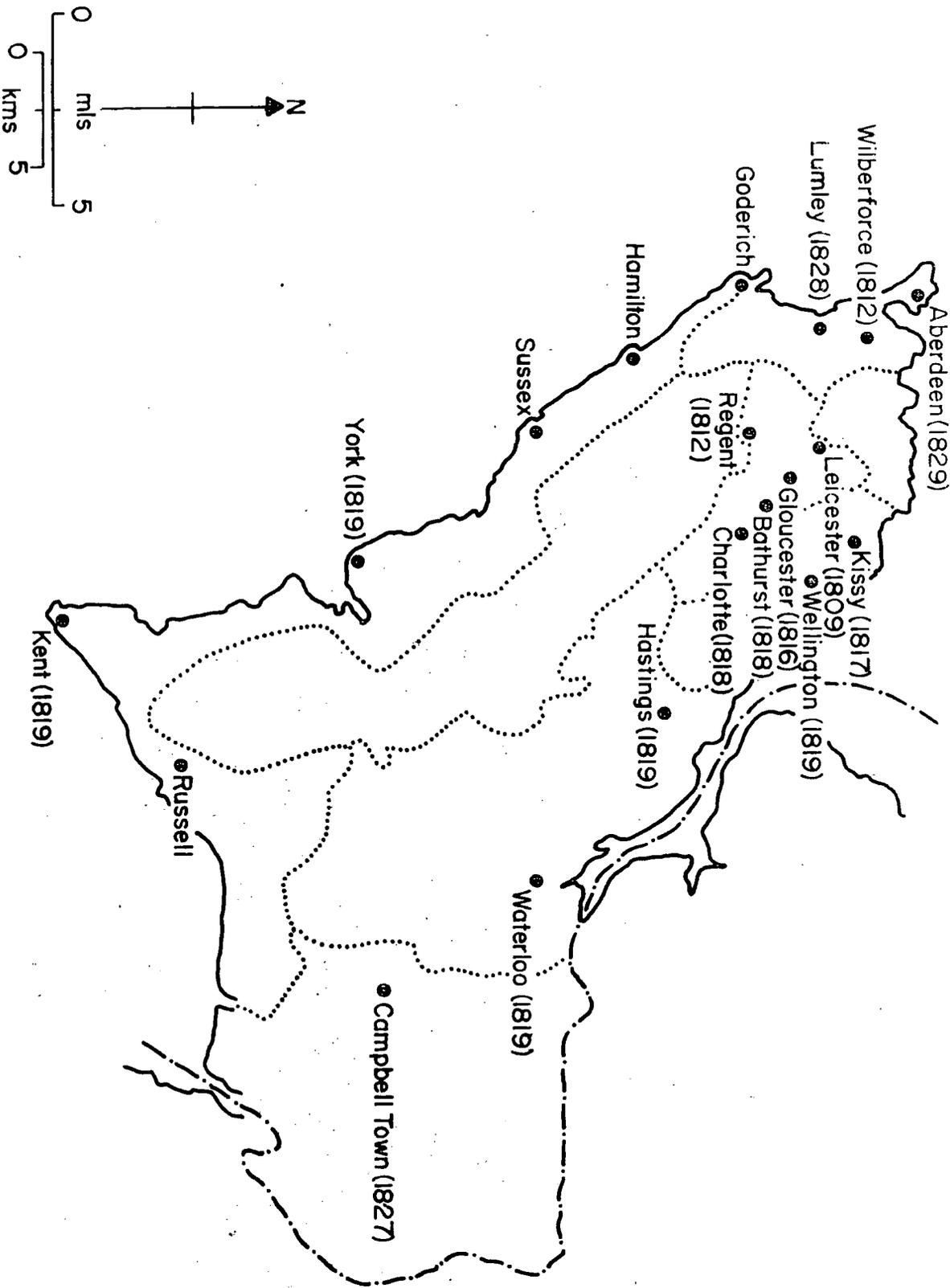


Figure 4.3 shows the boundaries of the parishes with the names of the Principal Town in each.<sup>13</sup> The creation of the parishes was intended to facilitate the administration of the Liberated African villages but it also served as a framework for integrating the Native Villages within the colonial administration.

The primary effect of these territorial and other changes on data is that census covered those areas belonging to the colony at any given date. The first three, (1802, 1811 and 1817) were restricted to Freetown. After the creation of the parishes, the next three censuses, (1818, 1820 and 1822) covered the parishes and returns were made for 28 Native Villages in each of the censuses. The census of 1826 and the yearly censuses executed between 1831 and 1851 covered, essentially, the total civilian population of the colony. So also were those taken in 1855, 1858 and 1860.

A much more serious problem is, that within any given limit of the colony, it is not always clear from available sources what categories of people were excluded. For example, it would appear that the indigenous population was first enumerated in 1817 although it (Temnes and Madingos) was estimated to have exceed 400 in 1806.<sup>14</sup> Similarly, although the Liberated Africans started arriving in the colony in 1807, it was not until 1818 that they were included in censuses.<sup>15</sup> There is also a confusion in the interpretation of categories such as 'natives', 'Servants' and 'Military pensioners',<sup>16</sup> and in the treatment of Natives living in Freetown as distinct from those living outside Freetown, in census returns. There is also some confusion as to the

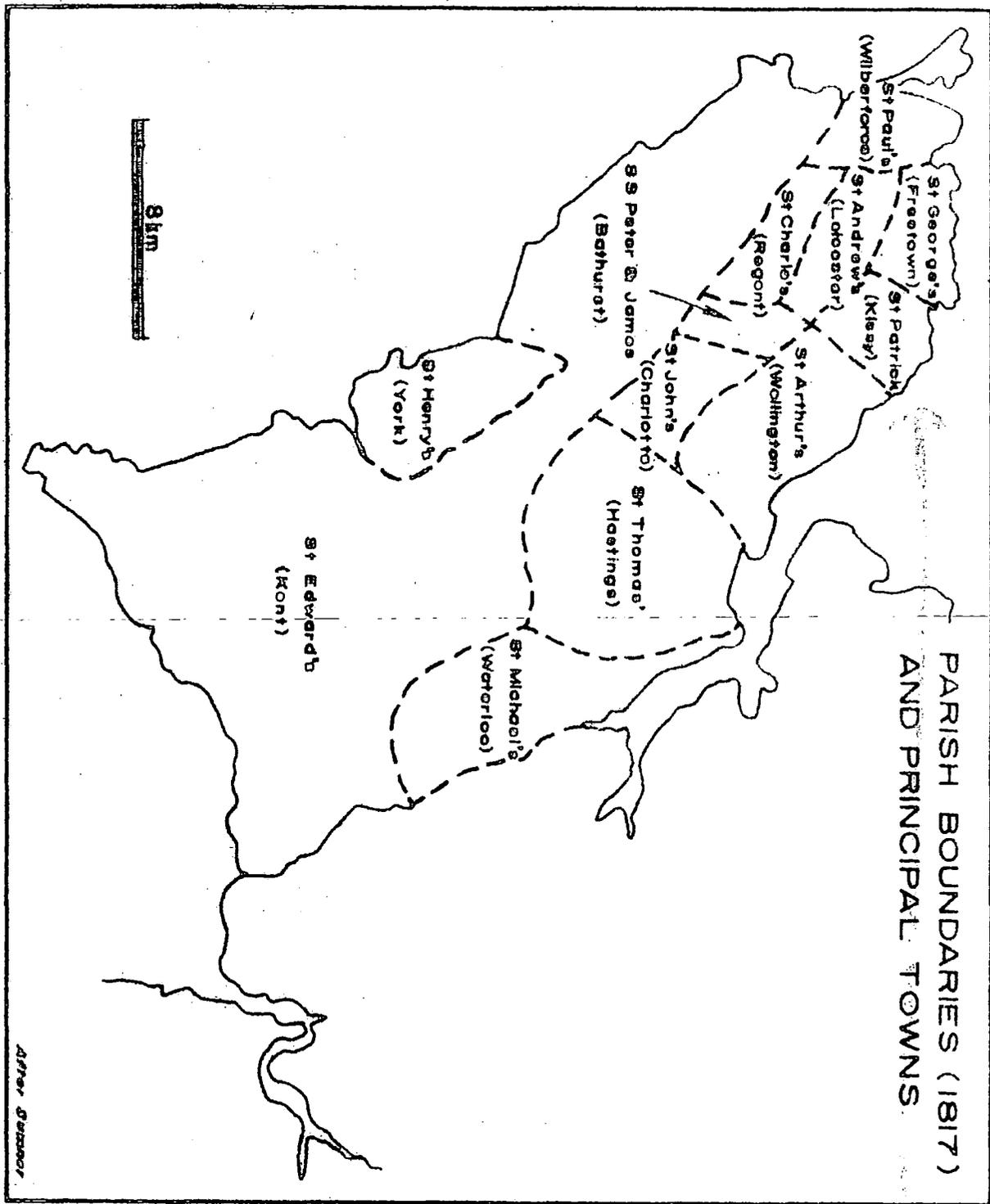


FIGURE 4.3

PARISH BOUNDARIES (1817)  
AND PRINCIPAL TOWNS

categories of 'Alien' and 'Resident Strangers' in returns published between 1851 and 1860, inclusive.<sup>17</sup>

One useful device for simplifying the complicated time-table of the arrival of various groups in the Western Area is a flowchart. Figure 4.4 shows the source areas of different groups, the primary movements which brought them into the Western Area, the secondary movements within the area and the tertiary movements which took some of them to destinations outside the area. To these movements have been added internal social movements that resulted in the merging of Settlers (Nova Scotians and Maroons) and Liberated Africans and their descendants (Creoles).

Of the five groups identified on Figure 4.4, the first two cannot be separated. The category of Native Africans represents the in-migrants who joined the Indigenous Africans after 1787. The third group is made up of the settlers who arrived between 1787 and 1800 and numbered less than 2,000:- Black Poor, Nova Scotians and Maroons. The Liberated Africans constitute a special group in being the largest of the groups and one whose arrival in the area has been documented. The fifth and final category made up of Non-Africans is small in size.

Employing the five groups as items for estimating the population of the Western Area at any given date could be expressed in the form:

$$P_{wa}^x = (I + A) + (L^c + L^k) + S + N$$

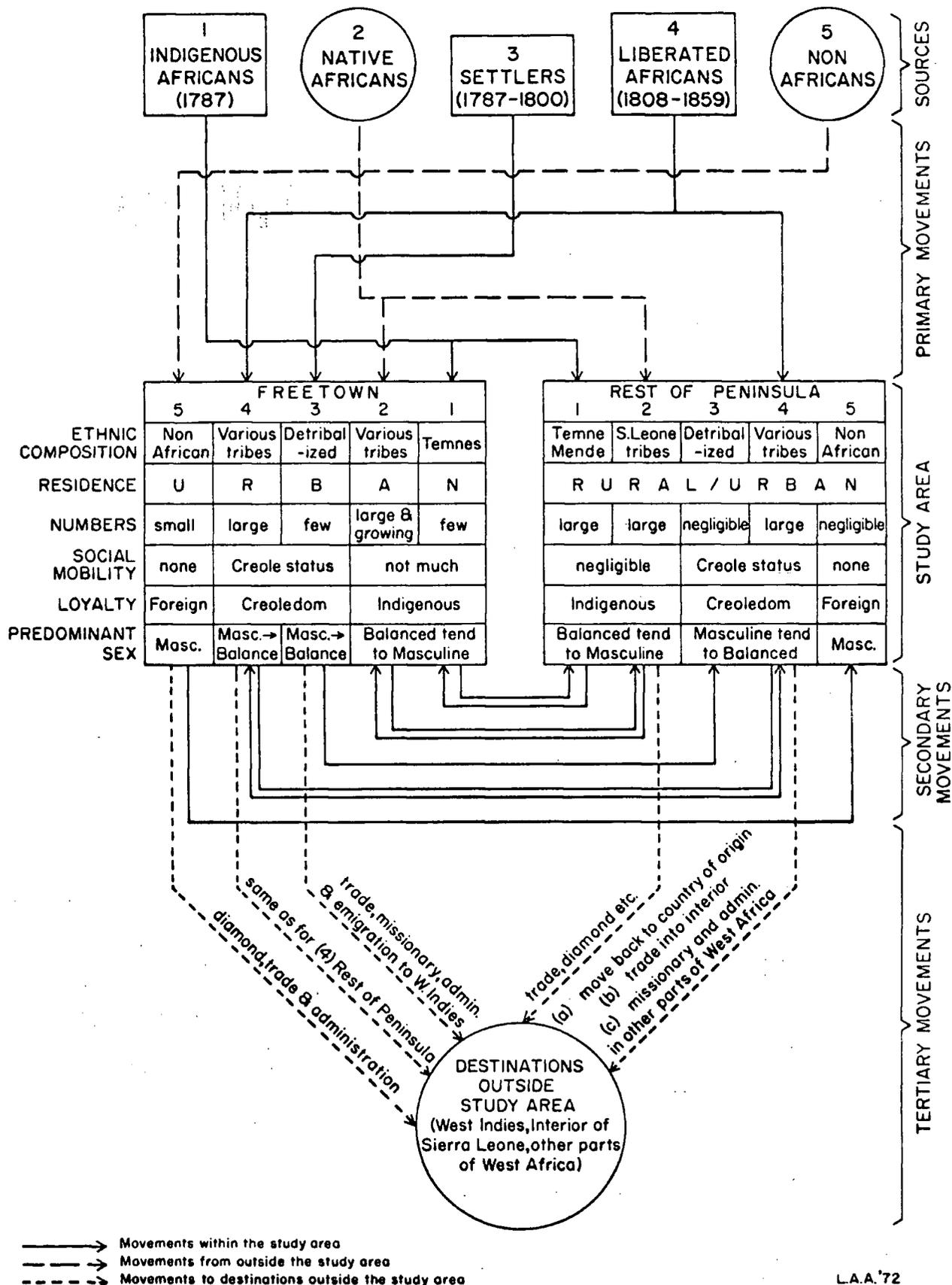
where  $P_{wa}^x$  = total population estimate of the Western Area in a given year.

I = Indigenous Africans (1787)

A = Other Africans arriving after 1787

**FIGURE 4.4**

**FLOW CHART SHOWING THE WAVES OF MOVEMENT IN AND AROUND THE STUDY AREA**



L<sup>C</sup> = Liberated Africans living within the colony  
 L<sup>K</sup> = Liberated Africans living in the Koya Lowland  
 S = Setters

and N = Non Africans.

The elimination of direct census returns from the expression above places the emphasis of estimates of the total population of the Western Area on the analysis of the records of the Liberated Africans and on the extent of the immigration of native Africans who together form the bulk of the population. The military population is also excluded. Consequently no mention is made of the West Indians who were largely in the military service. The reliability of such estimates of these and other elements in the population can be judged from further comments on each of them, and on the procedure adopted in making such estimates.

#### Native Africans

In chapter 3, the size of the indigenous population in 1787 was estimated at nearly 3,000 for all parts of the Western Area. It was also pointed out that this element could not be distinguished in subsequent records of the various censuses. It is, however, assumed that the original inhabitants will, for census purposes, classify as Native Africans. The earliest census data on the native population are for 1818, when the returns for 28 native villages, presumably those within the colony, showed that the native villages contained 1,141 persons.<sup>18</sup> Much more comprehensive data on the native population came later, and it is possible to project increase in the native population from the initial 3,000 in 1787 to the next date for which such comprehensive data are available.

The earliest data on the size of the total African population living in the colony come from the 1881 census.<sup>19</sup> The 24,452 persons classified as natives and other Africans included members of tribes of Sierra Leone and other groups such as the Kru, Madingo and Fula; and it combined the numbers of such persons living in the Western Area with those in the out-stations of the colony. This procedure makes the identification of the number of native Africans within the Western Area much more difficult.

It is assumed that nearly all the population in the out-stations were native Africans.<sup>20</sup> The combined population of these stations was 5,856 in 1881<sup>21</sup> and this number is then subtracted from the 24,542 to give a balance of 18,604 native Africans living within the Western Area by that date. An arithmetical projection of native Africans from 3,000 in 1787 on decennial bases to a population of 18,604 in 1881 forms the estimate of the population growth experienced by this element during the first period, (Table 4.1).

#### Liberated Africans

In order to appreciate the problems of keeping track of the Liberated Africans, it will be necessary to explain the procedure employed in integrating slaves found on captured vessels into the colony. In this connection, Figure 4.5 is an elaboration of the previous flowchart, (Figure 4.4) in as much as it affects the recaptives. This elaboration helps in clarifying the categories of 'captured', 'liberated', 'registered' and other, employed in keeping the various records of the movement of the slaves.<sup>22</sup>

FIGURE 4.5

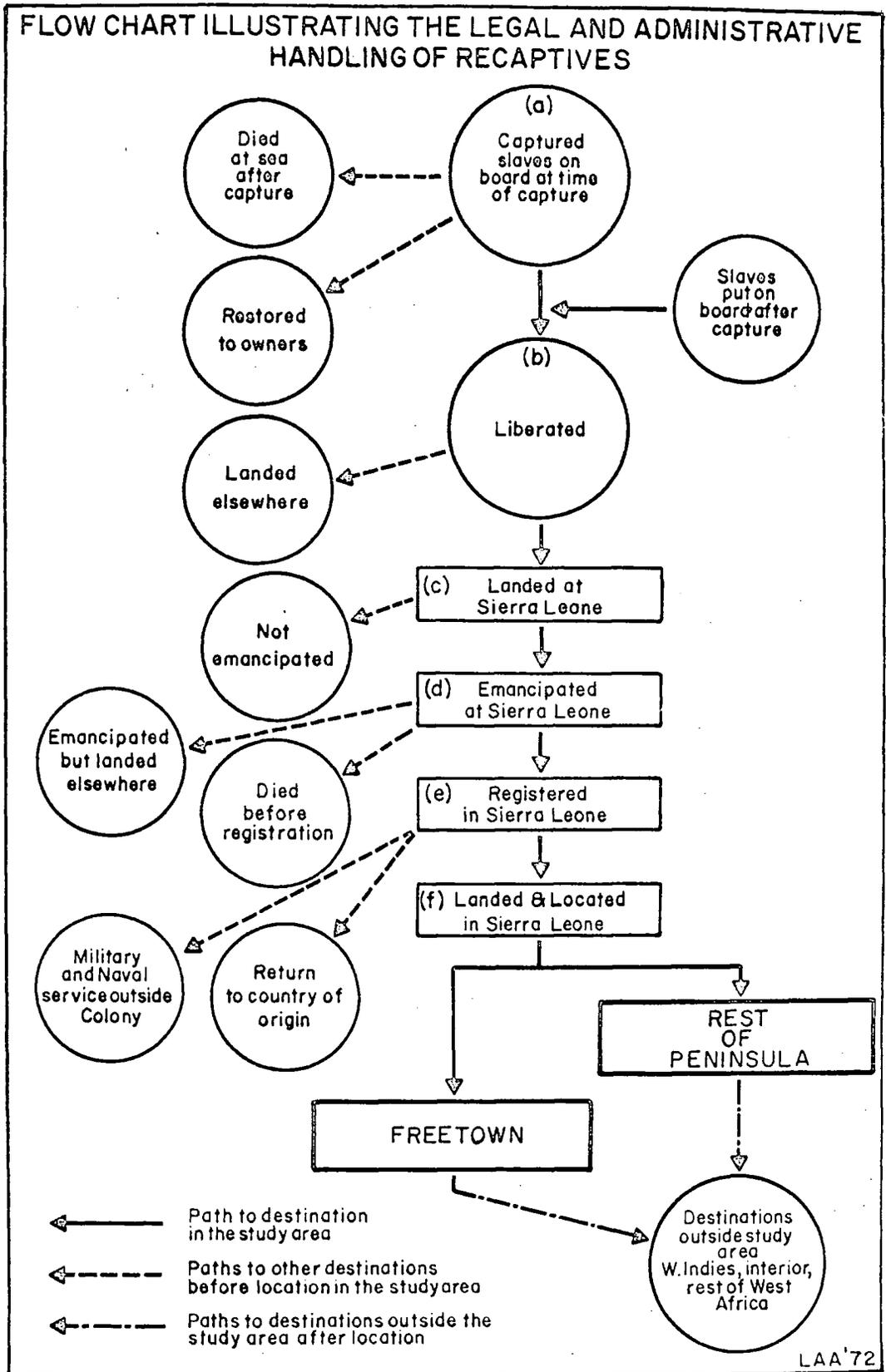


TABLE 4 . 1

AN ARITHMETICAL PROJECTION OF NATIVE AFRICANS LIVING WITHIN THE WESTERN  
AREA FROM THE ESTIMATED 3,000 IN 1787 ON A DECENNIAL BASES TO A POPULATION  
OF 18,604 IN 1881

<u>Date</u>	<u>Number</u>
1787	3,000
1791	3,664
1801	5,324
1811	6,984
1821	8,644
1831	10,304
1841	11,964
1851	13,624
1861	15,284
1871	16,944
1881	18,604

Source: Author's analysis  
For 1881 figure see text

Three periods can be identified in the experiences of the recaptives. First, was that between the capture of the slave-vessel and the decision of the Vice Admiralty court which separated those slaves who were to be emancipated and located in Sierra Leone from those who were to be returned to the slave owners.<sup>23</sup> Second, was the period starting with the handing over of those to be located in Sierra Leone to the Liberated African Department. These were received, initially, into the Queen's Yard and looked after for three months before being settled in designated villages. If they stayed on in these villages or within the limites of the colony, they remained the concern of the colony's administration. But if, as was often the case, they moved to other destinations outside the colony, they then passed into the third period which constitutes the tertiary movements marked on the flowcharts.

The Liberated African Department based its records on the numbers received into the colony. The large numbers of Liberated Africans who emigrated to their country of origin,<sup>24</sup> or to other parts of Sierra Leone,<sup>25</sup> or with official encouragement to the West Indies as free labour,<sup>26</sup> created discrepancies between the records of the department and the numbers of Liberated African enumerated in censuses. In addition, only civilian Liberated Africans found within the colony were enumerated. Enlistment into the military and other services.<sup>27</sup> Consequently, the number of Liberated Africans estimated or enumerated at various dates shown on Table 4.2 is to be regarded primarily as illustrating the very rapid increases in their numbers in spite of the scale of emigration.<sup>28</sup>

CENSUSES AND ESTIMATES OF LIBERATED AFRICANS  
(AND THEIR DESCENDANTS) IN THE COLONY AT VARIOUS  
DATES ILLUSTRATING THE RAPID INCREASES  
1814 - 1851

	<u>Date</u>	<u>Number</u>
	July 1814	2,750
1	April 1817	5,130
31	Dec. 1818	6,406
8	July 1820	8,076
1	Jan. 1822	7,969
	April 1826	10,716
31	March 1827	11,878
31	Dec. 1828	16,886
31	Dec. 1829	21,205
30	June 1830	<u>23,888</u>
	1831	25,780
30	June 1832	25,996
31	Dec. 1832	25,742
30	June 1833	26,327
	1837	32,000
	June 1838	36,700
31	Dec. 1839	37,276
30	June 1840	37,733
31	Dec. 1840	37,029
30	June 1842	36,874
31	Dec. 1842	36,894
30	June 1843	36,136
31	Dec. 1844	36,990
	1847	40,026
	1848	40,243
	1850	41,009
	1851	41,711
	1860	38,375

Source: Kuczynski. pp. 96 - 7 for table and notes on sources.

One group of Liberated Africans not covered by the censuses, but of whom account must be taken is that made up of those who moved into the Koya lowland. Although statistics on the volume of this movement are scanty, it appears that the tendency for such movement persisted throughout the period under discussion.

The expectation that agriculture was to be the livelihood of Liberated African was not fulfilled. The poor soils, especially of the Peninsula Mountains, was a disappointment and a source of complaint. The poor supervision which Liberated African villages received after founding was another. The response of the Liberated Africans was to move out of their villages either into Freetown's commercial sector or into the more rewarding agriculture in the Koya lowland, where they competed with the native Africans. By 1838, when the intrusion into the lowland was sufficiently irksome to the natives for them to make a deputation to the Governor of the colony necessary, it was estimated that there were some 3,000 Liberated Africans there.<sup>29</sup>

In arriving at the estimate of Liberated Africans living within the Western Area at various dates between 1811 and 1860, reference is again made to the findings of the 1881 census.<sup>30</sup> Liberated Africans, their descendants, Mulattoes and persons of mixed blood together numbered 35,430 in 1881. Since there is no evidence to show how many of these were living in the outstations and considering the assumption that the population of the outstations were predominantly made up of native Africans, the figure of 35,430 is taken on face value as approximating the number of Liberated Africans in the Western Area.

There continued to be an increase in the number of Liberated Africans found in the colony between 1811 and 1851. As long as additional slaves from captured slave vessels were arriving in the colony, their numbers tended to offset the number of Liberated Africans moving out of the colony. But once this source of increase was cut off by the dwindling slave trade, a decline in the number of Liberated Africans returned in censuses occurred.

In 1851, there were 41,711 Liberated Africans in the colony, this was the highest figure for any census, (Table 4.2). By 1881, there were 35,430, an apparent decrease of 6,281 persons. This decrease occurred in spite of the incorporation of the Koya lowland into the colony. Apart from the emigration of Liberated Africans, another cause of the decline was that an appreciable number of Liberated Africans and their descendants must have passed themselves off as native Africans without difficulty. Such a merging of the two groups is difficult to quantify, but would allow the Liberated Africans, who have been uprooted from their tribes to find a link, if they wished. Liberated Africans who were originally from one of the local tribes would be the ones to have adopted this line of action, early.

On Table 4.3, the number of Liberated Africans estimated to be living in the Western Area is based on the interpolation of data for 1861 and 1871 based on the census returns of 1851 and 1881. Allowance has been made for the number of Liberated Africans living in the Koya lowland before it became part of the Western Area. The estimate of 3,000 persons from the colony living in the area in 1838 is retained. Without doubt, fluctuations in their numbers, occurred in response to political events<sup>31</sup> but such fluctuations are

TABLE 4.3

THE NUMBER OF LIBERATED AFRICANS (AND THEIR DESCENDANTS)  
ESTIMATED TO BE LIVING WITHIN THE WESTERN  
AREA ON DECENNIAL BASES FROM 1821 to 1931

Date	Census or Estimate of Number in the Colony	Estimate of others outside colony but within Western Area: (mostly Koya)	Western Area: Total Number
1821	8,022*	1,000	9,022
1831	25,780	2,000	27,780
1841	36,951*	3,000	39,951
1851	41,711	3,000	44,711
1861	38,621	3,000	41,621
1871	35,531	3,000	38,531
1881	n.a	n.a	35,430)
1891	n.a	n.a	33,212)
1901	n.a	n.a	33,518)
1911	n.a	n.a	31,282)
1921	n.a	n.a	28,580)
1931	n.a	n.a	32,998)

Source:

1821 number in colony =  $\frac{1820 + 1822}{2}$  on Table 4.2

1841 number in colony =  $\frac{1840 \text{ (Dec.)} + 1842}{2}$  on Table 4.2

1851 number in colony see Table 4.2.

1. Author's Estimates of number in Koya based on 1838 estimate of 3,000, see footnote no. 29.
2. n.a = not applicable since Koya lowland is already part of colony.
3. For Western Area Total Number 1881 to 1931 see Kuczynski p. 163.

difficult to incorporate into the simple frame-work employed for this account of population growth.

### Settlers

This group is made up of various colonists who came from Europe and the Americas to settlements on the Freetown site between 1787 and 1800. The first group of colonists was drawn mainly from the Black Poor of London. Of the 411 (black and white colonists) who left Plymouth, 377 arrived in Sierra Leone in May, 1787. Another 39 colonists joined the settlement in 1788. High mortality, desertion and finally an attack on their settlement reduced their number to the 64 colonists who were gathered together by Alexander Falconbridge to found Granville Town in 1791.<sup>32</sup> This group of colonists ~~were~~ <sup>was</sup> absorbed by the larger group of Nova Scotians who soon joined the colony.

There were 1,131 Nova Scotians who arrived in Sierra Leone in March 1792. The mortality among the Nova Scotians was not excessive and some natural increase may have occurred. But desertion into native villages in the neighbourhood of the colony and to other parts of Sierra Leone and an under-enumeration in censuses resulted in a decline in their recorded numbers. The available figures on the Nova Scotians living within the colony at various dates between 1802 and 1860 are shown along with those of the Maroons on Table 4.4. The explanation of the rapid decline in numbers recorded after 1848 is that the Nova Scotians were counted as native ~~Colo~~les, that is as descendants of the Liberated Africans.<sup>33</sup>

The last group of colonists, the Maroons, numbered about 550 on arrival in Sierra Leone in September 1800. They, unlike the other groups, appear to have enjoyed a very rapid increase in numbers between 1802 and 1811. They increased

from 515, enumerated in the whole colony, to 1807, enumerated in Freetown alone in the censuses of 1802 and 1811 respectively. It has been suggested that this increase is due to it being probable that the Maroon women who arrived in 1800 were mostly young and therefore can account for the large number of children listed in 1811, which doubles that listed in 1802.<sup>34</sup> The available data from censuses and estimates for the Maroons of Table 4.4 suggests that, like the Nova Scotians, they too experienced a general decline in numbers from 1837 onwards, and by 1850 were nearly all absorbed into the category of Liberated African descendants. The decline which set in after 1837 was due primarily to the emigration to the West Indies, to which the Maroons responded more favourably than the Nova Scotians.<sup>35</sup>

The total number of settlers who came into the colony was about 2,092. In spite of some natural increases, the general trend is one of decline throughout the period 1802 to 1860. The causes of decline can be summarised as follows. The effect of mortality and the desertion or encouraged emigration of settlers was the most marked and remarked. There were also instances of under-enumeration resulting in fluctuations in numbers. But, with the introduction of the category of 'native Creoles' in the census of 1850, it became possible for settlers to claim to belong to the larger group of Liberated Africans and their descendants. Such claims were facilitated by the basic homogeneity of the racial stock to which the settlers and the Liberated Africans belonged.

The estimate of the number of settlers found in the Western Area (Table 4.4) is based on the data discussed so far. Those settlers who moved out of the settlements

TABLE 4.4.

ENUMERATED OR ESTIMATED  
POPULATION OF NOVA SCOTIANS  
AND MAROONS LIVING IN THE COLONY  
AT VARIOUS DATES 1792 - 1860

Date	Nova Scotian	Maroons
March 1792	1131	
29 March 1802	904	515
April 1811	982	807
31 Dec. 1818	691	610
8 July 1820	730	594
1 Jan. 1822	722	601
April 1826	578	636
1837	n.a	650
1844	597	470
1847	568	460
1848	560	462
1850	49	15
1851	112	73
1860	69	22

Source: Nova Scotians: Kuczynski pp. 70, 74 & 75 and footnotes  
 Maroons : " pp. 89, 92, & 95 and footnotes  
 For both groups see summary on Table 9 p.162 and footnotes

into native villages are to be regarded as passing into the category of native Africans. Consequently, no allowance is made for them.

### Non Africans

The one distinct group of non Africans that was present in the Western Area during the first period was made up of Europeans who came into the colony, largely, as administrators. The one attempt at settling Europeans in the colony was made in 1792 when 119 Europeans consisting of 85 employees of the Sierra Leone Company, 18 settlers (including their families) and 16 soldiers came to Sierra Leone. Very high mortality reduced their number and, in the next year, most of the survivors returned to England.<sup>36</sup> Henceforth, the Europeans living in the colony were mostly in the military service, with some in the administration. The data on the number of Europeans living in the colony at various dates<sup>37</sup> in this period are shown on Table 4.5.

### PERIOD II (1868-1963)

#### Complete Censuses of the Western Area

The main feature of the censuses held in 1868 and thereafter was that they covered the Western Area. There are, however, a number of problems with the data obtainable from these censuses.

The Bai Kanta lease of 1861, known as the British Koya,<sup>38</sup> was included in the census of 1868, but, for some reason, was not included in the first of the series of decennial censuses held in 1871.<sup>39</sup> Since, by 1872, the northern parts of the lease had been retroceded,<sup>40</sup> it would appear that the population of 7,444 returned for ~~the~~ Koya in 1881<sup>41</sup> refers to the southern portion<sup>42</sup> and that it was this portion that was later merged with the Eastern District in 1891.<sup>43</sup> This southern portion, now known as the Koya District,

TABLE 4.5

EUROPEAN POPULATION IN THE COLONY AT VARIOUS DATES1831 - 1931

Date	(Male + Female) Population
1831	95
1832	102
1833	84
1834	85
1835	90
1836	105
1838	102
1839	99
1840	83
1842	116
1843	138
1844	175
1845	158
1846	115
1847	95
1848	110
1849	98
1850	111
1851	125
1855	105
1857	105
1858	107
1860	131
1868	125
1871	107
1881	271
1891	224
1901	451
1911	702
1921	911
1931	497

Source: Kuc. p. 187.

- Note
1. Only Civilian European population covered in 1831 - 1855
  2. 1868 figure includes I in British Koya and II in Bulama
  3. The figures for 1855 on include the military.
  4. Figures for 1881 to 1931 include the population on board vessels and population in out-station.
  5. In 1881 29 Europeans were enumerated in the outstations

is, distinct from the retroceded portion, which remained nominally British at the retrocession.<sup>44</sup> It was this northern portion which was merged with the protectorate in 1896.<sup>45</sup>

The suggestion held out here is that, except for the exclusion of British Koya from the colony census in 1871, the total population of the 'Peninsula' for 1881 through to 1931 covers all the mainland part of the Western Area and the Banana Islands.<sup>46</sup>

Another problem arising, is that the constituencies of the Western Area<sup>47</sup>, which served as census districts in 1963, differ significantly from the administrative and other units which were employed for the presentation of <sup>data</sup> in earlier censuses.<sup>48</sup> Only Freetown has managed to retain a distinct entity in data presentation, although it, too, expanded from its earlier site. Because of these inconsistencies in the administrative units, comments on population growth during this period will concentrate on total population, and the differential growth between Freetown on the one hand and the rest of the Western Area on the other.

Table 4.6 shows the relevant data for 1868, the decennial censuses of 1871 to 1931, the 1947 and the 1963 censuses. There was a general upward trend in population growth during the second period. Irregularities appear to have been due to the poor quality of the 1871 census.<sup>49</sup> There was also a slight decline in the population outside Freetown from 1901 to 1911.

Freetown shows the most rapid growth in population over the period. Its population was doubled in the 20 year period 1871-1891 and at a slower rate nearly doubled in the next 40 years.

Table 4.6.

POPULATION OF THE WESTERN AREA  
1871 - 1963  
DERIVED FROM POPULATION OF THE COLONY OF  
SIERRA LEONE 1871 - 1931 AND  
FROM THE CENSUSES OF 1947 AND 1963.

Date	Total Peninsula	Tasso Island	Total (Western Area)
1868	47,655	n.a.	47,655
1871	38,936	n.a.	38,936
1881	53,862	828	54,690
1891	58,448	1,040	59,488
1901	67,782	1,079	68,861
1911	68,115	1,209	69,324
1921	79,561	1,321	80,882
1931	90,168	1,295	91,463
1947	-	-	117,034
1963	-	-	195,023

Source: Total Peninsula:(1868) see Kuczynski p. 26 (population of Freetown 21,974 plus population of rest of peninsula excluding, Koya, 25,681.) Figures for 1947, Census report (mimeo) C.S.O. Freetown Figure for 1963 Census Report C.S.O. Freetown Vol. 1 Table 1.

Note Figure for 1871 excludes Koya. There is also serious undercount in Freetown. But I assume that from 1881 on figures include the Koya district; see text for discussion.

Freetown's proportion of the total population has increased from 38.5 per cent in 1871 to 85 per cent in 1891. In the next two decades, due to an increase in the districts, Freetown's proportion dropped to about a half. But, after the First World War, Freetown's proportion again increased to 60 per cent and reached 65.5 per cent in 1963.

#### POPULATION GROWTH (1787-1963)

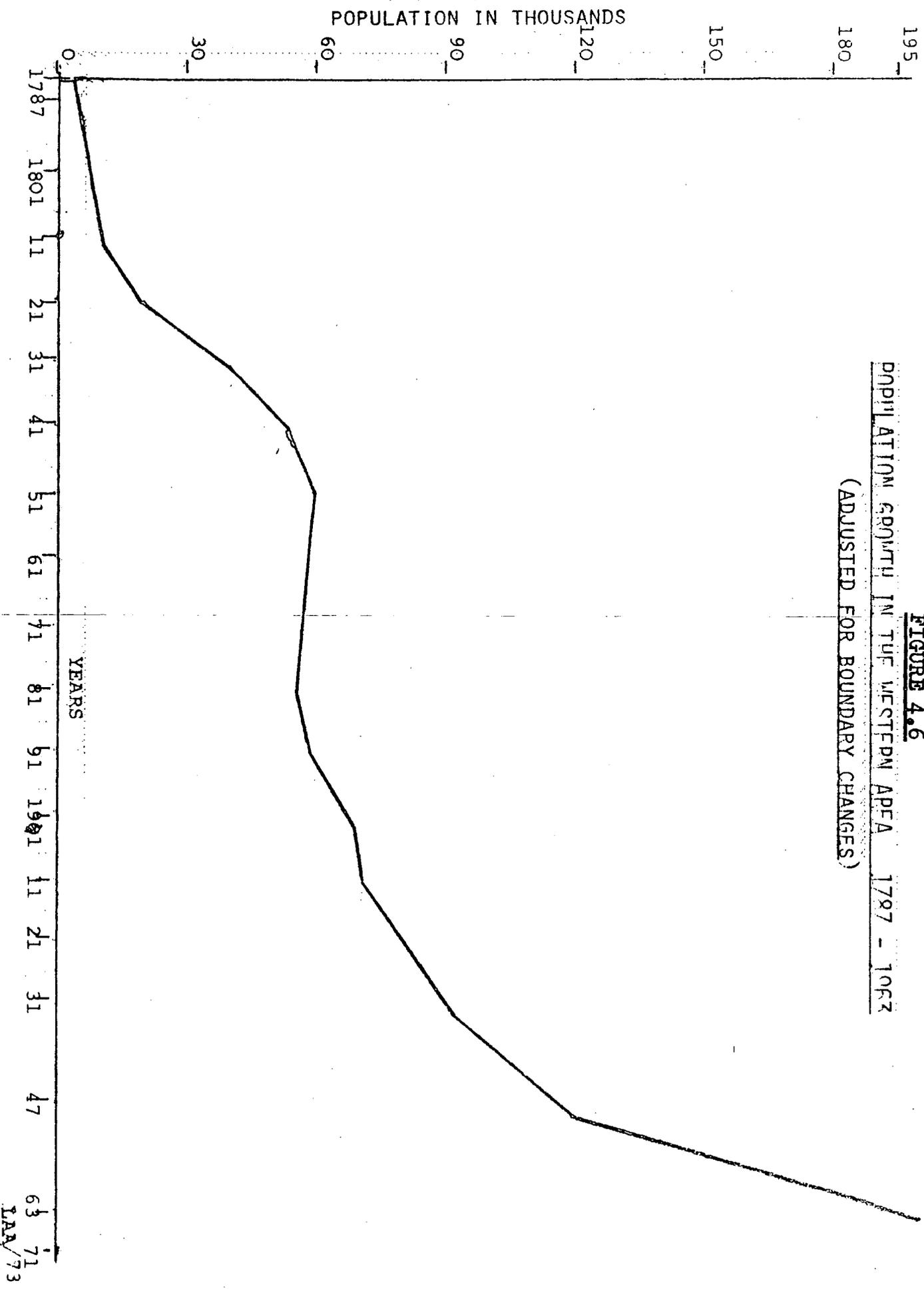
The growth trend in the population of the Western Area from 1787 to 1963 shown in Figure 4.6 is based on the data shown on Tables 4.1 to 4.6. The trend can be summarised as follows:

The initial estimated population of the Western Area of about 3,000 in 1787, living in scattered villages around the foothills of the Peninsula Mountains and on the Koya lowland, could not have increased to any considerable extent in the pioneering days of the colony. High mortality among the colonists and the difficulties experienced in establishing the colony meant that numbers of settlers admitted remained small until 1807. Some emigration of settlers to destinations outside the Western Area meant that the population stabilised at about 4,000 until the arrival of recaptives.

The mobility of the recaptives, once they had been sent to the Liberated African villages, and the extent to which large numbers moved out of the Western Area are well documented.<sup>50</sup> But the influx was sufficient for a rapid increase in the number of Liberated Africans living in the colony from 1826 to 1833 to occur, (Table 4.2).

The fact that the Liberated Africans were, like the indigenous people, black, meant that it was possible for Liberated Africans to pass into other categories in censuses.

**FIGURE 4.6**  
POPULATION GROWTH IN THE WESTERN AREA 1787 - 1962  
(ADJUSTED FOR BOUNDARY CHANGES)



63  
71  
TAA/73

But, given the record of the numbers found within the colony at various dates (Table 4.2 \_\_\_\_\_) and the adjustment made to include the numbers living in the Koya lowland, it would appear that the increase in the population of the Liberated Africans generated an increase in the volume of immigrants from the tribes in the immediate neighbourhood. Such a response from native Africans is consistent with the growing commercial, administrative and other activities within the colony, as its population increased.

After the slow growth of the first 20 years, the population grew rapidly to an estimated 18,000 in 1821. The population doubled in the next 10 years due to the influx of Liberated Africans and the fast growth rate was sustained until 1851 after which the population levelled off at about 60,000. It will be observed that estimated population for 1871 is higher than the official return for that year. And it was for this census that a large undercount is suggested. Whilst the estimates are of limited refinement, they are satisfactory as an indication of the trend of population growth for all parts of the Western Area.

The rapid growth experienced since 1931 is the outcome of the importance of the area in the economic and political life of Sierra Leone. With the establishment of the Protectorate, the export of agricultural products and the importation of manufactured goods has been largely handled by the Port of Freetown.

The area also played a significant role in the colonial administration of West Africa's British territories. Such economic and political services provided from the Western Area have, however, tended to be based on the Freetown site.

This is the reason behind the marked urbanisation of the site in sharp contrast to the rural pattern which persists in the Koya lowland.

NOTES AND REFERENCESCHAPTER 4

1. A list of censuses and comments on their coverage compiled from Kuczynski, R.R., Demographic Survey of the British Colonial Empire - Vol. 1 West Africa, Oxford University Press, 1948 pp 19-25; p. 158 and footnote no.1; Goddard, T.N., The Handbook of Sierra Leone, Negro University Press, New York, Reprint 1969, pp 33ff and Crooks, Major J.J. A History of the Colony of Sierra Leone, Frank Cass, 1972, pp 14ff., constitute Appendix 4.1.
2. Fyfe, C. A History of Sierra Leone, Oxford University Press 1962, pp. 19-20
3. ibid. pp. 96
4. ibid. pp. 133-136
5. ibid. p. 152
6. ibid. pp. 310-312
7. ibid. passim
8. Kuczynski, op. cit. pp. 95-150
9. Goddard, op. cit. pp. 33-39; also Sumner, D.C. Education in Sierra Leone, Government of Sierra Leone, 1963, p. 37 and Kuczynski, op. cit. p. 156 for the various dates.
10. Sumner, op. cit. p. 29
11. Kuczynski, op. cit. Table 6, p. 156
12. ibid. Table 1, p. 26 shows Kissy (Regent) listed up to 1931.
13. The boundaries are after Sumner, op. cit. p. 56, a slight cartographic ambiguity in the demarcation of St. Edward's Parish has been removed.
14. Kuczynski, op. cit. p. 84
15. ibid. p. 155
16. ibid. footnote no. 6 on pp. 19-20
17. ibid. p. 158
18. ibid. p. 156. The average population for each of the 28 native villages shown on Table 6 is 41 persons, which is about the same number that was estimated as the average for each of the 52 villages estimated in the discussion of the pre-settlement population in chapter 3.
19. ibid. Table 10, p. 163: 3,384 natives + 21,068 other Africans = 24,452, a comparison of this Table with Table 1, p. 26 reveals differences due to the inclusion of white population living within the colony or afloat on vessels in the later. See also Goddard, op. cit. p. 40 for reference to the floating white population.

20. Fyfe, op. cit. pp. 273-274, 284-286 give an indication that some Liberated Africans were trading and residing in the out-stations.
21. Kuczynski, op. cit. Table 1, p. 26, this figure excludes the 828 inhabitants of Tasso(h) Island which forms part of the present Western Area.
22. A clarification of these terms can be found in Kuczynski, op. cit. pp. 98-99. Figure 4.5 is based on this source.
23. ibid. footnote no. 8, p. 98. This course of action was often necessary because of the maze of international agreements guiding the treatment of captured slave vessels and discussed in Fyfe, op. cit., p. 137.
24. Kuczynski, op. cit. pp. 136 ff.
25. This is the most difficult element to quantify.
26. Kuczynski, op. cit. Table 5, p. 141
27. ibid. Table on p. 119 gives an idea of the extent of black troops.
28. Compare the data in ibid. Table on p. 96 giving the number of Liberated Africans and their descendants enumerated or estimated to be living in the colony at various dates with the following records of 'captured', 'registered' and other categories: Table on p. 100 'Captured and Condemned' (1808-1819); Table 2, p. 101 'Registered' (1820-1845) and Table on p. 104 'Emancipated' (1847-1852, 1855) and it may be estimated that about half of the Liberated Africans brought into the colony at various dates moved out or passed into other categories.
29. Fyfe, op. cit. pp. 209-210
30. see footnote no. 21 above.
31. Fyfe, op. cit. pp. 363-4, 425-6 describe such events which coincided with periods of ascendancy of the colony over the people of the Koya area.
32. Falconbridge, Mrs. A.M. Voyages to Sierra Leone: 1791-1792-1793, London, 1794, p. 55
33. Kuczynski, op. cit. pp. 74-75 and footnote no. 4, p. 75
34. ibid.; p. 90
35. ibid. pp. 93-94
36. ibid. p. 58
37. ibid. Tables 16 and 17 on p. 187 and footnotes
38. Variously spelt 'Quiah', 'Kwaia' and more consistently as Koya in recent times.
39. Kuczynski, op. cit. p. 25

40. Fyfe, op. cit. pp. 363-364
41. Kuczynski, op. cit. Table 1, p. 26 under 'Quzah'
42. Fyfe, op. cit. p. 544 refers to this portion as Southern Koya
43. Kuczynski, op. cit. footnote no. 3, p. 26 is misleading in that it implies that Koya as a whole was included in the Protectorate in 1896.
44. Fyfe, op. cit. pp. 363-364
45. Comments in the 1901 Census Report, p. 3 quoted in Kuczynski, op. cit. p. 29 equally fails to clarify the distinction between the retroceded Koya (now part of Koya chiefdom) and the rest of the 1861 acquisition which is now Koya district in the Western Area. For a more explicit account of the British Koya see the account in Crooks, Major J.J. op. cit. pp. 204 ff.
46. Banana Islands form part of the Western District, see Sumner, op. cit. p. 37, and the population on these islands is presumed to be included in the data for that district in Kuczynski, op. cit. Table 1, p. 26.
47. Clarke, J.I. 'Constituencies' in Sierra Leone in Maps (ed. Clarke) University of London Press, 1966, p. 35 (inset).
48. The parishes gave way to the three districts formed in 1826/27, see Sumner, op. cit. p. 37; also Sibthorpe, A. B.C. A History of Sierra Leone, Frank Cass, London, 1970 p. 40; and in 1905 further administrative changes were made leading to the formation of the Police District of Freetown, for details see Goddard, op. cit. pp. 99-100. Except in the case of the parishes, available details do not form basis enough for mapping.
49. See comments from Census Report, 1881, pp. 4-5 quoted in Kuczynski, op. cit. p. 26
50. ibid. footnote no. 7 above, see also, Fyfe, op. cit. passim.

CHAPTER 5

URBAN AND RURAL RESIDENCE - 1963

This discussion of the population distribution by urban or rural residence and of the character of settlements is aimed at a further clarification of the effects of the historical and demographic events, discussed in chapter 4, on the evolution of residential pattern in the Western Area. It should, also along the lines suggested in the working hypotheses, form a background to the analysis of the survey data in subsequent chapters.

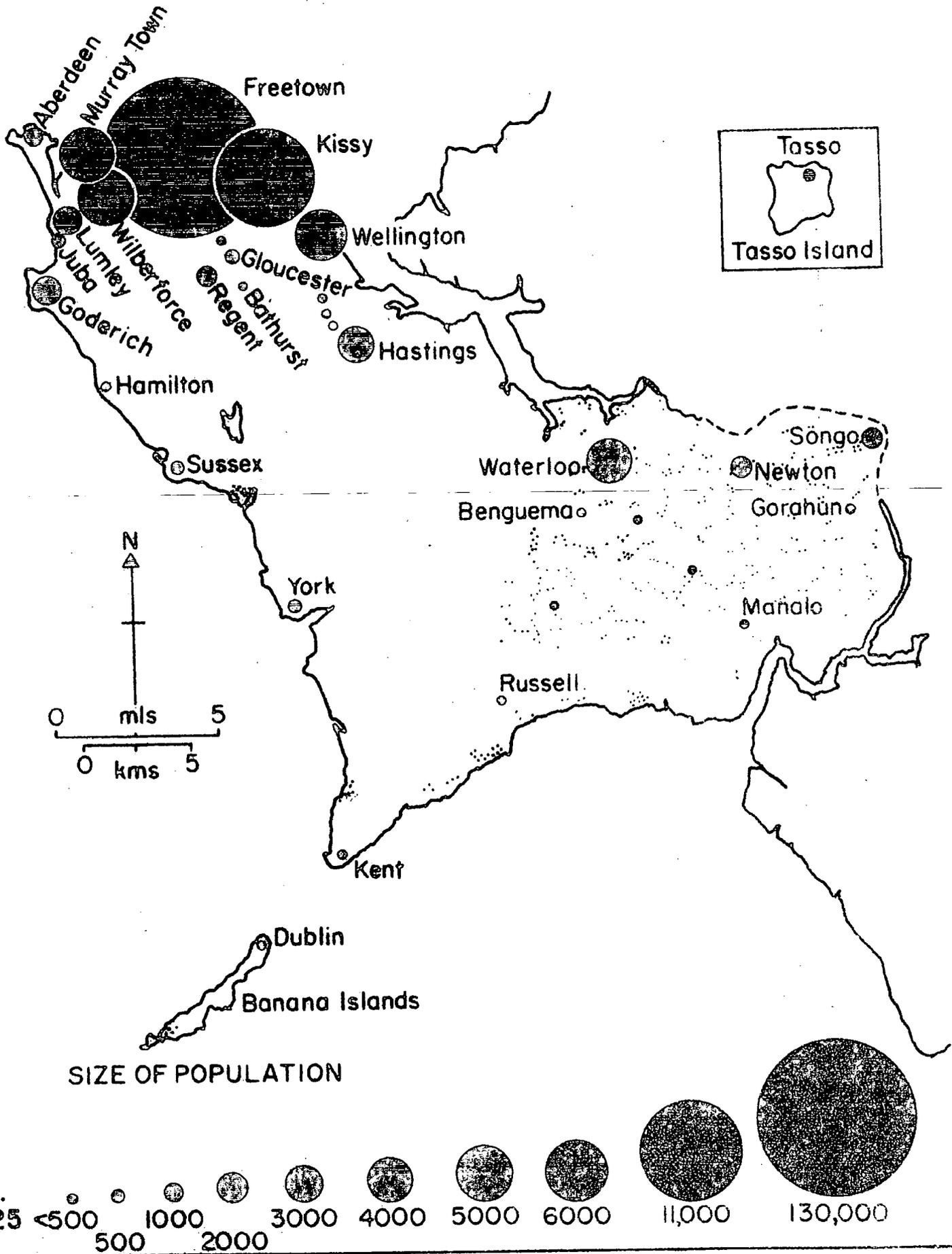
The 1963 census occupies a unique place in the demographic history of Sierra Leone. It was the first complete count made throughout the country, and probably, the most reliable record of the population of the Western Area. But, above all, it made available, for the first time, population of individual settlements and the total population of clearly identifiable administrative units of the Western Area details which make the following discussion of the residential pattern possible.<sup>1</sup>

The population of the Western Area was 195,023 in 1963. Of this number, 127,917 were living in Freetown. The remaining 67,106 or 34.5 per cent of the total population, were living in other settlements ranging in size from the 13,143 inhabitants of Kissy Village to a large number of very small hamlets with less than 100 inhabitants. Figure 5.1 shows the distribution of settlements with a population of 500 or more as proportional circles and the population of other settlements using dot distribution.<sup>2</sup>

The main features of the population distribution are the marked contrast in the sizes of settlements and population densities between the Freetown site and the rest of

FIGURE 5.1

POPULATION DISTRIBUTION 1963



the Western Area. The five largest settlements are situated on this site and together account for 80.7 per cent of the total population of the Western Area. Population density in the City of Freetown is about 26,000 persons per square mile. The two districts of Kissy and Wilberforce have an average of 1,600 persons to the square mile whilst the density in the other four districts is about 150 persons to the square mile.<sup>3</sup>

These contrasts partly explain why Freetown and the districts of Kissy and Wilberforce have usually been regarded as urban districts whilst the districts of York, Koya, Waterloo and Mountain have been regarded as rural. This usage derives from but does not wholly agree with the official designation of places with a population of more than 1,000 as urban in Sierra Leone.<sup>4</sup>

Whilst account is taken of the various approaches to residential classification, the rest of this chapter is only partly concerned with the population size of settlements. Rather, the general appearance of settlements, the provision of amenities, the presence or absence of special residential quarters and the opportunity for wage employment in settlement are aspects considered in the classification of residence. Such an approach is based on the writer's knowledge of the settlements and on the thesis that such aspects of a settlement's character have effects on variations in population composition.

For example, the more modern housing available in Wilberforce attracts families and individuals with much higher education and income than the more traditional housing available in the East End of Freetown. Similarly, the Kissy low-cost housing scheme attracts a different group of people

from those who are attracted to the much more prestigious houses in King Tom. In effect, the variations in character are not only between settlements but within settlements.

### The City of Freetown

Freetown is the capital and chief port of Sierra Leone. It is the centre from which educational, administrative and political development of the country has been pioneered. The port handles over 60 per cent, by value, and some 25 per cent, by volume, of the total export trade of Sierra Leone.<sup>5</sup> Most of the country's manufacturing industries, particularly those depending on imported raw materials are located in the immediate environs of Freetown. Such are the processing of flour, the manufacture of leather goods, umbrellas and cement.<sup>6</sup>

One feature of Freetown shared by other settlements established by the colonial administration is the regular pattern of its streets. This pattern, in combination with the survival of a large number of houses built to Creole architecture, gives the city an appearance of a garden city. Plate 5.1 shows part of Freetown with one of the main streets (Savage Square), to the right of center. The slopes of Mount Aureol, in the foreground, are the site of cassava cultivation.<sup>7</sup>

The city can be divided into three broad sections,<sup>8</sup> There is the central business district (CBD) centered on the commercial and administrative blocks extending from Government Wharf to Parliament Buildings on Tower Hill. Tentacles of this CBD, in the form of streets such as Kissay and Westmoreland Streets, are extended into the East and West Ends respectively. The East End extends



L.A.A.(1964)

Plate 5.1

A view of the East End of Freetown from Mount Aureol.

(Savage Square is right of centre)

from the CBD to Cline Town. The separation of business quarters and residence is not as advanced here as in the CBD. Fourah Bay Road typifies the mixture of commercial and domestic activities in the East End. The density of housing in this section is higher than in the West End, which extends from the CBD to Brookfield. The 'bazaar' atmosphere in the streets of the East End is in sharp contrast to the 'colonial' feel in the low density housing in parts of Brookfield and King Tom. The presence of the New England Secretariat <sup>and flats</sup> to the south west of the city further reinforces the exclusiveness of the West End. With the exception of Kru Town Road, it is true to say that even the high density housing in the West End are much more devoted to residence and less to commercial activities than in the East End.

The population of Freetown is well provided with amenities. Besides pipe-borne water and electricity, the provision here of medical, educational and various recreational facilities is the most favourable in the whole country.<sup>9</sup> But in classifying Freetown as an urban centre, the basic criterion is that the economic structure of its labour force is markedly different from ~~the~~ those of rural communities predominantly engaged in agriculture.<sup>10</sup>

Table 5.1 shows the occupational structure of the labour force in Freetown and in eight centres in the Western Area for which data are available from the 1963 census.<sup>11</sup> And Table 5.2 shows the industrial structure of the employed population in the same nine centres.<sup>12</sup> Freetown has only 2.3 <sup>per cent</sup> of the labour force in agriculture, 12.4 per cent in manufacturing industries and 71.7 per cent in commerce, transport and the service industries.

Table 5.1

## PERCENTAGE DISTRIBUTION OF WORKING POPULATION IN NINE CENTRES BY OCCUPATION

Occupation Group	Percentage Distribution by Centre								
	Freetown	Kissy	Wilberforce	Wellington	Murray Town	Waterloo	Hastings	Goderich	Lumley
Professional	6.0	5.1	7.1	2.7	5.8	7.6	3.7	2.1	5.4
Managerial	1.9	2.3	7.0	0.5	5.2	0.5	0.2	0.3	1.8
Clerical	9.1	8.4	5.5	4.2	5.5	2.3	3.4	2.5	5.2
Sales	24.6	15.5	8.9	19.2	10.6	35.3	14.9	20.0	17.0
Farmers	2.3	2.0	2.9	18.0	12.5	15.6	22.9	36.0	15.5
Milkers	0.1	0.1	0.1	0.5	0.1	0.1	0.0	0.1	0.1
Transport	14.1	10.7	2.7	8.1	4.6	4.0	6.3	3.2	4.7
Labourers	31.3	41.4	16.8	41.4	30.6	28.1	42.8	33.6	31.7
Service	10.6	14.5	49.0	5.4	25.1	6.5	6.3	2.2	18.6
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: see footnote no. 11

For explanation of the occupation groups see footnote no. 7 in chapter 10

Table 5.2

PERCENTAGE DISTRIBUTION OF THE EMPLOYED POPULATION IN NINE CENTRES BY INDUSTRY

Industry Group	Freemtown	Klissy	Wilberforce	Wellington	Murray Town	Waterloo	Hastings	Goderich	Tumley
Agriculture	2.4	4.5	1.6	18.2	15.0	16.3	22.7	36.1	16.5
Mining etc.	0.3	0.4	0.9	0.8	0.2	0.3	0.4	0.1	0.7
Manufacturing	12.4	12.8	5.9	17.5	8.9	11.3	18.3	6.1	8.6
Construction	9.9	13.5	9.8	9.8	16.6	7.9	9.4	27.5	16.4
Electrical etc	2.2	2.7	1.2	1.7	1.6	1.6	0.8	0.8	4.7
Commerce	31.6	21.8	14.3	24.4	15.0	36.7	16.1	20.4	18.5
Transport	18.2	19.1	3.5	14.3	6.4	10.3	13.0	4.3	3.9
Services	21.9	24.5	61.7	11.0	35.7	15.2	15.0	4.4	29.4
Activities not well described	1.1	0.7	1.1	2.5	0.6	0.4	4.2	0.3	1.3
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: see footnote no.12

For explanation of the industry groups see footnote no, 7 in chapter 10

One factor to which attention must be drawn in the interpretation given to the small proportion of Freetown's labour force in agriculture, is that it is the only unit in the Western Area confined to the limits of a single settlement. It, therefore, unlike other major settlements, has a limited farmland. Such lands are also being progressively lost to urban expansion. The poor soil on available land further reduces the participation of Freetown's labour force in direct agricultural activities. The retailing of farming and fishing produce is, however, a very visible part of Freetown's market scene. It could be suggested, then, that the small proportion of Freetown's labour force in agriculture is not wholly due to changes in the economy but to the physical conditions around the city.

Although attention is not paid to the extent of unemployment, it could be deduced that migrants in search of employment opportunities and the comparatively higher standards of living in Freetown would swell the supply of labour far above the effective demand for it. The large proportion employed in sales is a symptom of the ability of this occupation group to provide a value for high level or real unemployment.

#### Suburban Centres

Kissy Village and Wilberforce are two of the major settlements closest to Freetown. The general appearance and the nature of amenities provided in these centres are very similar to those of Freetown. With regards to the movement of people from these centres to schools, markets, work and other activities in Freetown, they could be considered as extensions of Freetown.

The economic structure of the active population in

these centres approximate that of Freetown. Kissy and Wilberforce have 2.0 and 2.9 per cent of their respective labour forces in agriculture. In other occupation groups, there are significant differences between the two centres. Whilst Kissy's occupation structure is very close to Freetown's in every group, Wilberforce exhibits the following difference. It has a consistently higher proportion of its working population in the Professional, Managerial and Service groups and lower proportion in the Transport, Labourer and Clerical groups.

It is premature to go into the causes of this difference, but the distinctly fashionable character of Wilberforce, to which attention was drawn earlier, results in the centre attracting persons in the higher income occupations. But, as in parts of Freetown, the fashionable quarters can be found side by side with poorer, high density housing in which persons in the semi-skilled occupations live.

In the case of Wellington and Murray Town, Wellington with a larger population and labour force, exhibits a greater divergence in occupational and industrial structure from Freetown than Murray Town. This is an indication that it is not population size alone that accounts for the economic structure.

Wellington has a much higher proportion of its labour force in farming. Its proportion of 18.0 per cent is about eight times greater than that of Freetown and a third higher than that of Murray<sup>a</sup> Town. It also has very much lower proportions in those occupations in which Wilberforce has high proportions. In contrast, Murray<sup>y</sup> Town is similar in economic structure to Kissy, the only difference being

that it has a much higher proportion in farming.

The most marked contrast between Wellington and Murray Town is in the industrial structure. The very high proportion of Wellington's labour force in manufacturing industry is due to the presence of the Wellington Industrial Estate and the tendency for workers in the estate to find accommodation in the settlement. On the other hand, Murray Town has 16.6 per cent in the construction industry and 35.7 per cent in the service industry. Whilst Murray Town is experiencing an upsurge in the construction of new buildings, the presence of a single processing factory employing very few people in 1963 can hardly account for the 8.9 per cent of the labour force in manufacturing industry. The explanation is that an appreciable number of persons living in Murray Town are employed in Wilberforce and Freetown.

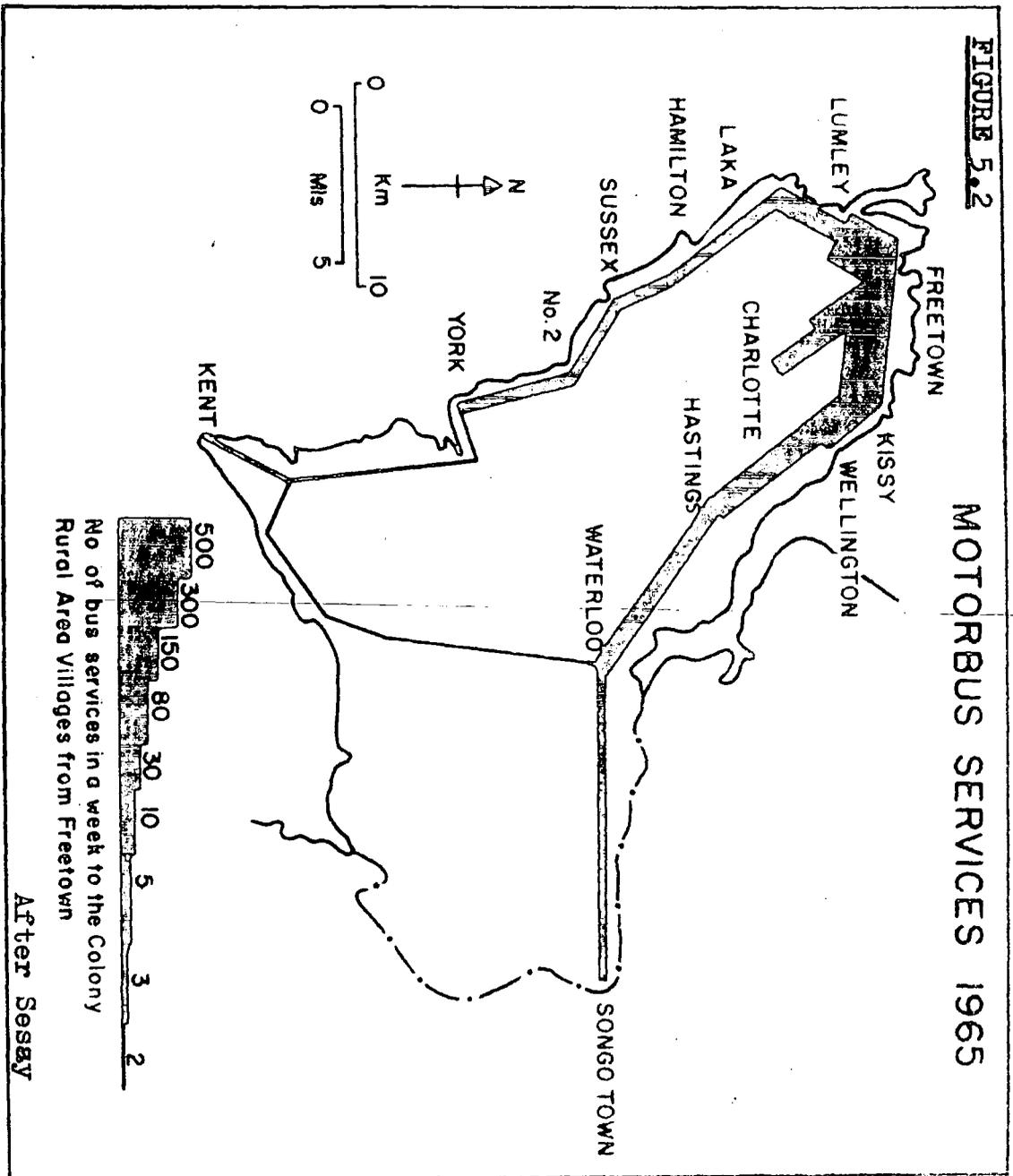
The degree of articulation of these suburban centres with Freetown can be visually summarised by referring to the frequency of bus services from Freetown to these and other centres in the Western Area, Figure 5.2. Whilst the much higher frequency of services to the suburban centres facilitates a large population movement between Freetown and these centres, neither the volume of such movement nor the purpose of such trips would appear sufficient ground for placing these centres in the category of dormitory towns. But the trend points to the increasing integration of these centres into a single urban system for which the term Greater Freetown has been suggested.<sup>13</sup>

#### District Headquarters

This urban category overlaps with the last one and consists of district headquarters with a population of 1,000

**FIGURE 5.2**

**MOTORBUS SERVICES 1965**



or more. Table 5.3 shows the proportion of each district's population living in these centres.<sup>14</sup> Two of the district headquarters have a population less than 1,000 and these are for the districts with small total populations.

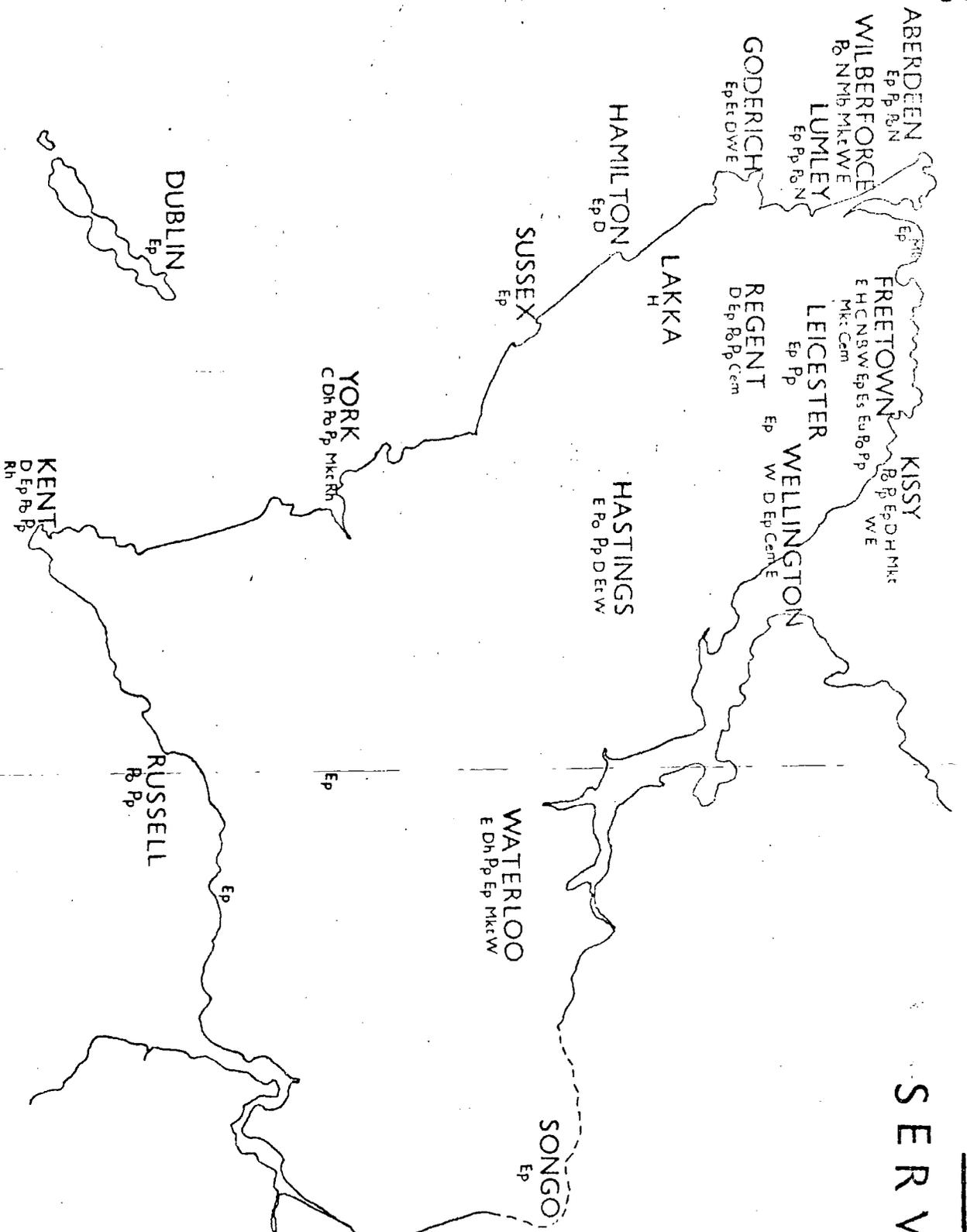
There are only 15 settlements in Kissy district and of these, Kissy itself and Wellington account for 80 per cent of the population. Similarly, when Wilberforce and Murray Town are taken together, about 60 per cent of the population of Wilberforce district is accounted for. The relatively high percentage of Waterloo district in the Settlement of the same name is the result of the historical momentum which Waterloo has enjoyed since its establishment in 1819. Its location on the transport route between Freetown and the rest of Sierra Leone is an added advantage.

Otherwise, most of Waterloo district is an extension of the rural settlement pattern found in Koya district where only 1,081 of its 9,367 inhabitants live in Songo Town; with the remaining 8,286 persons living in 120 other settlements.<sup>15</sup>

Another importance aspect of the headquarters is the services which are provided in them. Figure 5.3 shows the distribution of such services as health, postal and banking and of such amenities as electricity and pipe borne water.<sup>16</sup> Although Freetown may be regarded as the point of reference in the disposition of amenities, the local importance of these centres should be emphasised. In this connection, the nearness of the Mountain district and its small population, make the duplication, there, of some services unnecessary. There is only one small dispensary in Regent serving the district, compared to one hospital and two dispensaries in the more remote York district.

# SERVICES

FIGURE 5.3



KEY

- B - Banks
- C - Courts
- Cem - Cemetery
- Dh - Dispensary/Health Centre
- E - Electricity
- Ep - Primary School
- Es - Secondary School
- Eu - University
- Et - Teacher Training
- H - Hospital
- Mb - Military Barracks
- Mkt - Markets
- N - Night Clubs/Hotels
- Po - Post Office
- Pp - Police Post

An inspection of the occupation and industrial structure of the headquarters reveals to what extent each reflects the variations that occur in the physical and human resource base from district to district. On the one hand, there is the Freetown-type structure observed in Kissy and Wilberforce and on the other hand, there is the structure of Waterloo's working population which reflects its more rural environment. The significant index is the 15.6 per cent of Waterloo's labour force in farming, a proportion which is more than five times greater than in the two centres.

#### Historical Centres

There are four centres with a population of more than 1000 which are not close enough to Freetown to have enjoyed the type of overspill which affected the suburban centres, and which have not at any time performed a dominant administrative role of the type assigned to district headquarters. Nevertheless, they (Hastings, Goderich, Lumley and Aberdeen), do not constitute a residual classification because they have a distinctive feature which holds them together into a logical group. They are all former Liberated African settlements which have managed to retain some prominence because each plays a special role or retains some special advantage in the economy of the Western Area in particular and of Sierra Leone in general.

Stated briefly, Hastings has an airport, supplementing services available at Lungi. Goderich is the site of a Teacher Training College and Lumley benefits from its location on a fine stretch of beach which attracts people from Freetown and tourists from abroad. The case of Aberdeen is less clear-cut, its location on the Sierra Leone estuary,

its nearness to Lumley beach are all contributory to its continuing prosperity.

Whilst Hastings is more remote from Freetown, the other three settlements have historically been associated with Freetown. It is, therefore, not difficult to see why Goderich, Lumley and Aberdeen form a second zone for the expansion of Freetown. They will continue to be integrated into the Freetown urban field, even if they lose their identity in the process.

Meanwhile, the proportions of farmers in three of these settlements, for which data are available, are much higher than in any of the categories discussed so far. Goderich has 36 per cent of its working population returned as farmers. This occupation group included those who are fishermen and hunters. The access to open sea fishing in Goderich and Lumley attracts a larger number of fishermen to these centres<sup>17</sup> than to places like Hastings. Conversely, the people in Hastings have more access to farmland than those living closer to Freetown.

The city of Freetown, the suburban centres, the district headquarters and the historical centres are the four classes of urban settlements identified in the Western Area.

#### Declining Villages

The group of villages which fall into this first category of rural settlements overlap with some of the other classes discussed earlier. It includes two district headquarters, but like the historical centres, it is made up solely of former Liberated African settlements. The common feature of these declining villages is that they are all medium-sized and at one time enjoyed a greater prosperity

and had much larger population than they do at present. The list of such villages is a long one, but, Gloucester (584), Sussex (496), Kent (187) and Russell (157) are a few which typify the decline and decay which set in once the wave of pioneering enthusiasm had died down in the then colony.

A place like Kent, located in a remote area, away from the main traffic line from Freetown to the rest of the country, suffers an obvious disadvantage. But whilst this location factor affected most of the other villages in York district and those in south of Waterloo, there are a number of declining villages situated right on the main road from Freetown to Songo. The decline of these, such as Allen Town, Grafton and Calaba Town must be blamed on the impractical clustering of these settlements along the short stretch of road joining Wellington and Hastings.<sup>18</sup> This statement does not, however, explain why Wellington and Hastings grew at their expense. But it is consistent with the concept of hierarchical organisation of settlements that some should lose out as the relative advantages of the various locations are explored.

To summarise, it appears that these medium-size villages are the ones that will increasingly suffer more loss of population to the Freetown area than the next group of villages, which because of their more rural character have that much less likelihood of having their population lured away. This conclusion is reinforced by the quick decline in the population of settlements in the Mountain district, situated just behind Freetown.

### Fishing and Farming Villages

These number some 233 out of a total of 259 settlements in the Western Area<sup>19</sup> and are distributed amongst the districts as shown on Table 5.3.

TABLE 5.3

#### DISTRIBUTION OF FISHING AND FARMING VILLAGES BY DISTRICTS

Districts	Number of Villages	Proportion of Total
Kissy	8	3.4
Wilberforce	6	2.5
Mountain	1	0.4
York	49	20.1
Waterloo	51	20.9
Koya	120	52.9
<b>TOTAL</b>	<b>233</b>	<b>100.0</b>

Source: Author's analysis

At this end of the urban/rural residential scale, identification and classification of settlement is that much easier because of the general uniformity in form and size among the villages that are described as fishing and farming settlements.

The distinguishing feature of all the settlements is the lack of planning, except in as much as the development of modern communication has imposed some rudimentary linear siting of houses along routes, thereby making the linear-form the main departure from the traditional village with a tightly clustered disorder of huts, whose form can be loosely described as circular.<sup>20</sup> Whilst, in general, all the fishing and farming villages have a population of less than 500, there is a large spatial variation in size which

is not capable of the same broad generalisation made about the forms of these villages.

The population of settlements with less than 500 inhabitants were not listed in the 1963 census report. But the proportion of each district's population living in such settlements can be obtained by subtracting the population of centres with more than 500 inhabitants, and the population of others, for which data are available, from the total district population.

In Kissy district, the population living outside Kissy and Wellington was 2,947 divided among 11 other settlements at the average of 268 individuals per settlement.

In Wilberforce district, the difficulty of identifying the population of individual settlements within the Wilberforce/Murray Town/Hill Station sprawl, makes the application of the procedure applied in Kissy district, meaningless here. Settlements such as Cockerill, Smart Farm and Wilmur, have been incorporated into the built up area. Between Lumley and Goderich (fishing settlements in their own right), are a number of smaller fishing and farming villages which, partly because of the rugged terrain and partly because of the distance separating them from urban centres are far less prosperous in appearance than the villages of Kissy district.

In the districts of York, Waterloo and Koya, the average sizes of such settlements were 68, 70 and 69 inhabitants respectively. Except for those settlements which belong in the category of declining villages, there are no settlements with more than 200 inhabitants in these three districts. And there are a large number, especially in the Koya lowland,

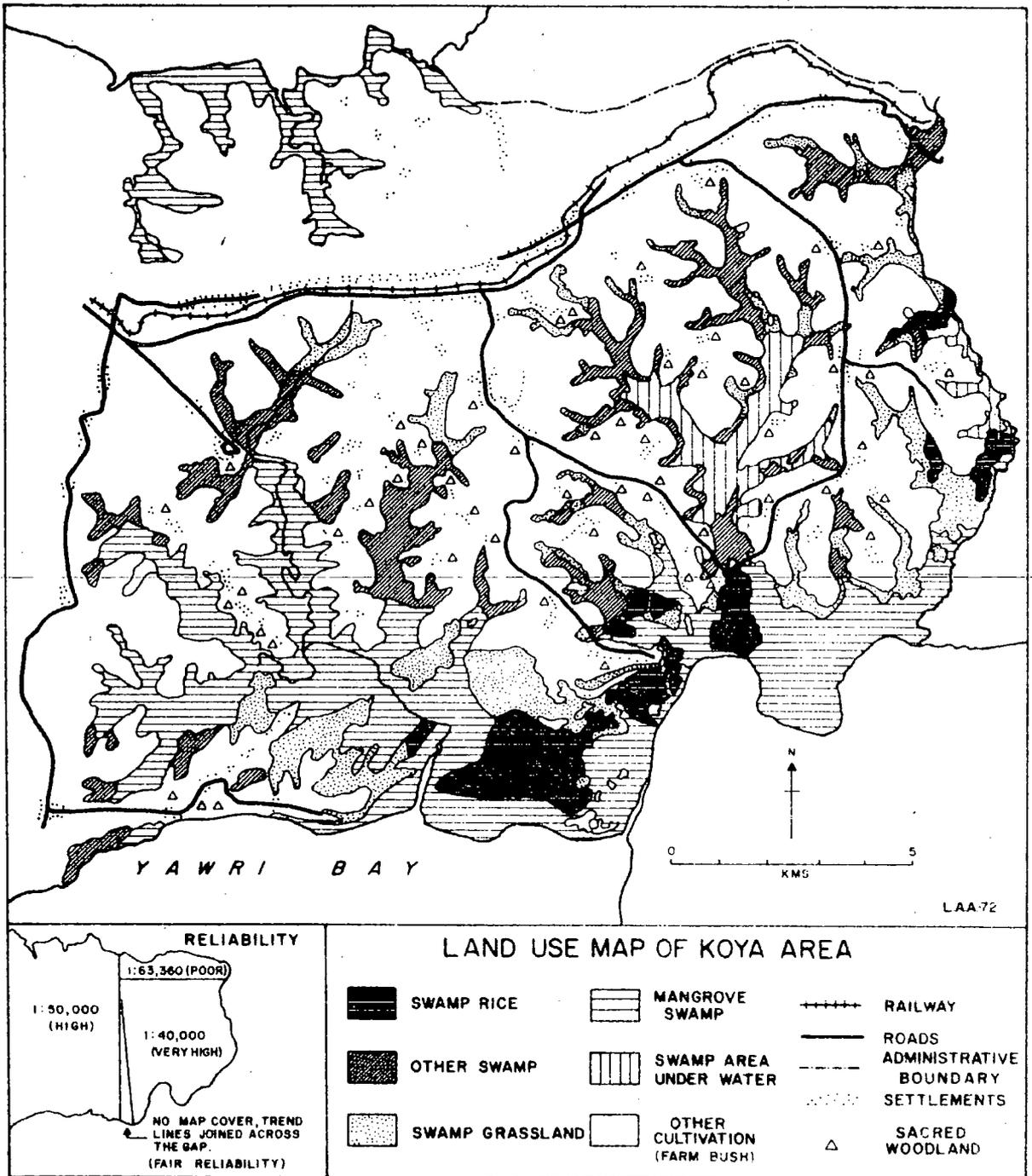
with as few as 30 inhabitants.<sup>21</sup>

Most families in the villages grow a few crops around the houses and, in addition, tend a few patches of stream bed~~s~~ which are sufficiently wide and wet to allow the growing of vegetables. Near the houses, cassava, plantain and a few fruit trees are grown and it is from these that such foodstuffs as garri, fuofoo and some cassava leaves are obtained. But the stream beds are devoted to pepper, lettuce, potatoes and okro. The stream beds of Kissy, Wilberforce and the Mountain districts are covered with such plots, Plate 2.2. These are the districts which are close to Freetown and, therefore, make a quick transportation of the perishable vegetables to the stores and markets of Freetown possible.<sup>22</sup>

Coconut and some garri, both products of dry-land farming, come~~s~~ from York district. The main attention of fishing activity in this remote district is aimed at the provision of cured fish for the Freetown market.

The fishing and farming activities in the Koya lowland, embracing parts of Waterloo, York and Koya districts, are slightly different from those of the Peninsula Mountains. The soil of the lowland is more productive and the presence of extensive swamps between the Calmont and Ribi Creeks make the cultivation of rice possible. Figure 5.4 shows the distribution of such swamps and <sup>of</sup> a general land use of the lowlands.<sup>23</sup> The shallow waters of the Yawri Bay also afford good all-year-round fishing.<sup>24</sup>

In spite of the advantages of the Koya lowland, the area is not noticeably a food surplus area. This is because of the large local demand for foodstuffs. In general rice



**FIGURE 5.4**

and other crop-farming is much more subsistent in orientation than fishing. Consequently, most of the rice grown is used locally whilst fishing supplies the Freetown market with cured fish. In this connection, Waterloo Village serves as a convenient intermediate market between the trade generated between the lowland and the Freetown market.

It may be concluded that an understanding of the character of settlements, both urban and rural, with reference to location, lay-out, amenities available and the occupation structure of the working population in response to economic opportunities, is an improvement on a classification based on the number of inhabitants. A study of the demographic and socio-economic characteristics of the sample population, of the type intended in subsequent chapters should clarify the validity of the classification carried out here. This classification was borne in mind in the demarcation of the unit areas and in the formulation of assumptions and hypotheses underlying the presentation and analysis of the survey data.

NOTES AND REFERENCESCHAPTER 5

1. Sierra Leone, C.S.O., 1963 Population Census of Sierra Leone, Freetown 1965 vol.1, Table 6, pp. 16-19 and Table 7, p. 38 list the settlements with 1,000 or more persons and 500 or more persons, respectively in the Western Area. To these two Tables have been added district population figures and the population of some settlements less than 500, obtained by a handcount carried out by the present writer in August 1964 at the C.S.O.
2. The distribution of dots were based on the classification of settlement sizes by number of houses on the 1:63,360 map of the Vicinity of Freetown sheets 1 and 2 on the district population living in such small settlements. The scale of one dot to 25 persons was found to be the most satisfactory.
3. The densities are derived from the planimetric measurements of districts on the 1:63,360 map and the district populations obtained from a handcount carried out in C.S.O. by this writer in 1964. Delimiting the boundaries of the forest reserve introduced some inaccuracies. The 1:10,000 inch-map of Freetown Peninsula, with forest reserves marked on, was of some help.
4. Maps of such places drawn by this writer and published in the 3 volumes of the 1963 census report was based on this assumption in the CSO, Freetown.
5. Sesay, S.M., and Mitchell, P.K. 'Freetown as a Port' in Freetown: A Symposium (Fyfe and Jones, eds.), Sierra Leone University Press, Freetown, 1968 p. 81. The small percentage of total volume of export trade is due to the export of mineral ore through Pepel.
6. For a general discussion of the location of industries in Sierra Leone, see Johnson, C.E.O. 'The Problems of Industrial Development in Sierra Leone' in Northern Geographical Essays (House, J.W., ed.) Department of Geography, Newcastle upon Tyne, 1966 pp. 331 - 350.
7. This picture was taken in 1964 from the Men's Hostel of Fourah Bay College by this writer. As a result extensions to the Queen Elizabeth II Quay, the Fourah Bay to the right upper corner of the picture has been obliterated.
8. See McKay, J. 'Freetown' in Sierra Leone in Maps (ed. Clarke) University of London Press, 1966 p. 59 for a detailed land use pattern. The division is, however, based primarily on personal knowledge of the city acquired in five years of residence there.
9. Clarke, J.I. et al. ibid. studies of the distribution of various services in Sierra Leone.
10. In spite of the difficulties of equating urbanisation

with industrialisation, especially in developing countries, the opposite approach of equating rural with agricultural is valid.

11. Sierra Leone, C.S.O. op. cit. vol. 3, Table 8, pp. 45-61.
12. ibid., vol. 3, Table 12, pp. 83 - 99; the explanation of terms such as 'employed' 'working population' 'labour force and others used in this discussion can be found in chapter 10.
13. The term 'Greater Freetown' was used by Professor J.I. Clarke in discussion with this writer in 1969 and an echo of this idea pervades the various contributions in Fyfe and Jones (eds,) op. cit.
14. see footnote no. 1, above.
15. see footnote no. 21, chapter 1, for comments on Songo's population.
16. This map is based on information contained on the 1:10,000 map of Freetown Peninsula Sheets 1,2,7 and 8 and on the 1:2,500 map of Freetown and District sheets 1 - 36 and others listed in Appendix.
17. Especially Ghanaian fishermen, see Williams, G.J. 'Fisheries' in Clarke (ed.) op. cit. pp. 84 - 85, and chapter 10 of this thesis.
18. Calaba Town is at times spelt Coldbath Town.
19. The count of fishing and farming villages was based on the various maps listed in Appendix. It is not to be taken as a census of settlements but as an indication of the distribution of numbers and sizes of settlement in the Western Area.
20. Siddle, D.J. 'Forms of Rural Settlement' in Clarke (ed.) op. cit. pp. 62-63.
21. Field observation and result of a household survey in selected villages of the Koya lowland organised by this writer in co-operation with Mr. Windapo in the Geography Department of Fourah Bay College, Freetown, December 1969.
22. Head portage of vegetables from farms in the Mountain district into Freetown is quite feasible and often employed to reduce transportation costs.
23. The land use map was compiled and reconciled from the various maps indicated in the reliability diagram on Figure 5.5.
24. The fishing activity in Yawri Bay is centered on the village of Tissanana rather than on Russell. This was the indication from field observations and modifies the opinion put forward by Williams, G.J. op. cit. p.84.

## CHAPTER 6

### AGE STRUCTURE

In this chapter, the age structure of the sample population in the Western Area is compared with the age structure of the population of Sierra Leone as recorded in the 1963 census. This comparison makes the identification of the similarities and differences between the sample population and the universe possible.<sup>1</sup> The extent to which discrepancies in age reporting and the editing of the survey data affect such similarities and differences will be briefly pointed out.

Next, variations in age structure occurring from urban to rural areas will be described and the causes of such variations due to levels of fertility, mortality and migration will be explained. A single index of age structure for each of the sub-divisions of the Western Area is then presented. The indices allow, over time, changes in the age structure to be monitored.<sup>2</sup>

#### Western Area

Table 6.1 compares the age structure of the sample population with that of Sierra Leone in 1963.<sup>3</sup> In both the Western Area and in the country as a whole, high fertility and mortality<sup>4</sup> have produced a young population. Of the sample population, 37.4 per cent are under 15 years. This proportion is about equal to that for Sierra Leone at 36.7 per cent.

In spite of the roughly equal proportion of children, there is a much lower proportion of children under five years in the sample than returned for the country. A brief inspection of the single year age/sex pyramid of the sample

TABLE 6.1

AGE STRUCTURE WESTERN AREA - 1968 SURVEY ANALYSIS COMPARED  
WITH AGE STRUCTURE SIERRA LEONE - 1963 CENSUS

Age Class	Percentage of total Population	
	Western Area	Sierra Leone
0 - 4	12.5	17.3
5 - 9	14.2	12.9
10 -14	10.7	6.5
15 -19	9.5	8.9
20 -24	8.5	8.7
25 -29	8.6	9.5
30 -34	8.2	7.9
35 -39	6.3	6.3
40 -44	6.5	5.3
45 -49	4.8	3.9
50 -54	3.3	3.2
55 -59	1.7	1.9
60 -64	2.2	2.6
65 and above	3.0	5.1
	100.0	100.0

Source: See footnote no. 2

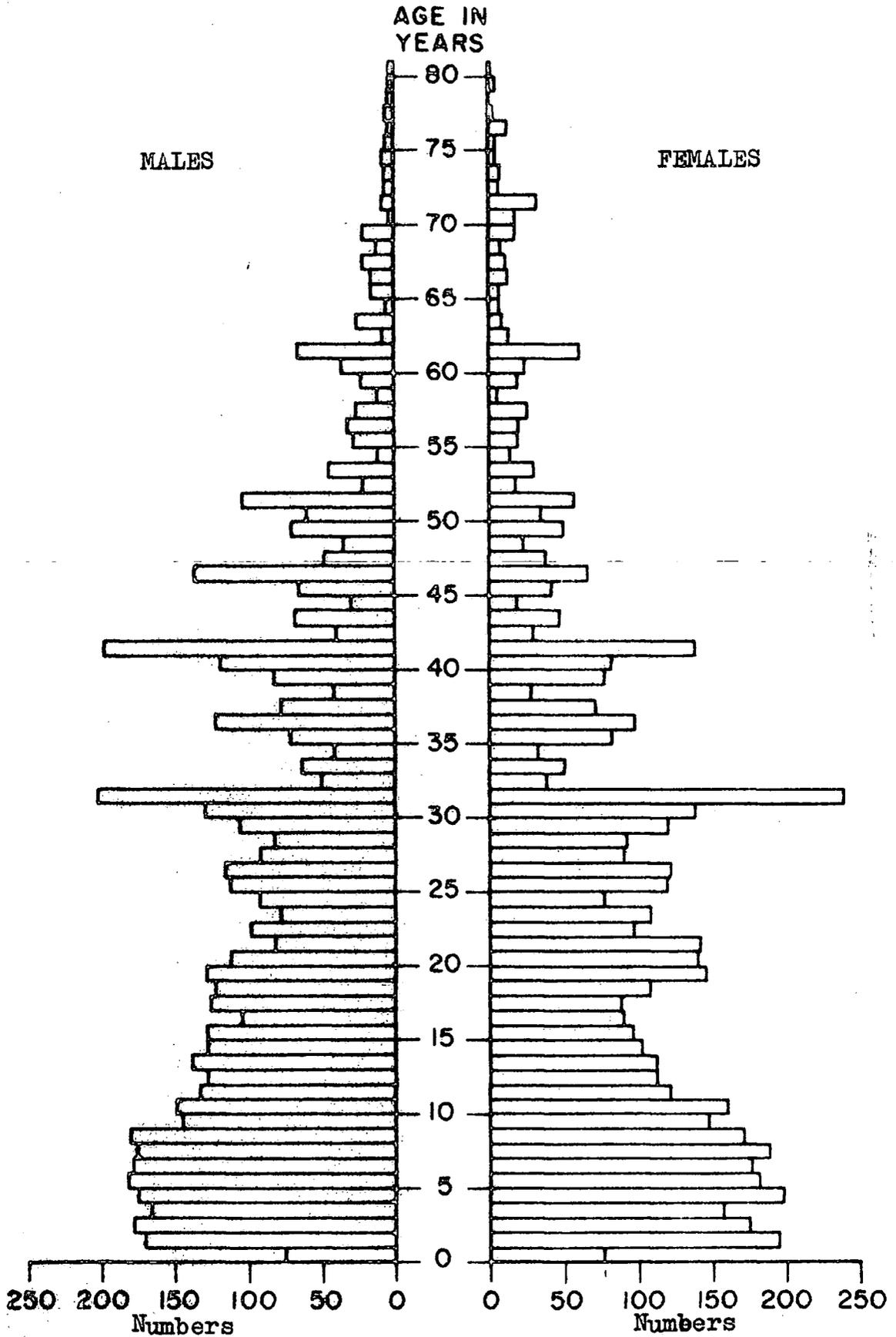
population ( Figure 6.1), shows that very few infants were returned in the second round of the survey. Only 152 infants were recorded at the second round compared with the 295 recorded at age one. It would appear that, in spite of possible fluctuations in demographic events, an undercount of infants combined with a displacement of infants into age one and a general inflation of ages of under-fives has produced the drop in recorded infants and the low proportion of under-fives.

An undercount of infants has been observed elsewhere, notably, in the Origbo Age-Statement Experiment carried out by Caldwell and Igun in Nigeria.<sup>5</sup> But it is most likely that there has been an appreciable displacement of infants to age one. This is because the period between the two rounds of the survey was shorter than the intended one-calender year.<sup>6</sup> It was 10 months in some areas. There are consequently a few cases of infants 10 to 11 months old who were enumerated in both rounds. And much more probable, but difficult to substantiate from field sheets, is that a number of infants who were born at about the time of the first round were returned as one year old in the second round, when in fact they were still less than 12 months.<sup>7</sup>

In contrast to the large proportions under 15 years in the sample and in Sierra Leone, the proportions aged 60 years and above are small. That the proportion of the sample in that age group, at 5.2 per cent, is less than the 7.7 per cent of the country's population in the same group is rather unexpected. The better medical facilities and access to various other amenities in the Western Area should produce a higher expectation of life and a correspondingly higher proportion of aged persons, there, than for the country

FIGURE 6.1

TOTAL SAMPLE POPULATION BY SINGLE YEAR OF AGE AND SEX,  
1968 SURVEY AUTHOR'S ANALYSIS



as a whole.<sup>8</sup> That this anomaly may have occurred as a result of sampling is probable, but in addition, it would appear that discrepancies in age reporting has contributed to this anomaly.

An application of Smith's scoring system for the accuracy of age reporting to the single year data obtained from the survey, (Appendix 6.1), shows that within the Western Area, itself a greater accuracy is achieved in Freetown than in the rest of the Western Area. A corresponding differential, no doubt, exists between the Western Area and the whole country. Accuracy in age reporting in the survey was also shown to correlate with the degree of literacy and to be associated with the extent of application of a vital registration system. In general male age reporting is better than female age reporting.<sup>9</sup>

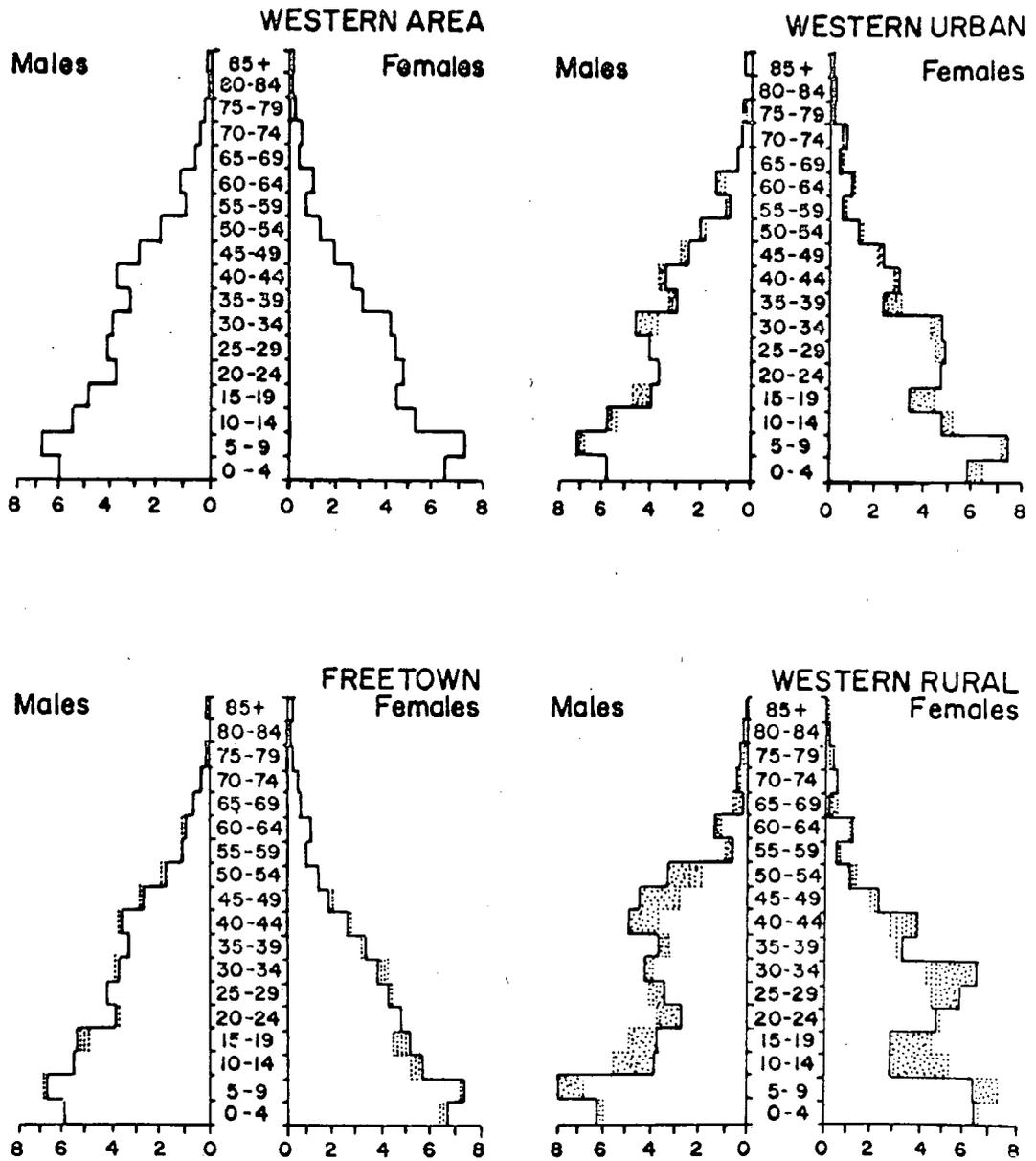
In the Western Area the 'pull' exercised by employment in administration, commercial and other services and in a small industrial sector on migrants from the rest of Sierra Leone is less dramatic than the pull on migrants of diamond mining activities in the Eastern Province. The middle bulge and the pronounced indentations in the age pyramids for Kano and Kenema districts<sup>10</sup> in 1963 are absent in the age pyramid for the sample population in the Western Area, (Figure 6.2). The proportion of adults in the sample is only slightly higher than the national proportion, being 57.4 per cent and 55.6 per cent respectively.

#### Residential Areas

Figure 6.2 shows the age-sex pyramids for the Western Area, Freetown, Urban Places and Rural Area. These pyramids are based on <sup>a</sup> sample population of 11,998 in the Western

FIGURE 6.2

AGE-SEX PYRAMIDS FOR RESIDENTIAL AREAS, 1968



Area, 8,311 in Freetown, 2,850 in Urban Places and 837 in Rural Area. When allowance is made for differences in the sample drawn from each residential area and the degree of accuracy in age reporting, the main features of the age composition of the Western Area are applicable to the residential areas. The population is marked by a high proportion of children and a small proportion of aged persons. There are however, some significant differences which discrepancies in age reporting have merely highlighted.

In Freetown and in Urban Places, the proportion of children is about equal at 37.9 per cent and 37.2 per cent respectively. In contrast, the Rural area has 33.6 per cent of the sample population aged 0 - 14 years. It may be argued that these proportions reflect the differences in the level of fertility and mortality, especially infant mortality. It is also the practice in the rural area that children of school age are placed with relatives and families in the more urban areas to facilitate their access to primary schooling.<sup>11</sup> To these two points may then be added the observation that the ages of teenagers, especially the girls, have been inflated and this has resulted in the lowering of the proportion of children.

Arising out of the preceding comments is the fact that the rural area has the highest proportion of adults, 61.4 per cent of the sample in the area being between 15 and 59 years of age compared to 57.3 per cent and 56.7 per cent in Freetown and urban places respectively. The pronounced indentation in the age pyramid of the rural area at ages 10-19 and the bulge at ages 20-54 are the result of the inflation of ages at the former ages.

But, in addition to this, the rural parts of Western Area, especially the Koya lowland, contain one of the relatively prosperous agricultural communities in Sierra Leone. Consequently, the extent of out-migration from rural area into Freetown and Urban places has not been sufficiently high to produced the shortage of males in general and adults males in particular which is a feature of the districts of Kambia, Bombali and Koinadugu in the Northern Province.<sup>12</sup>

With 5.2 per cent of the sample population aged 60 years and over, the proportions of the sample from each residential area in this age group deserves some comments. In general, the movement of adults from rural to urban areas tend to produce a high proportion of children and aged persons in the rural areas. But in the Western Area, there is an additional trend which accentuates this pattern. This is the movement of aged persons into the rural area. It would appear, however, that such a movement is not aimed at the rural area indiscriminately but that it is localised. It is therefore with the aim of establishing finer details of age structure in the Western Area that attention is now turned to the discussion of age-groups in each of the 21 unit areas which were demarcated in chapter 1.

#### Unit Areas

Bearing in mind the limitations imposed on the reliability of estimates derived from small samples, a discussion of age structure in the unit areas takes the form of age-groups, and dependency ratios derived from these age groups. Table 6.2 shows the percentages of each unit areas' sample population recorded as children, (0 - 14) adult (15 - 59) and

TABLE 6.2

## AGE GROUPS AND DEPENDENCY RATIO IN UNIT AREAS

	Percentages			Dependency Ratio $\frac{a+b}{c} \times 100$
	0 - 14	15 - 59	60 and above	
	a	b	c	
CBD 1 - TOWER HILL AREA	37.5	57.4	5.1	74.2
CBD 2 - COMMERCIAL AREA	35.9	58.4	5.7	71.2
EAST END 1 - BOMBAY STREET	40.9	55.6	3.5	79.8
EAST END 2 - SAVAGE SQUARE	40.2	55.6	4.2	79.8
EAST END 3 - KENNEDY STREET	36.5	59.8	3.7	67.2
EAST END 4 - CLINE TOWN	37.7	57.5	4.8	75.9
WEST END 1 - KING TOWN	34.9	58.4	6.7	71.2
WEST END 2 - CONGO TOWN	38.4	56.8	4.8	76.1
All Preetown:	37.8	57.4	4.8	74.2
MURRAY TOWN	40.8	49.1	10.1	103.7
WILBERFORCE	39.2	57.5	3.3	73.9
LUMLEY	32.2	64.0	3.8	56.3
GODERICH	25.5	73.2	1.3	36.6
KISSY	37.5	58.9	3.6	69.8
WELLINGTON	37.3	56.3	6.4	77.6
WATERLOO RURAL (Macdonald Vgs)	32.6	56.4	11.0	77.3
WATERLOO VILLAGE	46.5	40.8	12.7	145.1
HASTINGS VILLAGE	42.4	51.6	6.0	93.8
All W Urban:	37.2	56.7	6.1	76.4
NORTH/KOYA DISTRICT	29.0	65.0	6.0	53.8
SOUTH/KOYA DISTRICT	42.1	54.8	3.1	82.5
MOUNTAIN DISTRICT	43.0	46.7	10.3	114.1
YORK DISTRICT	28.3	66.8	4.9	49.7
All W Rural	33.6	61.4	5.0	62.9
ALL WESTERN AREA	37.4	57.4	5.2	74.2

Source: Author's analysis

aged persons (60 years and above) respectively. It also shows the dependency ratio for each area.

On the basis of the hypothesis that a population characteristic such as age, which is associated with migration, will show a spatial variation from urban to rural area, the tabulation of age groups and dependency ratios for the unit areas should clarify some of the residential differences which have been discussed so far. It was also pointed out in the classification of settlements into residential areas, (Chapter 5), that the opportunity for employment, and the resource base of economic activities are factors which modify the consideration of population size of settlements. It is, therefore, worth noting that the lowest dependency ratio is obtained for Goderich. The thriving fishing settlement of Goderich attracts migrants from Ghana and,<sup>13</sup> as will be shown later, most of the families engaged in fishing are young with few children and few dependants. This is the background to 73.2 per cent of the sample from this settlement being adults and having one of the lowest proportions of children and of aged persons.

The high proportion of adults and consequently, a low dependency ratio in Koya district must be interpreted against the background of comments made so far about age reporting, a prosperous agriculture and a limited extent of out-migration of adults from this district, and the presence of some in-migrants in the area.

All parts of Freetown and the suburban centres, with the exception of Murray Town, have low dependency ratios. This pattern is consistent with the localisation of employment in manufacturing industry, and in the services in Freetown

Murray Town is one of those settlements in the suburbs of Freetown which has a large proportion of aged persons and about an average proportion of children. Its proportion of adults, at 49.1 per cent, is only higher than that in one other unit area which was classified as urban. This other settlement is Waterloo with only 40.8 per cent of its sample population returned as adults. The high dependency ratio in Waterloo and in the Mountain district, would appear to justify the observation made earlier that the extent of out-migration from this distant urban centre and from the declining villages of the Mountain district is greater than from the smaller agricultural settlements.

With specific reference to the proportion of aged persons in the sample population, the Mountain district, the Macdonald group of villages and Waterloo village are three other areas where high proportions are recorded. Whilst the high proportion of aged persons in the Mountain district appear to be partly due to the outcome of high emigration of adults from the district, the villages south of Waterloo such as Samuel Town, Middle Town and Macdonald have attracted some retired persons from elsewhere. Of the 88 households included in the survey data from this unit area, nine heads of households are retired persons, there are seven other retired relatives making a total of 16 retired persons out of a recorded sample population of 354. The fact that four of the 16 have some formal education and that three of the retired persons are non-Sierra Leoneans would tend to indicate that these are people who have spent their working life elsewhere and have retired into the villages. The attraction of these villages is that they offer housing and living conditions much like those available in former Liberated

African settlements whilst the cost of living is not as high as in the urban area.

#### Determinants of Variation in Age Structure

The implicit assumption in the discussion of age structure has so far been that all parts of the Western Area experience a high fertility and mortality level and that migration, mainly from rural to urban areas, is the underlying factor explaining variations in age structure. Data from the survey were not adequate for measuring fertility and mortality levels.<sup>14</sup>

By employing the Child-Woman Ratio as a measure of the incidence of childbearing in the population of adult women, the validity of the assumption of high fertility can be tested. Table 6.3 shows the number of children under five years old, the number of women of childbearing age (15-49) and the computed ratio for the Western Area, the three residential areas and each of the 21 unit areas. In spite of the limitations on the reliability of the ratio as a measure of fertility,<sup>15</sup> imposed by sample size and discrepancies in age reporting and the completeness of enumeration, some trends still emerge.

The Western Area ratio of 495 per 1,000 women is exceeded in most parts of Freetown and the suburban centres. The low ratio in Goderich is in line with the presence there of young families engaged in fishing. In Waterloo district, there is a sharp contrast between the 452 per 1,000 women reported for the town of Waterloo and the low ratio of 295 per 1,000 women returned for the rural settlement. This contrast is independent of sample size since the sample selected from the rural settlements is in fact greater than that selected from Waterloo Village.

TABLE 6.3  
CHILD/WOMAN RATIO UNIT AREAS

Unit Area	No. Children 0 - 14 a	No women 15 - 19 b	Child/Woman Ratio a/b x 1000
CBD 1 - TOWER HILL AREA	119	259	459
CBD 2 - COMMERCIAL AREA	136	306	444
EAST END 1 - BOBRAY STREET	176	269	654
EAST END 2 - SAVAGE SQUARE	135	255	529
EAST END 3 - KENNEDY STREET	115	224	513
EAST END 4 - CLINE TOWN	139	265	525
WEST END 1 - KING TOWN	92	213	432
WEST END 2 - CONGO TOWN	141	279	505
All Free town:	1,053	2,070	509
MURRAY TOWN	27	48	563
WIBERFORCE	31	50	620
LUMLEY	32	56	571
GODFRICH	15	45	333
KISSY	89	203	438
WELLINGTON	50	103	485
WATERLOO RURAL (Macdonald Villages)	26	88	295
WATERLOO VILLAGE	14	31	452
HASTINGS VILLAGE	52	89	584
All Urban:	336	713	471
NORTH/KOYA DISTRICT	13	33	394
SOUTH/KOYA DISTRICT	53	102	520
HOUMAN DISTRICT	11	22	500
YORK DISTRICT	30	81	370
All Rural:	107	238	449
WESTERN AREA	1,496	3,021	495

Source Author's analysis

In Koya, Mountain and York districts, the trend is not conclusive, but it would appear that, in general, there is an urban/rural differential in fertility indicated by the various ratios.

With reference to levels of mortality, there is no convenient measure available from the survey result. It is however, apparent that with an estimated expectation of life at birth of 41 years for the 1965-70 period,<sup>16</sup> mortality is high in all parts of the Western Area. Differences in the level of infant mortality between urban and rural areas and in the level of mortality amongst various demographic and social groups in the population<sup>17</sup> are to be expected.

On the extent of immigration into the Western Area, the C.S.O.,<sup>18</sup> on the evidence provided by the second round of the household survey concluded as follows:

"About 3% of all persons in the Western Province (Western Area) at the end of 1967 had moved into the area during the year. In addition there were some movements of households within the Western Province".

Table 6.4 shows the percentage distribution of household members in each of the three residential areas by migration status at the end of 1967 and as recorded by the final report prepared by the C.S.O.<sup>19</sup>

Although the urban places registered the highest rate of immigration, it is Freetown that attracted the highest proportion from outside the Western Area. The rural area also turn out to be the destination for some immigrants from other parts of Sierra Leone. The number of such migrants is equal to the number moving into the rural area from Freetown and other urban places. These figures confirm the status of the Western Area as an in-migration area and

TABLE 6.4

PERCENTAGE DISTRIBUTION OF HOUSEHOLD MEMBERS BY  
MIGRATION STATUS 1967/8

Migration Status	Freetown	Urban Places	Rural Area
<u>In Area all year:</u>	94.4	93.3	97.5
Had not moved	84.4	89.4	96.8
Changed dwelling Unit	10.0	3.9	0.7
<u>Moved into area during year:</u>	5.6	6.7	2.5
From other part of Western Area	1.7	4.2	1.1
From other Provinces	3.1	1.8	1.1
From Outside Sierra Leone or not recorded	0.8	0.7	(0.3)
All Household Members	100.0	100.0	100.0

Source: See footnote no. 19

provide additional evidence that most of the immigration into the area is aimed at Freetown.<sup>20</sup> Subsequent readjustment involving some urban to rural migration also take place within the area.

### Age Structure Index

One way of monitoring the effects of levels of fertility, mortality and migration on age structure in the Western Area is to apply an index which summarises the age structure in different parts of the Western Area. Such an index may then be applied at different intervals to record the direction of change far more effectively than is possible by the inspection of age pyramids alone. Such an index has been proposed by Coulson. The age structure index (ASI) according to him, 'provides a single quantitative measure of the age structure.'<sup>21</sup>

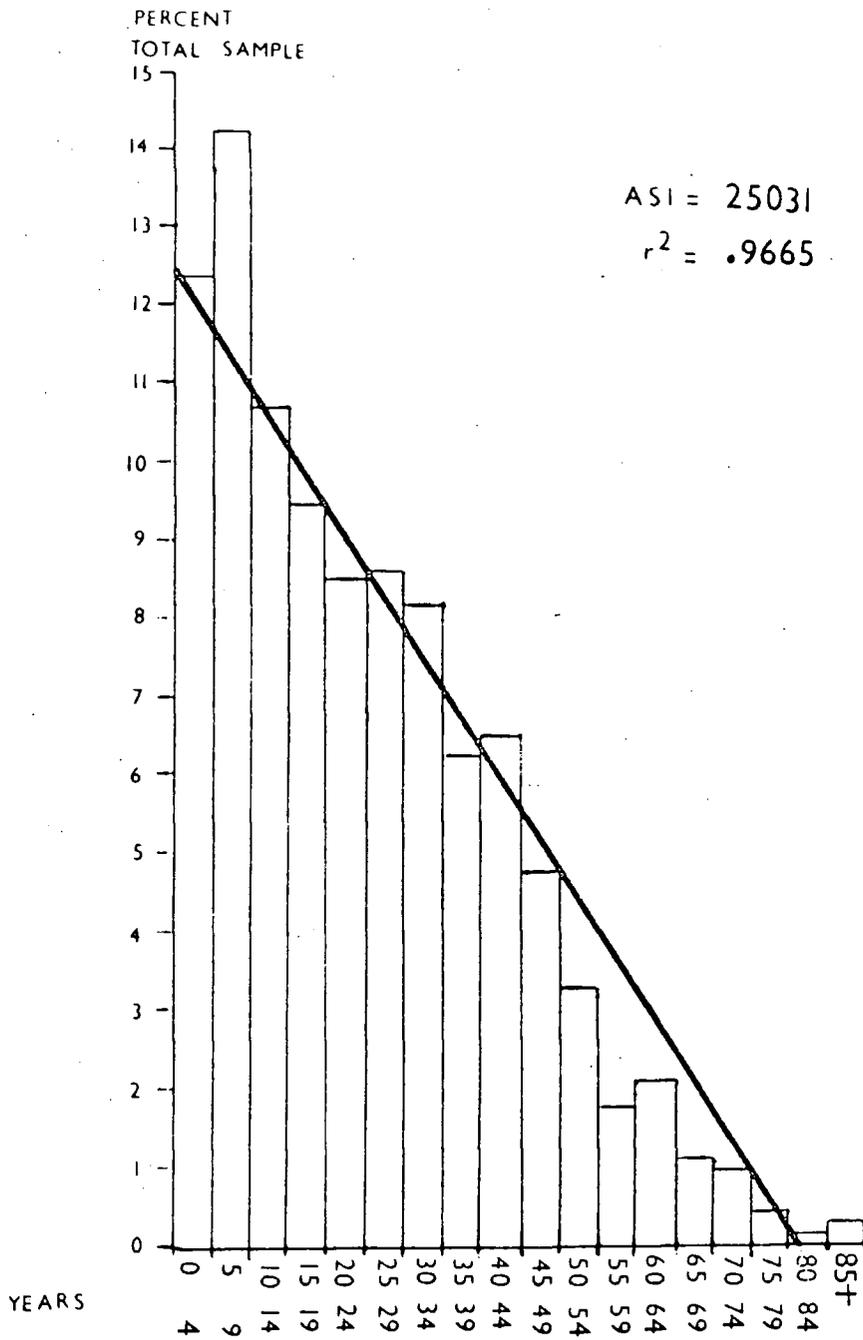
Stated briefly, the ASI employs a linear generalisation of the outline of age pyramids. Using an equation describing a least square trend line, Coulson was able to obtain a continuous range of values for each census tract which can then be ranked to provide a quantitative description from young to old population. Since the index is for the combined male and female population, its computation is based on age histogram rather than pyramids.<sup>22</sup>

Figure 6.3 shows the age histogram for the total sample population and the least square line drawn by eye. The line describes the relationship of the values of the Y axis (percentage of total population at each age class) to those of the X axis (the 5-year age classes). The position and the slope of the line can be expressed in the equation

$$Y = a + bX$$

The 'a' describes the position of the line and it is a

FIGURE 6.3



POPULATION HISTOGRAM — TOTAL SAMPLE  
showing  
LEAST SQUARES TREND LINE

constant representing the value of Y, when X equals zero, that is, it gives the point at which the line cuts the Y axis. The 'b' is the regression coefficient and is a measure of the slope of the line. It is this 'b' which is the ASI for each census tract.<sup>23</sup> In order to test the accuracy of each ASI, a coefficient of determination, 'r'<sup>2</sup>, was computed for each data set.<sup>24</sup>

Table 6.5 shows the sample size, the ASI and the coefficient of determination of the index for each unit area. The larger the sample, the more reliable the ASI. But in as much as there is no coefficient below the critical .7000 level, the ASI can be accepted as reliable.

On the interpretation of the values of ASI, the larger the value, the younger is the population. In order to obtain meaningful interpretation of the values, an ASI was computed for the age structure of Sierra Leone population in 1963, (Appendix 6.2). The index was 24685. And a similar index for the population of the Western Area in the same census was 25075. Compared to the survey sample index of 25031, the indices for 1963 indicate that the population of the Western Area is younger than the combined Sierra Leone population, and that hardly any change has taken place in the age structure of the Western Area since the census.

The next step was to put the values in an international perspective so that the terms 'younger' and 'old' can be seen in true context. An ASI was computed for one of the world's oldest populations and another for one of the youngest, France and Honduras respectively.<sup>25</sup> France had an index of 10030 and Honduras had 31159. Against these figures, the overall youthfulness of the sample population is apparent, but variations considered as significant occur.

**TABLE 6.5**  
**SAMPLE SIZE, AGE STRUCTURE INDEX (ASI) AND THE COEFFICIENT OF DETERMINATION**  
**(r<sup>2</sup>) OF THE ASI FOR UNIT AREAS**

Unit Area	Sample Size	ASI	r <sup>2</sup>
CBD 1 - TOWER HILL AREA	1,082	24,953	.9493
CBD 2 - COMMERCIAL AREA	1,188	24,763	.9661
EAST END 1 - BOMBAY	1,060	26,434	.9489
EAST END 2 - SAVAGE SQUARE	1,073	25,964	.9536
EAST END 3 - KENNEDY STREET	895	25,374	.9534
EAST END 4 - CLINE TOWN	1,036	25,367	.9609
WEST END 1 - KING TOWN	847	23,661	.9600
WEST END 2 - CONGO TOWN	1,130	25,493	.9474
<b>All Free town:</b>	<b>8,311</b>	<b>25,278</b>	<b>.9684</b>
MURRAY TOWN	218	23,936	.9341
WIBERFORCE	214	26,059	.9337
LUMLEY	208	24,814	.9222
GODERICH	157	24,620	.7483
KISSY	771	25,523	.9237
WELLINGTON	389	24,264	.8982
WATERLOO RURAL (Macdonald Villages)	354	23,889	.8453
WATERLOO VILLAGE	157	23,799	.7824
HASTINGS VILLAGE	382	25,946	.9332
<b>All W Urban:</b>	<b>2,850</b>	<b>24,601</b>	<b>.9470</b>
NORTH/KOYA DISTRICT	100	22,872	.8474
SOUTH/KOYA DISTRICT	347	24,941	.8521
MOUNTAIN DISTRICT	107	24,352	.8674
YORK DISTRICT	283	22,828	.7991
<b>All W Rural:</b>	<b>837</b>	<b>23,965</b>	<b>.9019</b>
<b>WESTERN AREA</b>	<b>11,998</b>	<b>25,031</b>	<b>.9665</b>

Source Author's analysis

Note: For level of significance of the r<sub>s</sub> values see S. Gregory, p. 180/81

Figure 6.4 shows the pattern of variation in the 21 unit areas. The youngest population is to be found in Freetown and the suburbs, with an ageing away from the city. Such a pattern is to be expected when adults at working ages move into urban areas. They, being in their reproductive ages as well, also add appreciable numbers of young dependants into the urban population. In contrast such movements reduce the number of adults in the rural area and the proportion of the total population who are aged persons is correspondingly increased.

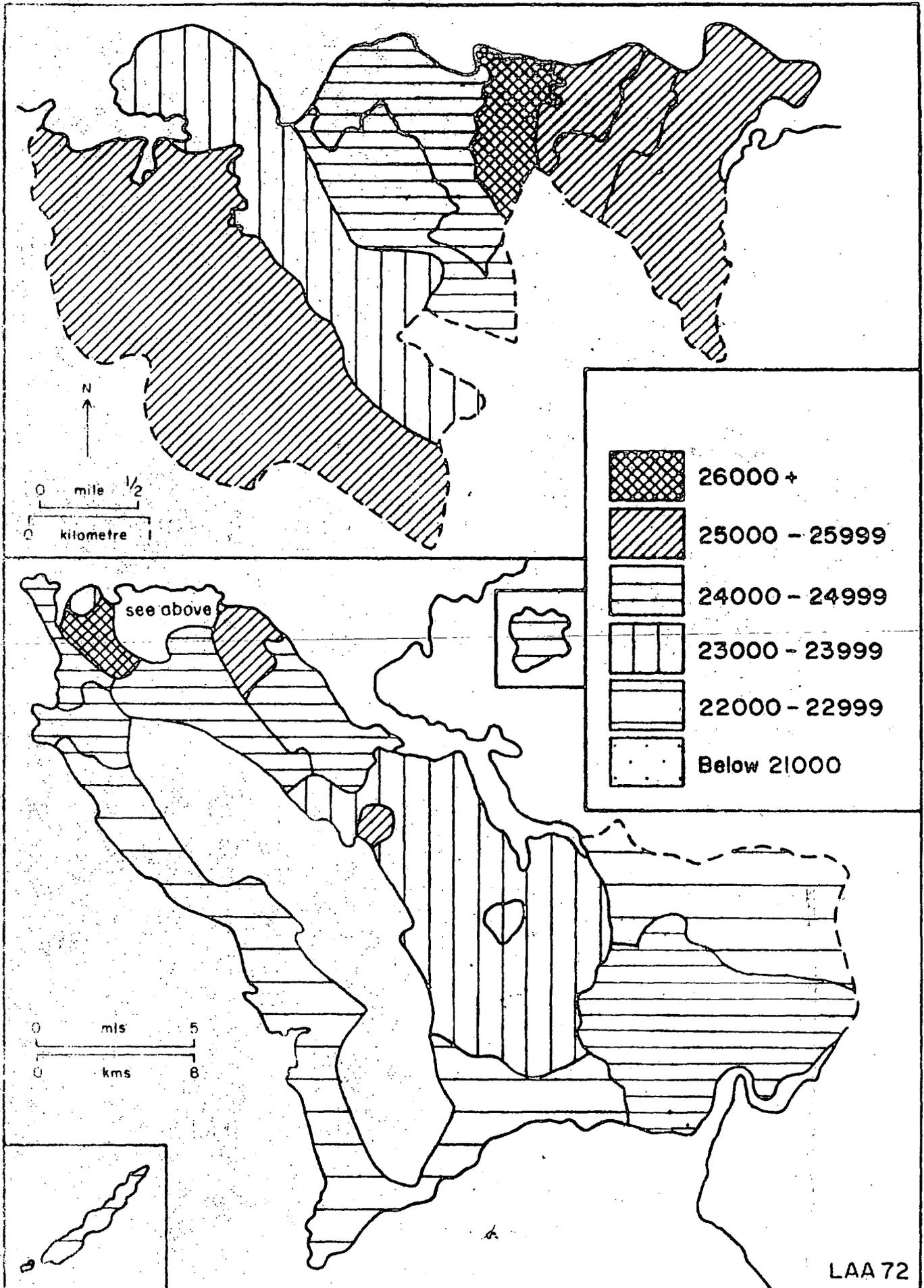
In Freetown, the movement of young families away from the city centre into the more fashionable suburban centres has created a situation in which the population of the city centre is noticeably older than the population living in the periphery. The high proportion of aged persons in Murray Town and the retirement of some to Macdonald area again show up in the two units having relatively older population.

#### Summary

The basic feature of the sample population is a high proportion of children and a low proportion of aged persons. Some variations occur in these proportions, the most notable being the high proportion of young adults and a relatively lower proportion of children and aged persons in Goderich. The possibility of discrepancies in age reporting and the small sample size affecting conclusions reached, was not overlooked.

Because of the absence of sufficient details on the levels of fertility, mortality and to a lesser degree, migration, in the different units of the Western Area, gauging the effects of these events on age composition was necessarily

FIGURE 6.4



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AGE STRUCTURE INDEX

circumscept. The possibility of differences in the age composition of ethnic groups contributing to the observable residential pattern is left until a discussion of the ethnic composition of the sample population in chapter 11.

The computation of the ASI provided a means of codifying the youthfulness of the sample population in the sub-divisions of the area. It also allowed the youthfulness to be placed in a wider context. It is hope that, by making similar computations at latter dates, changes in age composition can be followed more quantitatively than is possible from the inspection of age groups or pyramids.

NOTES AND REFERENCESCHAPTER 6

1. The population of Sierra Leone is the ultimate universe against which estimates of population characteristics need to be compared.
2. Coulson, M.R.C., 'The Distribution of Population Age Structure in Kansas City', in Demko, Rose and Schnell (eds.) Population Geography: A Reader, McGraw Hill, 1970, pp. 408-430.
3. Age structure of the sample population is based on the writer's analysis and that of the Sierra Leone population on Clarke, J.I., 'Age Structure' in Sierra Leone in Maps edited by same author, Oxford University Press, 1966, p. 46.
4. United Nations, Demographic Yearbook, 1970, p. 119 contains a 1965-70 estimate of crude birth rate of 44.8 per 1,000, a crude death rate of 22.7 per 1,000 and a natural increase rate of 22.1 per 1,000 for Sierra Leone. These estimates were prepared by the U.N. Population Division.
5. Caldwell, J.C. and Igun, A.A., 'An Experiment with Census type Enumeration in Nigeria', Population Studies, 25, 1971, pp. 287-290.
6. This is in spite of the statement to the contrary in C.S.O., Freetown Household survey of the Western Area November 1966 - January 1968, Final Report, p. 3.
7. Mr. Labor, who was a Supervisor in both rounds of the Household Survey, explained that, since selected EAs were not visited in exactly the same sequence as in the first round, some intervals were telescoped into slightly more than 10 months but in general children return in both rounds who had no precise date of births tended to be returned as one year old. (Discussions, C.S.O. Freetown, October, 1969 - June 1970).
8. Clarke, J.I. op.cit. p. 46.
9. The main feature of female age reporting was an inflation of ages of those in their teens, producing a shortage of females at ages 15-19.
10. Clarke, J.I. op. cit. p. 47.
11. This is the field observation of this writer whilst on field work in the Koya lowland, December 1969. Waterloo and Freetown were the two frequently stated places of residence of such children.
12. Clarke, J.I., op. cit. p. 47
13. Williams, G.J. 'Fisheries' ibid. pp. 84-85.
14. See footnote no. 9, Chapter 1 of this thesis.

15. Barclay, G.W. Techniques of Population Analysis, Wiley, 1970, pp. 24, 172 and 214 contain the method of computation and comments on the limitations of the child-woman ratio.
16. United Nations, op. cit. p. 119
17. These differences are the outcome of variations in the provision of medical services and the different risks of death to which categories of persons in a population are exposed. See Clarke, J.I. Population Geography, Pergamon Press, 1966 pp. 117-122 for a discussion of differential mortality and causes of death.
18. C.S.O., op. cit. p. 18
19. ibid., Table 28, p. 70
20. See also Forde, E.A. and Harvey, M.E. 'Graphic Analysis of Migration to Freetown', Sierra Leone Geographical Journal, No. 13, 1969 pp. 20 ff.

21. Coulson, op. cit. p. 409
22. ibid., p. 410. It is not clear if Coulson based his computation on age groups extending to 99 years or if the last group of 'over 84' shown on the histogram, idem., is employed. In this thesis, computation is for age groups 0-4, 5-9 .....65 and over. A trial computation with age groups up to 99 years for the sample population shows no significant difference in the index obtained. It should be noted that for the last telescoped age group 65 years and over, the X value is 82 which is the mid point between 65 and 99, (see Appendix 6.2).
23. To obtain 'b' we substitute in the formula:-

$$b = \frac{XY - (\sum X)(\sum Y)/N}{\sum X^2 - (\sum X)^2/N}$$

where N = the number of pairs of observations (14 age groups) the value of Y are the set of percentages of total population and X is the mid-value of each age group, X<sub>j</sub> = 2, 7, 12, 17, .....82.

For a derivation of the formula see Toyne, P. and Newby, P.T. Techniques in Human Geography Macmillan, 1971, p. 56 where 'b' is referred to as 'm'.

24. To obtain 'r<sup>2</sup>' for each data set, we substitute in the formula:-

$$r^2 = \frac{\sum (X - \bar{X})(Y - \bar{Y})/N}{\sigma X \cdot \sigma Y}$$

where  $\bar{X}$  is the mean of the values of X and  $\bar{Y}$  is the mean of the values of Y, and  $\sigma X$  and  $\sigma Y$ , the respective standard deviations.

25. U.N., Demographic Yearbook, 1964. p.144 for France in 1962 and p. 138 for Honduras in 1961 census. The choice of both dates was to employ data contemporaneous to the Sierra Leone 1963 census.

## CHAPTER 7

### SEX COMPOSITION

In 1963, Sierra Leone had an excess of females and a sex-ratio of 983 males per 1,000 females.<sup>1</sup> In contrast, the Western Area had an excess of males, there being 1,114 males per 1,000 females. Neither the excess of males nor the sex-ratio in the Western Area was as high as in the diamond mining areas of Kono, Kenema and Bo districts.<sup>2</sup> But, as in the diamond area, the basis of the high sex-ratio is obvious. As Clarke<sup>3</sup> pointed out, Freetown and its suburbs attract more males through the opportunities for employment and education there.

By the time of the survey, the sample population had a sex-ratio of 1,063 males per 1,000 females. This ratio is lower than in 1963 but it shows that the Western Area is still one of the areas with an excess of males in Sierra Leone. In this chapter, variations in sex-ratio within the Western Areas are described. The reasons for the concentration of more males than females in specific areas are explained. A discussion of age-specific sex-ratio throws additional light on the excess of adult males in specific areas. Mention is also made of other factors affecting sex-ratios and the relative significance of such factors in the light of evidence available from the survey analysis. The migratory tendencies shown by the various tribes and the relationship of these tendencies to tribal sex-ratio is the most significant of these factors.

#### Urban-Rural Variation

In the three residential areas, sex-ratios showed an increase from 1,048 males per 1,000 females in Freetown to 1,095 males in urban places and to 1,108 males in the rural

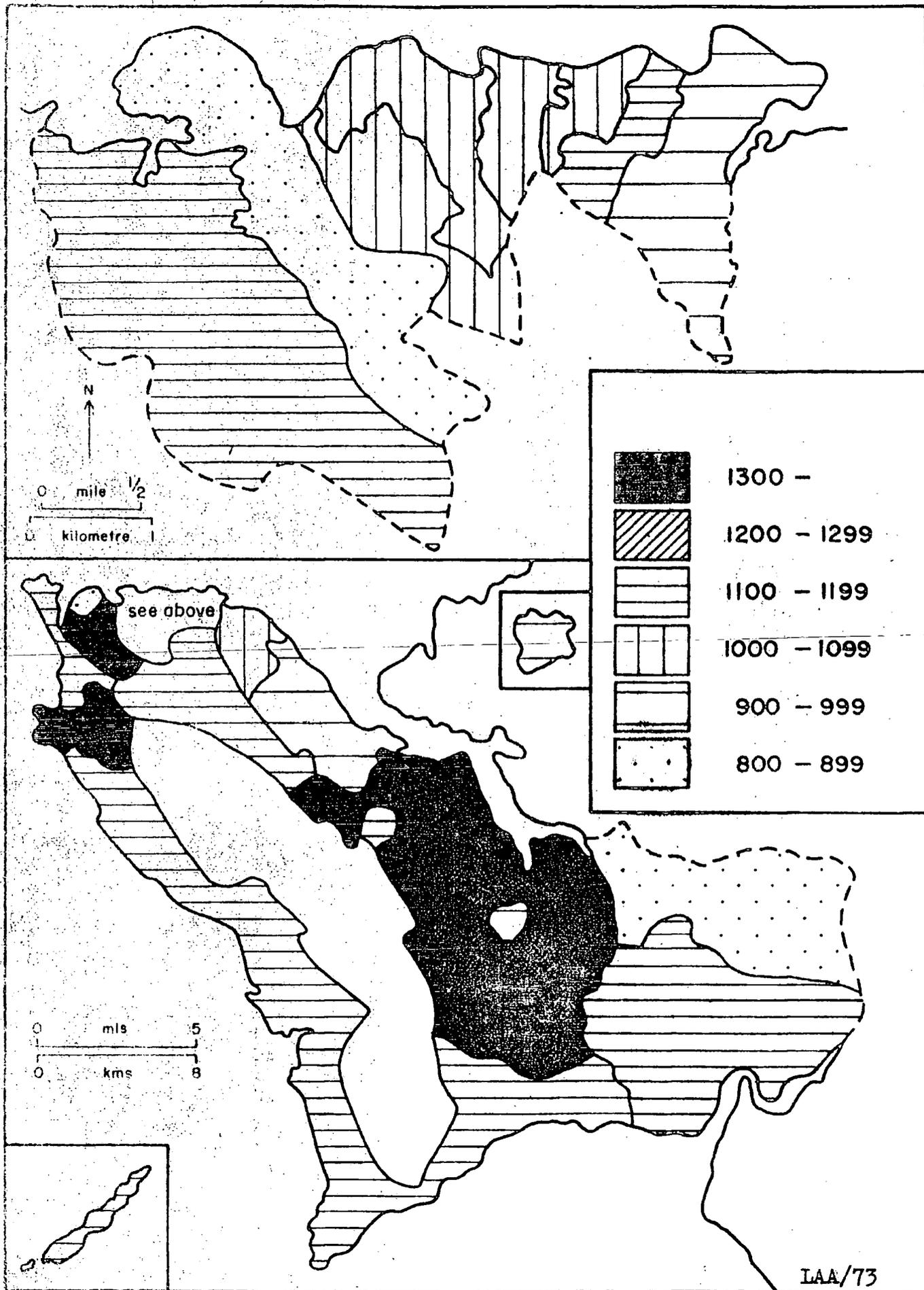
area. The presence of high sex-ratios in both urban and rural areas confirms the status<sup>of</sup> the Western Area as a destination of migrants, composed of more males than females, from the rest of Sierra Leone and from other parts of West Africa.<sup>4</sup> The higher rural sex-ratio also suggests both the presence of rural economic activities which attract male participation as well as the probable residence of special groups of males in the rural area. Fishing is such a rural economic activity. The presence of institutions such as the Police Training School in Hastings and the Military Barracks in Juba results in the predominantly male population, associated with such institutions, finding accommodation in the rural area and, consequently, increasing the sex-ratio. In order to confirm the accuracy of the reasons given<sup>for</sup> high sex-ratios in both urban and rural areas, attention is turned to the ratios for subdivisions of the Western Area.

#### Sex ratios in the Unit Areas

Table 7.1 shows the distribution of the sample population from each unit area by sex and corresponding sex-ratio for the unit area. The sex-ratios for the various units are mapped on Figure 7.1 for easy visual comparison.

In Freetown, six of the eight unit areas have sex-ratios close to the Freetown mean of 1,048 males per 1,000 females. In the two remaining units (King Tom/Brooksfields and Congo Town) the lowest and the highest ratios in Freetown, of 899 males and 1,169 males per 1,000 females, respectively, are recorded side by side. In spite of these two extreme ratios, Freetown as a whole has quite a small excess of males recorded. In a sample population of 8,311 from Freetown,





SEX RATIOS -1968  
(Total Sample- Population)

LAA/73

males outnumber females by only 195.

From the establishment of Freetown until the middle of the 19th century, when the last of the Liberated Africans had settled in the Western Area, a high sex-ratio could easily be accounted for. Pioneer settlers and slaves from captured vessels were, understandably, predominantly male. But the emigration of Creole males to other parts of Sierra Leone and West Africa reduced the excess of males. By 1860, the initial excess of males had turned to an excess of females.<sup>5</sup>

Meanwhile, Freetown emerged as the major urban centre in Sierra Leone. In response to the increasing opportunity for gainful employment and a noticeably higher standard of living possible in the urban areas as opposed to subsistent existence in the rural area, migrants from the neighbouring tribes and from further afield, moved into the city in large numbers. Although such migrants were, and are still, predominantly males, the existence of a large commercial sector in the urban economy, in which females could also be gainfully employed, has encouraged the immigration of appreciable number of females from the different tribal areas. Consequently, the sex-ratio of the non-Creole population is much more balanced than in the past, although excess of males among non-Creoles still remains the source of the overall excess of males in Freetown.<sup>6</sup>

Outside Freetown, three areas with high sex-ratios stand out. Goderich, Wilberforce and the Macdonald villages have ratios of 1,492, 1,372 and 1,360 males per 1,000 females respectively. The fishing community in Goderich and especially the Ghanaian element in the sample population contain more males than females,<sup>7</sup> males being the more involved

in the arduous task of fishing.

The siting of the military barracks in Wilberforce results in an appreciable number of males, attached to the barracks, finding accommodation in parts of the settlement and thereby increasing the sex-ratio. This is in spite of the exclusion of the actual residents of the barracks from the selection of samples based on non-institutional households.<sup>8</sup>

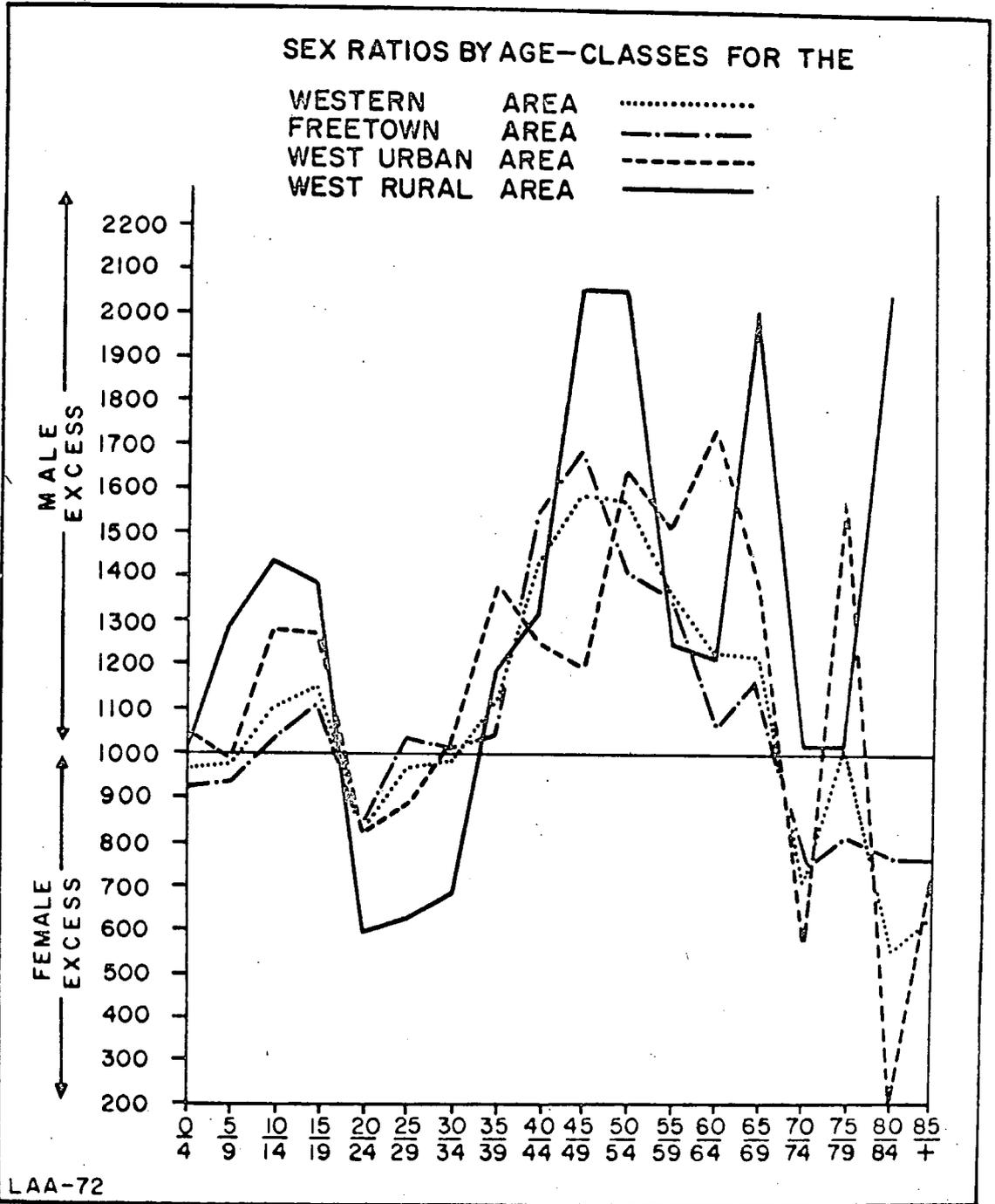
The high sex-ratio in the rural area of Waterloo district and in the south of Koya district as well as in York district is related to the predominance of male participation in fishing and farming activities. One feature of the family and household composition in these districts is the presence of a large number of male relative who help the head of households in these activities.<sup>9</sup>

Since a high sex-ratio in the Western Area is interpreted as the outcome of more male immigration into the area, in search of employment and other opportunities, then the sex ratio of the population in the working ages should provide a more pertinent measure of the migratory response to the disposition of such economic opportunities.

#### Age Specific Sex-Ratio

Figure 7.2 shows the age-specific sex ratios for the Western Area, Freetown, urban places and rural area plotted as deviation graphs. In each of the four sample populations, an excess of males at the ages 0-19 is followed by an excess of females at the ages 20-29. This is followed by a marked excess of males among older adults. The displacement of teenage girls from ages 15-19 mostly into ages 20-24 is responsible for the alternating high and low sex-ratios. But the most relevant feature is the high sex-ratio at the

FIGURE 7.2



age-group 15-59.

Additional detail on age-specific sex-ratio is provided on Table 7.2 which shows the sex-ratio at each age group for the sample population from each of the 21 unit areas. Contrary to the general increase of total sample sex-ratio from Freetown to the rural area, the sex-ratio of the adult population is highest in Freetown at 1,121 males per 1,000 females. The sex-ratio for the same age group in the urban places is nearly the same as in Freetown but in the rural area, there is only a very slight excess of males at this age group.

In Freetown, two areas with high sex-ratios can be identified. These are the CBD and the Cline Town areas. Apart from the various sex-ratios among the adult population indicating the dominance of Freetown in the provision of employment, educational and other opportunities, they also indicate that there is a link between the location of such opportunities and facilities and the residence of the people making use of them. In the choice of accommodation, the majority of the labour force, semi-skilled or unskilled and with low income, tend to concentrate around their places of work. In contrast, the fewer skilled and better paid members of the professions and administrative class can afford to spend more on transportation and consequently be more flexible in their choice of accommodation. The sample households in the high sex-ratio areas include a higher proportion of one-person households containing, mostly, single working males<sup>10</sup> than found elsewhere.

Wilberforce is one of the urban places with a marked excess of males in the adult age-group. This is consistent

TABLE 7.2

SEX RATIO (MALES PER 1,000 FEMALES) FOR THREE AGE GROUPS IN EACH UNIT AREA

Unit Area	SR		
	Children 0-14	Adults	Old Aged
CBD 1 - TOWER HILL/CIRCULAR RD.	1,019	1,201	646
CBD 2 - COMMERCIAL AREA	889	1,100	888
EAST END 1 - BOMBAY STREET	937	1,081	1,867
EAST END 2 - SAVAGE SQUARE	996	1,155	1,252
EAST END 3 - KENNEDY STREET	957	1,239	644
EAST END 4 - CLINE TOWN	916	1,069	761
WEST END 1 - KING TOWN	745	1,021	785
WEST END 2 - CONGO TOWN	1,191	1,115	1,292
All Freetown:	959	1,121	944
MURRAY TOWN	894	946	692
WILBERFORCE	1,154	1,321	749
LUMLEY	1,160	1,180	1,000
GODERICH	1,223	1,556	(male)
KISSY	966	1,092	1,196
WELLINGTON	959	947	1,272
WATERLOO RURAL (Macdonald Villages)	1,627	1,082	2,000
WATERLOO VILLAGE	827	883	1,219
HASTINGS VILLAGE	1,250	1,095	645
All W Urban:	1,079	1,102	1,135
NORTH/KOYA DISTRICT	706	805	(all male)
SOUTH/KOYA DISTRICT	1,384	1,078	1,200
MOUNTAIN DISTRICT	1,554	1,001	832
YORK DISTRICT	1,052	1,055	724
All W Rural:	1,196	1,055	1,211
WESTERN AREA			

Note: Because of few old aged population the sex-ratios are only representative for Freetown; for other places see sampling error Table.

with the presence, there, of large military establishments directly employing large numbers of males. In addition, the choice of Wilberforce, as preferred residence by members of the professions and other executives working in Freetown and predominantly male, influences the sex-ratio of the adult population in this settlement.

Goderich again shows the highest sex-ratio in the adult age group as it did for the total sample, emphasising the predominance of male immigrants engaged in fishing activities in this settlement. An excess of males in the adult age group is also recorded in other places such as Lumley and in York district where there are appreciable fishing communities.

~~Eleant~~ here, and particularly in the Koya district, an even sex-ratio or a slight excess of females is recorded at the adult age group. With the sample population in the old age group in these areas being mostly male, there is a possibility that an inflation in the ages of adult males may have taken place. Anyone who has observed the effect of diseases such as elephantiasis and other skin diseases on the appearance of persons engaged in fishing and in agriculture will appreciate how such an inflation of ages may have occurred.<sup>11</sup> In addition, the absence of an upper age limit to participation in agriculture and to a lesser degree in fishing, as opposed to participation in the industrial and service sector of the economy in urban areas reduces the significance of the low sex-ratio recorded in the adult age group in the rural areas.

#### Masculinity at Birth and Differential Mortality of the Sexes

These are two of the factors that affect sex-ratios but

about which very little has been said. Evidence from the survey analysis on masculinity at birth is not conclusive. Apart from the possible under-enumeration of infants in the survey,<sup>12</sup> the number of infants returned showed about equal number of males and females at 75 and 77 respectively. For the age class 0-4, there is an excess of females, there being 958 males per 1,000 females in this age class.

The chances of error in sex reporting in the survey, in which names of individuals were taken must be ruled out. But with the high infant mortality rate of 146.5 per 1,000 life births in 1967,<sup>13</sup> a high sex-ratio of foetal deaths<sup>14</sup> and the possibility of more male than female infants deaths in the first few weeks of life are reasons that may account for the excess of female infants and for the excess of females at the age class 0-4.

Except for the tentative suggestion of differential mortality of the sexes in infancy, there is hardly any evidence for extending this suggestion to other age classes. But it is likely that the poorer health services in the rural area may contribute to higher female mortality especially of females in the reproductive ages. An assessment of the possible effects of these factors on sex-ratio must await more research and a wider application of a vital registration system in all parts of the Western Area.

#### Migration and Sex Ratio

Migration remains the other major cause of variations in sex-ratio requiring further discussion. Implicit in the description and explanation of sex-ratios in the Western Area is the role that migration plays in the high sex-ratio observed in the fishing communities. It was also stated

that such migration involved mostly persons in the adult age group. The differences in adult sex-ratios from area to area was noticeably related to the differences in the level of economic activity and the opportunities open for employment in the manufacturing and service sectors.

Evidence from the survey analysis on the extent of migration, discussed in the last chapter, revealed that appreciable proportions of the households and of individuals in the Western Area were involved in movements from and to other places outside the area as well as in movements within the Western Area. The extent of such movements was also shown to be higher in urban areas than in rural areas. The relationship between the levels of such movements, which is used here as a crude mobility index (CMI)<sup>15</sup> and the sex-ratios of the tribal elements of the sample population should provide a further link between migration and variations in sex-ratios.

On Table 7.3, the sample population is classified into tribes and by sex. The sex-ratios <sup>for the</sup> samples are shown. These figures by themselves only provide a limited insight into the relationship between migration and sex-ratios. The case of the Fula tribe with a sample of 846 and a sex-ratio of 1,783 males per 1,000 females draws attention to the known tendency to migrate shown by this tribe and the masculinity in its ~~sex~~ sex composition.

Drawing on knowledge of the history of the arrival of the various tribes in the Western Area<sup>16</sup> and of their distribution in other parts of Sierra Leone<sup>17</sup> or West Africa,<sup>18</sup> it is possible to group the tribes into categories which

TABLE 7.3

SAMPLE POPULATION CLASSIFIED BY TRIBE AND SEX  
 (Sex Ratios are shown in the last column)

Tribe	Total Sample	Male	Female	Sex Ratio
Creole	3,030	1,410	1,620	870
Temne	3,436	1,707	1,729	987
Mende	1,214	679	535	1,269
Loko	539	291	248	1,173
Limba	1,289	691	598	1,156
Sherbro	320	178	142	1,253
Susu	300	146	154	948
Minor tribes from S.L	131	78	53	1,471
Fula	846	542	304	1,783
Kru	178	85	93	914
Madingo	285	146	139	1,050
Non- Sierra Leoneans	430	230	200	1,150
<b>TOTAL</b>	<b>11,998</b>	<b>6,183</b>	<b>5,815</b>	<b>1,063</b>

Source: Author's analysis

broadly reflect their migratory tendencies. The proportion of individuals in each of the grouped tribes, who either moved into the Western Area in the interval between the two rounds of the survey or who changed accommodation within the area during the interval is shown on Table 7.4 as CMI and the sex-ratios for the different groups are shown in the last column. Four groups are identified.

The first group consists of the Creole and Temne sample population. Because of their large sample sizes (53.9 per cent of the total) and because of their long history of occupying the Western Area the two tribes may be regarded as 'host' tribes. They both show low sex-ratios and a lower than average mobility index. Only 12.1 per cent of the sample population belonging to the two tribes were involved in any movement between the two rounds of the survey as opposed to the 13.3 per cent of the total sample.

The low sex-ratio among Creoles is not a recent phenomenon and, apart from the emigration of Creole males,<sup>19</sup> a possible explanation is that some Creole males return themselves as belonging to other tribes, to which they may be linked, whilst some females from other tribes may have been absorbed into the Creole community.<sup>20</sup> In the case of the Temnes, who were the original owners of the Western Area and of the neighbouring territories, they have had a long period over which to redress an imbalance in sex-ratio by the immigration of large numbers of males and females. The trading opportunities in Freetown, providing opportunities for male and female participation, has encouraged such a balanced sex ratio among a tribe situated conveniently near the area.

TABLE 7.4

SEX-RATIO AND CRUDE MIGRATION INDEX FOR GROUPS OF TRIBES

Group of Tribes	Combine Sample	Sex Ratio for Combine Sample %	No. changing dwelling unit between rounds of survey	Proportion CMI %
<u>Host Tribes:</u> Greole and Temne	6,466	931	784	12.1
<u>Other Sierra Leone Tribes:</u> Mende et al	3,793	1,193	506	13.3
<u>Tribes originating outside Sierra Leone:</u> Fula, Kru, Madingo	1,309	1,442	252	19.3
Sierra Leoneans	430	1,150	50	11.6
Total	11,998	1,063	1,592	13.3

Source: Author's analysis

Note: For explanation of groups see text  
For CMI see text and footnote no. 15.

The second group consists of various other tribes originating in Sierra Leone and with sample sizes ranging from the 1,214 members of the Mende tribe to the single persons included from each of the Soso and Gola tribes. The combined sample from these other tribes is 3,793 which is 31.6 per cent of the total sample. The sex-ratio of 1,193 males per 1,000 females is appreciably higher than for the total sample. But the proportion of these tribes involved in movements during the interval between the two rounds of the survey, at 13.3 per cent, is exactly the same as for the total sample.

The majority of the excess of males in the second group was recorded for the Mende, Limba and Loko tribes. These are the tribes that have not had as long as the first group to redress an imbalance in their sex composition, although their ~~popu~~ numbers in the Western Area are growing.

The third group consists of the Fula, Kru and Madingo tribes. They are the tribes who originated from outside Sierra Leone but have now settled in the country in appreciable numbers and for some generations.<sup>21</sup> In the case of the Fula tribe, there is still a very active link between those members of the tribe living in the Western Area and their relatives staying in Guinea Republic.<sup>22</sup> Because of this link, cases of members of Fula households travelling to and others arriving from Guinea are frequent. This tribe had the highest mobility index of 19.2 per cent and a sex-ratio of nearly two males to a female.

In the case of the Kru tribe, a slight excess of females is the direct outcome of a number of male heads of Kru households who were away at sea at the time of the

second round of the survey. Otherwise, one would expect that, since the Kru community is fairly stable and well established in the Western Area, the Kru tribe would have a balanced sex-ratio.

The Madingo, with a low mobility index and a balanced sex-ratio prove the point that, when tribes settle down for generations and, unlike the Fula, are not forced by circumstances to maintain links with their country of origin, then the tendency is for a redress of any initial adverse sex-ratio that may have existed. It is quite probable that the balanced sex-ratio was achieved, partly by direct immigration of females of the Madingo tribe, and partly by the males of the tribe marrying into other tribes, especially the Temne tribe.<sup>23</sup>

The final group consists of non-Sierra Leoneans, of which Nigerians and Ghanaians are the two largest elements, (chapter 11). This group has a sex-ratio of 1,150 males per 1,000 females and a mobility index much lower than for the total sample.

The sex-ratio is not excessively high because of the long history of contact between the Western Area and the two countries. And in the case of Nigerians, numbers of females have travelled out from Nigeria to Sierra Leone to engage in an import trade in foodstuffs for the large Nigerian community in Sierra Leone as well as for the host population. The existence of this trade based on a cheap ocean route encouraged further migration to Sierra Leone.<sup>24</sup>

Although, like the Fula tribe, the Nigerian and Ghanaian elements retain strong links with their country of origin, the small proportion involved in movements during

the interval between the two rounds of the survey appears to be related to the existence of distinct Nigerian ghettos in parts of Freetown and of Ghanaian communities in fishing settlements. New arrivals into either of these two environments, therefore, tend to remain part of the stable group.

The residential preferences shown by the different tribes, as in the case of the Ghanaians in fishing settlements and the Fulas, living mostly in and around Freetown, is the medium through which tribal sex composition are reflected in the spatial variation in sex-ratios. When a tribal group is highly clustered as is the case with the Kru, the population characteristics of such tribe affect the estimates obtained for the area they live in.

#### Summary

Three explanations have been offered for the pattern of sex-ratios in the Western Area. First, that fishing, and to a lesser extent, farming activities in the rural area attract male labour. When the migrants are easily identifiable then the basis of excess of males is easily located.

Second, the location of commercial, educational and military establishments create local pools of males attached to or attracted, in larger numbers than females, to such establishments. Such is the case of the military barracks in Wilberforce, the commercial area in Freetown and the port services in Cline Town. It was also shown that, with reference to age specific sex-ratio, the urban areas were attracting predominantly male labour force and the adult sex-ratios in the urban area confirm this. The opportunity for female participating in trade, however, attract female immigrants

in sufficient numbers not to give the Western Area as unbalanced a sex-ratio as in the diamond mining areas of Sierra Leone.

Finally, migration was shown to be the major conclusive influence on sex-ratios. The relationship between migration, (as partially measured by the mobility index obtained from the survey) and the sex ratios among tribal groups was also shown to be significant.

NOTES AND REFERENCESCHAPTER 7

1. All sex-ratios are expressed as number of males per 1,000 females.
2. Clarke, J.I., 'Excess of Males and Females' in Sierra Leone in Maps (Clarke ed.) University of London Press, 1966, pp. 44-45.
3. idem
4. An analysis of the countries of origin of the non-Sierra Leonean sample population can be found in chapter 11 of this thesis.
5. Kuczynski, R.R., Demographic Survey of the British Colonial Empire, Vol. 1, West Africa, Oxford University Press, 1948, p. 170.
6. ibid. p. 172, Table 14 illustrates the contrast between the excess of females among the Creoles and the excess of males among other African population living in the colony at the decennial censuses of 1891 to 1931.
7. Of the 25 Ghanaians included in the sample from Goderich, 16 are aged 15 years and above. Of these 16 adults, 11 are males and the other five, females. Most of the males are aged between 20 and 30 years. There are four males who live as relatives of heads of households and participate in fishing.
8. A number of boys' quarters attached to the accommodation of army officers and others in the professions, living along Wilkinson Road are occupied by single males who constitute one-person households. Their inclusion in the sample does not contradict the definition of households provided by the CSO in Instruction to Enumerators (xerox-copy with this writer), p. 2.
9. The points made about Ghanaian fishermen in footnote no. 6 above apply, to a lesser degree, to some local tribes and to farming.
10. From responses to the income earned by such persons, it would appear that they earn an average of 30 leones a month. They are mostly employed as shop assistants and from details obtained from the dwelling unit survey (Form A, Appendix 1.1), they occupy very small rooms in dwelling units, especially along Circular Road, for which they pay an average monthly rent of about 2 leones.
11. On the field trip to the Koya lowland in December 1969, (see footnote no. 49, chapter 3), Mr. Windapo, lecturer, Fourah Bay College drew attention to cases of elephantiasis. This observation coupled with the constant nuisances of tse-tse fly led to a discussion covering

the effects of farming and fishing activities and the rural environment on age estimates. Comments by the students and test estimates of chosen subjects were instructive.

12. This has been discussed in chapter 6.
13. United Nations (UN) Demographic Yearbook 1967, Table 12, p. 269. Data is based on year of registration and not on year of occurrence. Some fluctuation from year to year, therefore, is to be expected, see CSO Annual Statistical Digest-1968, Tables 18 & 19, pp. 30-31.
14. In Freetown, there were 186 males to 144 females, registered late foetal deaths in 1966, see UN Demographic Yearbook, 1969, Table 39, p. 556.
15. Comments and migration analysis by the CSO discussed in chapter 6 were based on the use of data on households moving into or out of the Western Area as well as those changing residence within the Western Area between the two rounds of the survey. The crude mobility index is an extended application of the definition of migrants to individuals involved in such movements, who are then classified by sex, tribe etc., to observe if differences in the tendency to migrate exist between such classes.
16. See Fyfe, C., A History of Sierra Leone, Oxford University Press, 1962, passim.
17. Harvey, M.E., 'Ethnic Groups' in Clarke ed. op. cit., pp. 36-37.
18. Nigeria and Ghana are the two principal sources of foreign migrants, but an appreciable number of Fulas still come from the Fouta Djallon plateaux of Guinea Republic.
19. Kuczynski, op. cit. pp. 170 and 172.
20. The political events taking place in Sierra Leone in the late 1960s were such that may have encouraged some Creole males to revive such local links based on blood and marriage, as they may possess. See Kilson, M. Political Change in a West African State, Harvard, 1966, pp. 231-251 for a discussion of power and influence in Sierra Leonean Parties, which is relevant to the shifting base of Creole loyalty and identity.
21. Fyfe, op. cit. pp. 135 (Kru) and 149 (Fula and Madingo), see also Dalby, T.D.P. 'Languages' in Clarke ed. op. cit., p. 38.
22. Periods of political unrest are periods of uncertainty for the Fulas who have alternated between periods of acceptance as almost citizens and periods when such recognition was questioned by government and the public at large. The links maintained with Guinea Republic appears to be a reaction to the ambiguity of their

position or alternatively the links are the causes of the ambiguity.

23. See the discussion of choice of mates in chapter 8.
24. In recent years, a decline in movements between the two countries has set in. This is partly due to increasing nationalism in Sierra Leone but also partly to concrete factors like the reduction in the registration of Nigerian students in Sierra Leone institutions, see CSO Annual Statistics Digest, 1968, Table 3.2 p. 55 for foreign student registration at the University of Sierra Leone from 1962/3 to 1968/9 academic years, and also Table 20, p. 32 for an almost equal number of arriving and departing Nigerians, in 1968.

## CHAPTER 8

### MARITAL STATUS

Two major categories can be recognised from the analysis of the survey data. There are those who have never married, known as the single population, and those who were ever married consisting of those who are currently married, the divorced and the widowed population. This chapter is aimed at clarifying the principles guiding the change of status from one category to the other as well as identifying how these principles operate to produce the differences in parts of the Western Area, and among different demographic and social groups.

The decision to get married is based on biological considerations such as the age, and of course, the sex of the individuals. In general, marriages are contracted between adult males and females. There are, however, exceptions where marriages are contracted with parties, mostly females, who are under 15 years old. There are also an appreciable numbers of marriages that do not conform to the more common monogamous form of marriage of one man to one woman. These exceptions occur because there are other considerations besides the purely biological in the decision to get married<sup>1</sup>.

The other considerations influencing marriages in the Western Area, as in other parts of the world, are social, economic and cultural considerations. As will be shown later, marriages tend to be between persons who are close in age, or persons who belong to the same tribe. The educational attainment of individuals may also affect the timing of their marriage. In general people wait until they have finished a formal education and until they have the economic means of supporting a family before getting married. The religion

of individuals and their place of residence are other influences on the timing of marriage.

In order to reflect the various considerations in the analysis, it has been hypothesized (chapter 1) that, because of the strong position of the cultural and economic considerations in the decision to get married, people in the rural areas tend to be more conservative than their urban counterparts. The conservatism shows up in higher proportions of the rural population getting married. Divorces are also likely to be less common in the rural areas, although this is not necessarily evidence of greater stability in marriage. But parallel to the assumption of residential differentials in marriage pattern is the strong influence of tribal background. The more educated and more sophisticated tribes will show a more radical attitude to marriage than the less educated. Religious affiliation of tribes also affects the tribal differences; the Christian attitude to marriage being somewhat different to the Muslim attitude<sup>2</sup>.

#### The Sample Population

Of the 11,998 persons included in the survey analysis, 7,030 were single. Another 4,617 persons, making up 38.5 per cent of the total sample, were married. Of the remaining 351 persons, 292 were widowed and 59 divorced. With the widowed and divorced persons accounting for less than 3.0 per cent of the total sample, the main cause of spatial variation in marital status lies in the relative proportions of single and married persons.

#### Marital Status by Residential Area

Table 8.1 shows the percentage distribution of the sample population from each unit area by marital status. The increase

TABLE 8.1

SAMPLE POPULATION CLASSIFIED BY UNIT AREAS AND BY PERCENTAGE DISTRIBUTION BY MARITAL STATUS

Unit Area	Sample Population	% Single	% Married	% Widowed	% Divorced
CBD 1 - POWER HILL AREA	1,082	63.5	35.6	1.0	0.1
CBD 2 - COMMERCIAL AREA	1,188	59.0	36.7	3.5	0.9
EAST END 1 - BOMBAY STREET	1,060	59.4	39.1	0.9	0.6
EAST END 2 - SAVAGE SQUARE	1,073	61.0	36.5	1.8	0.8
EAST END 3 - KENNEDY STREET	895	59.7	36.8	3.4	0.1
EAST END 4 - CLINE TOWN	1,063	59.6	37.1	3.1	0.2
WEST END 1 - KING TOM	847	60.1	34.5	4.9	0.6
WEST END 2 - CONGO TOWN	1,130	60.7	37.7	1.1	0.5
All Freetown:	8,311	60.4	36.8	2.3	0.5
MURRAY TOWN	218	64.6	32.1	3.2	0.0
WILBERFORCE	214	57.5	40.7	1.9	0.0
LUMLEY	208	56.7	39.5	3.8	0.0
GODERICH	157	51.0	44.0	3.8	1.3
KISSY	771	55.0	41.3	2.5	1.2
WELLINGTON	389	53.4	44.0	1.1	1.6
WATERLOO RURAL (Macdonald Vgs.)	354	45.8	51.1	3.1	0.0
WATERLOO VILLAGE	157	61.2	32.4	6.3	0.0
HASTINGS VILLAGE	382	61.5	38.5	0.0	0.0
All W Urban:	2,850	55.7	41.3	2.4	0.6
SOUTH/KOYA DISTRICT	347	53.3	43.5	3.2	0.0
NORTH/KOYA DISTRICT	100	44.0	54.0	2.0	0.0
MOUNTAIN DISTRICT	107	64.5	30.9	4.7	0.0
YORK DISTRICT	283	44.6	50.9	3.6	1.1
All W Rural:	837	50.7	45.6	3.3	0.4
WESTERN AREA:	11,998	58.6	38.5	2.4	0.5

Source: Author's analysis

in proportions single from the rural area, where about half the sample population is single, <sup>to</sup> 60.4% in Freetown and the corresponding decrease in proportions married from 45.6 per cent in the rural area to 36.8 per cent in Freetown obviously validate the research hypothesis. But this validation is superficial in the sense that the effects of age structure and sex ratio, in the respective areas, have not been controlled.

For example, all parts of Freetown and other urban places have noticeably lower proportions married than in the rural areas such as Koya and York districts. But, these urban centres have been shown to have a higher proportion of children than the rural areas. That the urban centres have lower proportions married, therefore, is not conclusive evidence of significant differences in the tendency to marry between these centres and the rural areas. But, before elaborating on the effect of age on proportions married, the sex differential in marital status is discussed.

#### Sex-Differential in Marital Status

On Table 8.2, the sex composition of the sample population from each unit area has been taken into account. Irrespective of residential category, the consistently higher proportion of females married stands out. Compared to the 42.3 per cent of the female sample population that is married, only 34.9 per cent of the male is married. The effect of the higher sex ratio in urban area and the lower proportions of male married is to depress the urban proportions vis-a-vis the rural proportions.

Besides the sex differential in married proportions, the very high proportions of both sexes who are single remain a dominant feature of each residential area. This is because

TABLE 8.2

SAMPLE POPULATION CLASSIFIED BY UNIT AREA AND BY SEX AND PERCENTAGE DISTRIBUTION BY MARITAL STATUS FOR EACH SEX

Unit Area	M A L E					F E M A L E				
	Sample	Single %	Married %	Widowed %	Divorced %	Sample	Single %	Married %	Widowed %	Divorced %
CBD 1 - TOPEKA HILL AREA	566	66.4	32.9	0.7	0.0	516	60.0	38.6	1.2	0.2
CBD 2 - (COMMERCIAL AREA)	596	64.2	33.1	1.5	1.2	592	53.7	40.4	5.4	0.5
EAST END 1 - BOMBAY STREET	540	65.0	34.3	0.2	0.5	520	53.7	44.0	1.7	0.6
EAST END 2 - SAVAGE SQUARE	560	65.7	32.9	0.5	0.9	513	55.8	40.5	3.1	0.6
EAST END 3 - KENNEDY STREET	461	63.6	34.7	1.7	0.0	434	55.8	38.9	5.1	0.2
EAST END 4 - CLINE TOWN	520	64.2	34.6	1.0	0.2	516	55.0	39.5	5.2	0.2
WEST END 1 - KING TOM	401	62.6	35.7	1.2	0.5	446	57.8	33.4	8.1	0.7
WEST END 2 - CONGO TOWN	609	66.7	32.2	0.3	0.8	521	53.7	44.2	1.9	0.2
All Freetown:	4,253	65.0	33.6	0.9	0.5	4,058	55.6	40.1	3.9	0.4
MURRAY TOWN	103	65.0	33.0	2.0	0.0	115	64.3	31.3	0.4	0.0
WILBERFORCE	118	62.7	36.4	0.9	0.0	96	51.0	45.8	3.1	0.0
LUMLEY	112	63.2	34.8	0.0	0.0	96	46.9	44.8	8.3	0.0
GODERICH	94	57.4	39.4	3.2	0.0	63	41.2	50.8	4.8	3.2
KISSY	394	59.9	37.8	1.5	0.8	377	49.9	45.1	3.4	1.6
WELLINGTON	192	58.9	40.1	0.5	0.5	197	48.3	47.7	1.5	2.5
WATERLOO RURAL (Macdonald Vgs.)	200	55.5	42.5	2.0	0.0	154	33.1	62.3	4.6	0.0
WATERLOO VILLAGE	75	68.0	30.7	1.3	0.0	82	54.9	34.1	11.0	0.0
HASTINGS VILLAGE	202	68.3	31.7	0.0	0.0	180	53.9	46.1	0.0	0.0
All W Urban:	1,490	61.5	37.0	1.2	0.3	1,360	49.2	46.0	3.8	1.0
SOUTH/KOYA DISTRICT	183	62.3	36.6	1.1	0.0	164	43.3	51.2	5.5	0.0
NORTH/KOYA DISTRICT	47	48.9	48.9	2.2	0.0	53	39.6	58.5	1.9	0.0
MOUNTAIN DISTRICT	58	72.4	27.6	0.0	0.0	49	55.1	34.7	10.2	0.0
YORK DISTRICT	152	51.3	45.4	2.0	1.3	131	36.6	57.3	5.3	0.8
All W Rural:	440	58.4	39.8	1.4	0.4	397	42.1	52.1	5.5	0.3
WESTERN AREA:	6,183	63.3	34.9	1.0	0.5	5,815	53.2	42.3	4.0	0.5

Source: Author's analysis

the effect of age structure and the age criterion in the decision to marry is not controlled.

The residential pattern of marital status by sex may be summarised visually by reference to Figure 8.1. For both sexes, combined or separately, the proportions of widowed and divorced persons are very small. But for the two major groups, the pattern is one of Freetown having the highest proportion single and the lowest married. In contrast, the rural area has the lowest proportion single and the highest married. The Western urban area is in-between, and details from Tables 8.1 and 8.2 show that there are basic differences between the individual units of this area. Units close to Freetown have proportion much like that of Freetown and units further away have proportions like those of the rural area. The apparent conclusion, at this stage, is that there is some indication that marriage as an institution is more popular in the countryside than in the towns, and more among females than males.

Such a conclusion will not, however, explain the effect of age and other demographic and economic variables on the different categories of marital status from place to place.

#### Age Structure and the Single Population

Table 8.3 illustrates the dominant role that the proportion of children in any area is likely to play in determining the proportion of the sample population staying single. Besides the absence of anyone, male or female, married below the age of 13 years, single persons under the age of 15 years account for 63.8 per cent of all single sample population. In addition, nearly nine in 10 persons aged 15 to 19 years are single.

Because of the distorting effect of the proportion of

FIGURE 8.1

PERCENTAGE DISTRIBUTION OF SAMPLES IN EACH RESIDENTIAL AREA ACCORDING TO SEX AND MARITAL STATUS

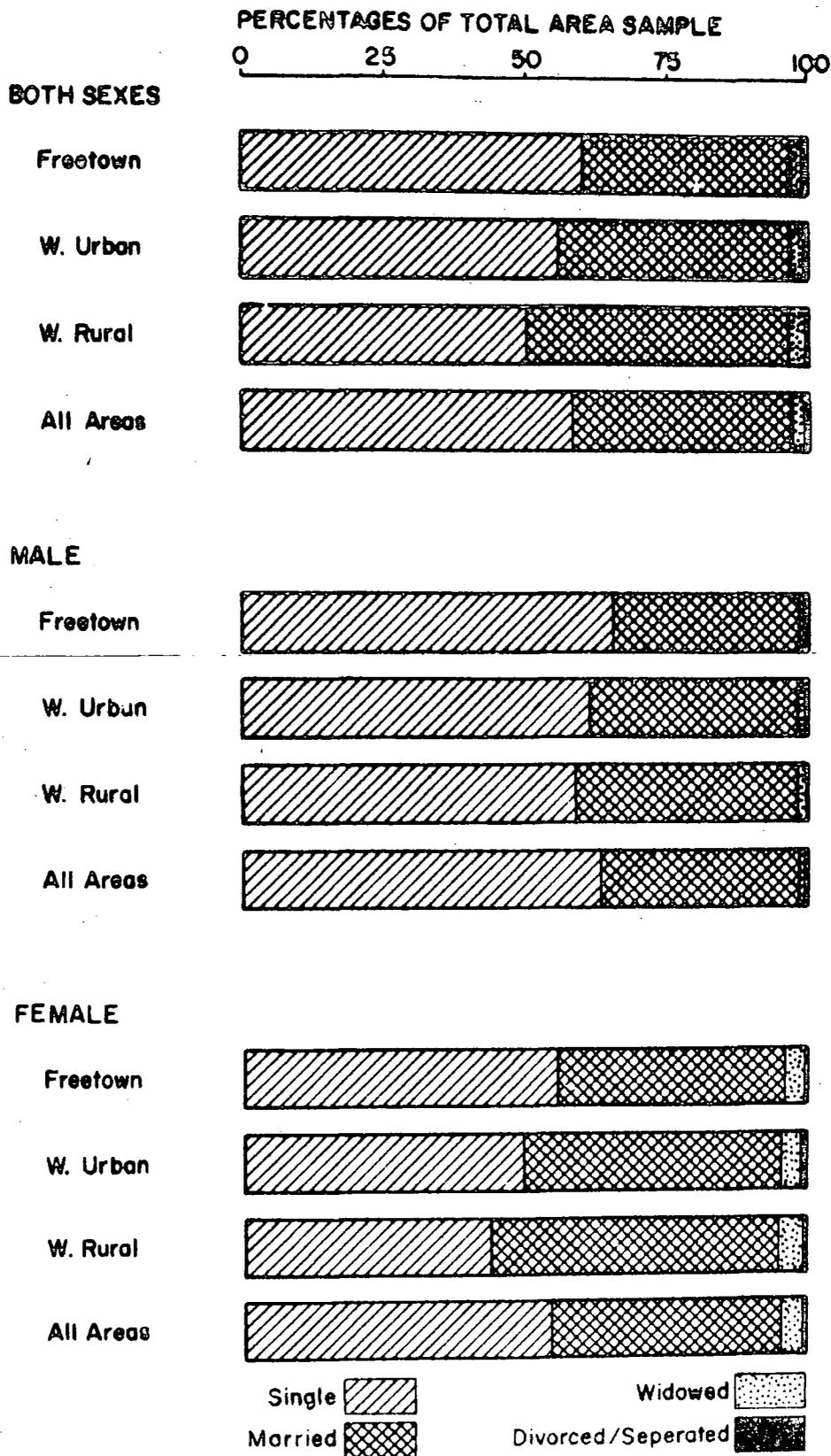


TABLE 8.3

SINGLE SAMPLE POPULATION CLASSIFIED BY AGE CLASS, WITH PERCENTAGES OF EACH AGE CLASS SINGLE, THE PERCENTAGE OF ALL SINGLE IN EACH AGE CLASS AND THE CUMULATED PERCENTAGE

Age Class	Total Sample (a)	Number Single (b)	Single as Percentage of Total Sample (b/a.k)	Single as Percentage of All Single (b/ b.k)	Cumulated Percentage of All Single
0 - 4	1,495	1,495	100.0	21.3	21.3
5 - 9	1,705	1,705	100.0	24.3	45.6
10 - 14	1,286	1,280	99.5	18.2	63.8
15 - 19	1,139	984	86.4	14.0	77.8
20 - 24	1,025	592	58.1	8.4	86.2
25 - 29	1,032	373	36.1	5.3	91.5
30 - 34	986	187	19.2	2.7	94.2
35 - 39	755	106	14.0	1.5	95.7
40 - 44	775	77	9.9	1.1	96.8
45 - 49	575	62	10.8	0.9	97.7
50 - 54	400	48	12.5	0.7	98.4
55 - 59	209	23	12.0	0.3	98.7
60 - 64	257	39	16.0	0.6	99.3
65 and above	359	59	16.4	0.7	100.0
Total	11,998	7,030	58.6	100.0	---

Source: Author's analysis

children particularly those aged 0 to 9 years, on proportions married, this age group is excluded in the consideration of the other marital categories<sup>4</sup>. In addition, the single category is considered as a residual classification and, consequently, identifying the characteristics of those who are now at one time married is much more relevant than a further examination of the single population.

#### Marriage and the Married Population

Arising out of the discussion of age and the single population, is the effect of the age at marriage and the proportions married. In the absence of direct survey data on age at marriage, the age class in which the proportion of any social or economic group married is maximum is taken as an indication of the marital condition for the group<sup>5</sup>.

Table 8.4 shows that the maximum proportion of the male population is married at age class 40 - 44 and at age class 30-34 for the female population. When allowance is made for the errors in age reporting (chapter 6), the differences in the residential areas are, probably, not significant. The ten-year gap between the age class for the male and the female population is maintained in Freetown, Table 8.5. The gap is increased in the Western urban area and closed completely in the rural area, where samples are rather small.

Similar gaps between males and females, as are observed for the total sample, also exist at the major education levels and for the major occupation and tribes (Table 8.6). The most frequent age class recorded for the male at 40-44 years approximates that recorded in other developing countries of Africa and Asia<sup>6</sup>. The markedly lower age class for females is also characteristic of the same countries. It may be concluded that

TABLE 8.4

SAMPLE POPULATION AGED TEN YEARS AND ABOVE FOR THE WESTERN AREA  
CLASSIFIED ACCORDING TO AGE CLASSES, SEX AND THE NUMBERS AND  
THE PROPORTION MARRIED: 1968

Age Class	M A L E S			F E M A L E S		
	No	Married	Percent	No	Married	Percent
10 - 14	673	-	0.0	613	6	1.0
15 - 19	609	9	1.5	530	146	27.6
20 - 24	460	56	12.2	565	372	65.8
25 - 29	505	216	42.8	527	433	82.8
30 - 34	486	337	69.3	500	449	89.8
35 - 39	397	318	80.1	358	319	89.1
40 - 44	457	394	86.2	318	270	84.9
45 - 49	352	298	84.7	223	181	81.2
50 - 54	244	202	82.8	156	112	71.8
55 - 59	121	98	81.0	88	52	59.1
60 - 64	141	107	75.9	116	61	52.6
65 and above	168	122	72.6	191	59	30.9
Total	4,613	2,157	46.8	4,185	2,460	58.8

Source: Author's analysis

TABLE 8.5

SAMPLE POPULATION~~K~~ AGED 10 YEARS AND ABOVE CLASSIFIED ACCORDING TO RESIDENTIAL AREAS, AGE-CLASSES, SEX AND THE NUMBERS AND PROPORTIONS MARRIED

Residential Area	Age-Class	M A L E S			F E M A L E S		
		No. Males	No. Married	Per cent	No. Females	No. Married	Per cent
FREETOWN	10-14	469	-	0.0	456	5	1.1
	15-19	458	1	0.2	413	103	24.9
	20-24	326	36	11.0	392	235	59.9
	25-29	354	144	40.7	343	269	70.4
	30-34	312	208	66.7	311	276	88.7
	35-39	270	217	78.1	268	238	88.0
	40-44	310	268	86.5	202	174	86.1
	45-49	238	203	85.3	141	117	83.0
	50-54	154	128	83.1	110	84	76.4
	55-59	89	74	83.1	66	40	60.6
	60-64	84	63	75.0	80	43	53.8
	65+	110	89	80.9	127	43	33.9
	10+	3,182	1,431	45.0	2,909	1,627	55.9
W. URBAN	10-14	172	-	0.0	134	1	0.7
	15-19	119	5	4.2	94	35	37.2
	20-24	111	17	15.3	134	103	76.9
	25-29	122	56	45.9	137	124	90.5
	30-34	138	104	75.4	136	123	90.4
	35-39	88	74	84.1	64	55	85.9
	40-44	104	90	86.5	84	70	83.3
	45-49	76	66	86.8	64	52	81.3
	50-54	62	54	87.1	38	24	63.2
	55-59	26	21	80.8	18	9	50.0
	60-64	45	36	80.0	26	15	57.7
	65+	47	28	59.6	55	15	27.3
	10+	1,110	551	49.6	984	626	63.6
W. RURAL	10-14	33	-	0.0	23	-	0.0
	15-19	32	3	9.4	23	8	34.8
	20-24	23	3	13.0	39	34	87.2
	25-29	29	16	55.2	47	40	85.1
	30-34	36	25	69.4	53	50	94.3
	35-39	31	27	87.1	26	26	100.0
	40-44	42	36	85.7	32	26	81.3
	45-49	38	29	76.3	18	12	66.7
	50-54	28	20	71.4	8	4	50.0
	55-59	5	3	60.0	4	3	75.0
	60-64	12	8	66.7	9	3	33.3
	65+	11	5	45.4	9	1	11.1
	10+	320	175	54.7	291	207	71.1

Source: Author's analysis

TABLE 8.6

AGE CLASS AT WHICH PROPORTION MARRIED IS MAXIMUM BY SEX AND BY MAJOR EDUCATION LEVELS, OCCUPATION AND TRIBAL GROUPS  
1968

GROUP	M A L E		F E M A L E	
	Age Class	% Married	Age Class	% Married
<u>EDUCATION</u>				
No Education	40-44	86.0	35-39	96.9
Primary	50-54	88.5	30-34	88.9
Secondary	45-49	89.3	40-44	86.7
University	35-39	100.0	30-34	100.0
<u>OCCUPATION</u>				
Professionals	40-44	95.0	30-34	75.0
Clerical	45-49	94.1	40-44	80.0
Sales	40-44	93.2	30-34	93.5
Farmers, etc.	50-54	87.1	30-34	92.3
Transport Worker	45-49	87.1	n.a	
Technical	45-49	90.1	40-44	100.0
Manual/Unskilled	40-44	92.5	30-34	100.0
<u>TRIBE</u>				
Creole	45-49	88.3	40-44	81.0
Temne	40-44	89.6	35-39	97.9
Mende	45-49	87.8	40-44	93.9
Loko	40-44	94.7	30-34	90.9
Limba	40-44	90.6	35-39	100.0
Fula	40-44	87.5	30-34	100.0
Non Sierra Leonean	35-39	93.7	35-39	92.9

Source: Author's analysis

Note: For explanation of occupation groups see Chapter 10  
Tribes with 400 or more sample population  
n.a. = not applicable, few female in transport

males generally marry later than females. The respective ages of spouses will be investigated in greater detail later.

#### Forms of Marriage

Available evidence suggest that only two forms of marriage operate in Sierra Leone. The two forms are monogamy and polygamy<sup>7</sup>. A monogamous union is the marriage of one man to one woman. In the strict sense, such unions preclude either party establishing any concurrent unions with another party. In contrast, polygamous unions involve persons, usually male, who have already established a current union with another female. In the survey data, there is an overlap in the legal basis of both forms of marriage. Not all monogamous unions are necessarily established by civil ceremonies and not all polygamous unions exclude a union established in civil ceremony. There are cases of males previously monogamously married in civil ceremony who subsequently take other wives according to native law and custom. Such subsequent unions are equally recognised by the community in as much as the offspring of such wives can and do exercise the full right of inheritance<sup>8</sup>.

#### Number of Mates

Since a classification of form of marriage is based on the number of female-mates, an identification of the variation in age, numbers and residence of the married female sample preceeds the discussion of the characteristics of the married male sample. As will be shown later, in the discussion of families and households, the statement of relationship of household members to the head obscures some detail of the link between members of households. Consequently, females shown as polygamously married are those in such unions with

the head of households and females in monogamous unions are those in households with only one wife recorded<sup>9</sup>. There is a third category of females who are married, but not to the heads of household.

Table 8.7 shows married females classified by age class, type of marriage and living arrangement. The 1,506 females who are in monogamous unions with heads amount to 61.2 per cent of all married females. Another 444 are in polygamous unions which account for 18.0 per cent of the married females. The remaining 510 females or 20.8 per cent of the married females are in an ambiguous living arrangement as they are not directly married to the heads of households in which they live.

In spite of the variations in the form of marriage and living arrangement, the age structure for each category is similar. The modal age class for each living arrangement is 30-34 years for both monogamous and polygamous unions and 25-29 for the females not married to head of households. This drop in the last category is probably the result of the marriage of younger men and women within the paternal household. An additional factor which may explain the very high proportion of such women who are aged 50 and above is the tendency for older women to take residence with younger families to give a hand in raising children, when they do longer have young children of their own.

Another feature in age structure is the slightly higher proportions of polygamously married females in their reproductive ages than similar females in monogamous unions. The proportions at 95.1 per cent and 90.4 per cent respectively are, however, not basis enough for the concept of differential

TABLE 8.7

MARRIED FEMALE SAMPLE CLASSIFIED BY AGE CLASS, TYPE OF MARRIAGE AND LIVING ARRANGEMENT

Age Class	Married Females (a)	Monogamously Married to Head of House (b)	Polygamously Married to Head of House (c)	Females Married to Head of House (b + c)	Females Married, not to Head of House a - (b + c)
10 - 14	6	1	3	4	2
15 - 19	146	65	37	102	44
20 - 24	372	209	87	296	76
25 - 29	433	266	93	359	74
30 - 34	449	287	101	388	61
35 - 39	319	241	37	278	41
40 - 44	270	187	43	230	40
45 - 49	181	106	24	130	51
50 - 54	112	60	12	72	40
55 - 59	52	39	2	41	11
60 - 64	61	29	3	32	29
65 and above	59	16	2	18	41
Total	2,460	1,506	444	1,950	510

Source: Author's analysis

Note: Col (a) is the same as col 1 'Western Area' Table  
 Col (b) is the same as row-total of Table  
 Col (c) is the same as col 2 'Western Area' Table

fertility by form of marriage, a concept which will be discussed in the next chapter<sup>10</sup>.

The main features of form of marriage among females may be summarised as follows. Monogamously and polygamously married females number three to one in the Western Area. Most married females are resident with their mates and in their own homes whilst about a fifth of all married females do not live in their own homes.

#### The Tribal Factor in Marriage

So far the emphasis has been on the residential variation in the proportions married and on the age/sex structure of the married population. It has also been pointed out that the age class at which proportions married is maximum by sex and by tribe approximates that of the total sample. Table 8.8 illustrates that the proportion married in each tribe approximates that observed for the total sample, and that female proportions are usually higher than male proportions. Striking exceptions are, on the one hand, the Creole with very low proportions of both sexes married and, on the other hand, the Fula and the Non-Sierra Leoneans with very high male proportions married but with low female proportions.

Accounting for the social values of a group as heterogeneous as the Creole is beyond the scope of this thesis. But the low male and female proportions married among a group which was observed to have the lowest sex-ratio among the major tribal groups, is an inconsistency which requires some clarification<sup>11</sup>.

Looking back on the civilising motives of the Victorian founders of the Sierra Leone settlement and what Dixon Fyle<sup>12</sup> has described as 'the imitative traditions of the

TABLE 8.8

SAMPLE POPULATION CLASSIFIED ACCORDING TO TRIBE AND THE NUMBER AND PROPORTIONS MARRIED BY SEX

Tribe	TOTAL			M A L E			F E M A L E		
	Sample Population	Number married	%	Male sample	Number married	%	Female sample	Number married	%
Creole	3,030	875	28.5	1,410	394	27.9	1,620	481	29.7
Temne	3,436	1,457	42.4	1,707	603	35.3	1,729	854	49.4
Mende	1,214	503	41.4	679	255	37.6	535	248	46.4
Loko	539	224	41.6	291	98	33.7	248	126	50.8
Limba	1,289	549	42.6	691	253	36.6	598	296	49.5
Sherbro	320	142	44.4	178	71	39.9	142	71	50.0
Susu	300	119	39.7	146	56	38.4	154	63	40.9
Minor Tribes from S.L.	131	48	36.6	78	28	35.9	53	20	37.7
Fula	846	369	43.6	542	219	40.4	304	150	49.3
Kru	178	69	38.8	85	35	41.2	93	34	36.6
Mandingo	285	105	36.8	146	52	35.6	139	53	38.1
Non-Sierra Leonean	430	157	36.5	230	93	40.4	200	64	32.0
Total	11,998	4,617	38.5	6,183	2,157	34.9	5,815	2,460	42.3

Source: Author's analysis

nineteenth-century Creoles', it is possible to make a reconstruction of the sequence of events that led to the creation of the first group of 'detrribalised' Africans. The field of education and religion offered the first areas of imitation for the Creoles. Whilst the pursuit of education as a means to social and economic mobility produced a tendency to late marriages, the Christian religion proclaimed the virtues of monogamy, and monogamy further reduces the number of marriages.

It is the opinion of this writer, that one of the by-products of the 'air of Freedom' enjoyed in Freetown in the pioneering days, coupled with the struggle for economic success, in a difficult situation, has been the Creole's love of personal liberty and a contempt for the married state. The outcome of this attitude has been the instability of marriages among Creole and the general acceptance of the 'boy-friend/girl/friend' relationship as an alternative to a man and wife relationship. The ease with which offspring of relationships of the first type could be legitimised by recourse to traditional and customary practice is an added inducement for the continuation of the system<sup>13</sup>.

In the case of the Fula and the Non-Sierra Leoneans, the high male and low female proportions married is a product of the high sex ratio and the youthfulness of the females in the two groups. Among groups with very high sex-ratios, such as the Fula, the males migrating into the Western Area, in search of employment, are mostly persons in their working and marriage ages. A number of the migrants are accompanied by families and a number are later joined by families left behind. The few female members of this migrant group are

also either married to or dependants of the migrants.

Although the sex-ratio for the non-Sierra Leoneans is not as adverse as for the Fulas, when they are considered as individual nationalities, a high sex-ratio ~~is observed~~ <sup>a young female population</sup> and the scarcity of old aged dependants is also observable.

On Table 8.9, the relationship between living arrangement and tribes of married females is illustrated. Compared to the average of 20.7 per cent of married females who are married to persons other than the heads of households, it is only the Temnes and the Creoles who show high proportions. The relatively early marriages among Temnes<sup>14</sup> may account for the large numbers of females in this category. But it would appear that economic dependency is the basis of the number of such females in the Creole tribe who maintain a patrilocal residence until such time as they can establish a home of their own.

On Table 8.10 the married males have been classified by age class, form of marriage and living arrangement. In contrast to the age structure of females who are married and not living in a household of their own, the males in the same category show a marked concentration in the younger age classes. Compared to 9.3 per cent of married males who are heads of households and aged 29 and below, there are 27.1 per cent of those who are not heads of households in this age group. This situation again emphasises the differential roles of the sexes in a marital union. The fact that the male is the provider, places the economic independence which marriage requires squarely on him. When this independence has not been attained, residence with relatives of the male

TABLE 8.9  
MARRIED FEMALE SAMPLE CLASSIFIED BY TRIBE, TYPE OF MARRIAGE AND LIVING ARRANGEMENT

Tribe	Married Females (a)	Monogamously Married to Head of House (b)	Polygamously Married to Head of House (c)	Females Married to Head of House (b + c)	Females Married, not to Head of House a - (b+c)
Creole	481	310	3	313	168
Mende	248	174	57	211	37
Temne	854	451	223	674	180
Loko	126	79	25	104	22
Limba	296	178	83	261	35
Sherbro	71	55	7	62	9
Sus	63	39	13	52	11
Minor Sierra Leonean	20	9	9	18	2
Fula	150	112	22	134	16
Kru	34	23	2	25	9
Mandingo	53	27	17	44	9
Non Sierra Leonean	64	49	3	52	12
Total	2,460	1,506	444	1,950	510

Source: Author's analysis

Note: Col (a) is the same as col 2 'Females' Table  
Col (b) is the same as row-total of Table

TABLE 8.10

MARRIED MALE SAMPLE CLASSIFIED BY AGE CLASS, TYPE OF MARRIAGE AND LIVING ARRANGEMENT

Age Class	MARRIED Males (a)	Monogamous Males Head of House (b)	Polygamous Males Head of House (c)	MARRIED Males Head of House (b+c)	MARRIED Males Not Head of House a - (b+c)
10 - 14	-	-	-	-	-
15 - 19	9	-	-	-	9
20 - 24	56	15	2	17	39
25 - 29	216	135	6	141	75
30 - 34	337	229	29	258	79
35 - 39	318	236	26	262	56
40 - 44	394	292	45	337	57
45 - 49	298	232	34	266	32
50 - 54	202	139	20	159	43
55 - 59	98	70	10	80	18
60 - 64	107	72	18	90	17
65 and above	122	86	8	94	28
Total	2,157	1,506	198	1,704	453

Source: Author's analysis

Note: Col (a) is the same as Col 3 Table (b) is the same as column total of Table

is the alternative solution.

With regard to the tribal distribution of married males who are not heads of households (Table 8.11), the distribution is much more even than those observed for the married females. The Fulas, with the highest proportion (27.4 per cent) of married males in this category, strengthen the argument of the role of economic independence in determining the status of married males. Younger married males of the Fula tribe stay with relatives, helping in the commercial activities, for which the tribe is noted, until such time as they can establish their own trade and their independence.

In general conclusion to the discussion on marital status and living arrangement, it may be added that the more flexible living arrangement possible in a traditional society as opposed to western society in part explain the phenomenon of married persons living in the houses of relatives by blood or by marriage. It also underlines the mutual interdependence which obtains in economic and social activities in such societies.

So far married males and females have been treated as two distinct groups for which it is possible to establish the basic demographic and other characteristic which set each apart from the other. But the nature of marriage presupposes a link between the sexes. In this final consideration of the married population, an attempt is made to identify how two such links operate in the selection of mates. The two characteristics for which it has been possible to obtain data from the survey are the ages and tribes of mates.

#### Age of Mates

In Western Society, the free choice of mates open to

TABIE 8.11

MARRIED MALE SAMPLE CLASSIFIED BY TRIBE, TYPE OF MARRIAGE AND LIVING ARRANGEMENT

Tribe	Married Males (a)	Monogamous Males Head of House (b)	Polygamous Males Head of House (c)	Married Males Head of House (b+c)	Married Males Not Head of House a - (b+c)
Creole	394	315	1	316	78
Mende	255	187	19	206	49
Temne	603	394	84	478	125
Loko	98	69	12	81	17
Limba	253	169	39	208	45
Sherbro	71	57	1	58	13
Sus	56	37	7	44	12
Minor Sierra Leonean	28	18	4	22	6
Fula	219	139	20	159	60
Kru	35	26	1	27	8
Mandingo	52	32	8	40	12
Non Sierra Leonean	93	63	2	65	28
Total	2,157	1,506	198	1,704	453

Source: Author's analysis

Note: Col (a) is the same as col 2 'males' Table (b) is the same as column total of Table

both sexes results in the marriage of persons who have common interests and similar backgrounds and experiences. Consequently, age, which is a strong determinant of interests, attitudes and experiences, is a relatively strong consideration in the choice of mates. The ages of spouses and grooms are therefore predominantly close<sup>15</sup>. Although the age at marriage and the instances of re-marriage alter the age gap between the bride and groom, in general the ages of mates stay within 1 - 3 years of each other. In contrast, traditional practices such as early female marriage and arranged choice of grooms, bring other considerations into choice of mate, the result of which is to minimise the role of age in choice<sup>16</sup>. In addition, the tendency of men taking second and subsequent wives in polygamous unions to consider youthfulness of brides as desirable, results in widening the age gap between mates. Although it has not been possible to identify the ranks of wives in polygamous marriages from the survey data, the separate discussion of monogamously married females and those in polygamous union should help in identifying differences in ages of mates and in forms of marriage.

Table 8.12 shows females in monogamous marriages to heads of households classified by age class and according to the age class of the husbands. As expected, the majority of females are married to males who are in older age classes. The overall range is from a few instances of females who marry males ten years younger to the other extreme of a few females married to males forty years older. Of the 1,506 females and, by implication, the same number of males in these monogamous unions, only 165 or about 11 per cent are

Table 8.12  
 FEMALES IN MONOGAMOUS MARRIAGES TO HEADS OF HOUSEHOLDS CLASSIFIED BY AGE CLASS AND ACCORDING TO THE AGE CLASS OF THE HUSBANDS

Age Class Females	Age Class of Husbands																	How Total
	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+		
10-14	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
15-19	-	-	8	24	4	9	3	2	1	2	1	1	-	-	-	-	-	65
20-24	-	-	7	78	32	35	17	5	1	1	1	1	-	-	-	-	-	209
25-29	-	-	7	26	123	63	31	14	6	2	-	-	-	-	-	-	-	266
30-34	-	-	-	3	24	88	96	55	14	3	-	-	-	-	-	-	-	287
35-39	-	-	-	3	4	36	115	49	19	8	5	-	-	-	-	-	-	241
40-44	-	-	-	-	1	4	26	89	33	14	11	3	3	2	-	-	-	187
45-49	-	-	-	-	-	1	3	16	49	18	10	5	3	1	-	-	-	106
50-54	-	-	-	-	-	-	-	-	15	17	15	7	3	2	-	-	-	60
55-59	-	-	-	-	-	1	1	1	1	5	19	9	3	-	-	-	-	39
60-64	-	-	-	-	-	-	-	-	-	-	6	11	7	4	-	-	-	29
65-69	-	-	-	-	-	-	-	-	-	-	1	1	3	2	-	-	-	7
70-74	-	-	-	-	-	-	-	-	-	-	-	-	3	2	-	-	-	8
75-79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
85+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Column Total	-	-	15	135	229	296	292	232	139	70	72	41	25	14	3	3	3	1,506

Source: Author's Analysis

Note: 'Row Totals' give the number of females in each age class. 'Column Totals' give the number of males in each age class. All females above the diagonal lines are married to older males and between the line to males in the same age class, but below the lines females are married to males in younger age classes. The reverse is true for males.

married to mates in the same age class. Those females married to males in the next age-class to their own amount to 40 per cent, and in two, three and four age classes older to 25.3, 12.8 and 5.4 per cent respectively. The modal age gap is therefore about five to ten years.

In the case of females in polygamous unions with heads of households (Table 8.13), only 5.9 per cent of the 444 such females are married to males in the same age class. Another 20 per cent are married to males one age class above and 21.2, 19.8 and 14.2 per cent married to males two, three and four age classes above their own. These percentages are much lower than for corresponding relationships for females in monogamous unions and is evidence of a much wider spread of the ages of males who are older than their mates in polygamous unions. Whereas there were quite a few cases of females monogamously married to younger males, the five such cases involving females in polygamous unions form an unusual departure that should be explained. In three of the five cases the males are in age classes just below those of the females but two of the cases involve females aged 70 - 79 married to males aged 55 - 59, an age gap of twenty years. By inspecting source data it is known that the two females as well as their husbands are Mendes. ~~and~~ Among the Mendes, it has been observed that widowhood is frowned upon and the solution is that widows become the legal wives of the brothers, sons or maternal nephews of the deceased husbands, among whom widows may choose<sup>17</sup>. That the two females are widows who married under such an arrangement is the explanation of this unusual departure in the relationship of ages of married females and ages of mates. In general the modal ~~age~~ gap

Table 8.13

FEMALES POLYGAMOUSLY MARRIED TO HEADS OF HOUSEHOLDS CLASSIFIED BY AGE CLASS AND ACCORDING TO THE AGE CLASS OF THE HUSBANDS

Age Class Females	Age Class of Husbands																Row Total
	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	80+	
10-14	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	3
15-19	-	-	1	4	10	5	6	8	2	1	-	-	-	-	-	-	37
20-24	-	-	3	5	21	16	21	8	7	2	3	1	-	-	-	-	87
25-29	-	-	-	2	25	13	30	11	4	5	1	2	-	-	-	-	93
30-34	-	-	-	1	8	16	31	16	10	7	9	3	-	-	-	-	101
35-39	-	-	-	-	-	4	12	22	4	2	2	2	-	-	-	-	37
40-44	-	-	-	-	-	-	6	22	3	2	12	2	-	-	-	-	43
45-49	-	-	-	-	-	-	1	16	11	2	7	2	-	-	-	-	24
50-54	-	-	-	-	-	-	-	1	1	2	9	2	-	-	-	-	12
55-59	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	2
60-64	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	3
65-69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
75-79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
80+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Source : Author's analysis

Note : Row Totals give the number of females in each age class

All females above the diagonal lines are married to older males and between the lines to males in the same age class, but below the lines females are married to males in younger age classes

between females and males in polygamous unions is the same five to ten years, but ~~with~~ <sup>there is</sup> the greater dispersion shown in the distribution of the ages of husbands vis-a-vis the ages of females in such unions.

### Tribes of Mates

In anthropological discussion of choice of mates, attention is often focused on the mechanics of the arrangement of marriages in traditional societies. Although great pains are taken to point out that westernisation is changing the procedure of choice of mates, the role that the pockets of language dialects (in a predominantly illiterate society) play in the choice as well as <sup>m</sup>restricting liberalisation of choice is often taken for granted. Judging from the widespread use of Creole as a lingua franca and the urban character of the Western Area, it may be assumed that the role of language in choice of mate will be minimised, but such an assumption will be ignoring two factors. One, that there is a strong attachment to mother tongues in traditional society, and secondly that the academic classification of dialects into broad groups is not a true reflection of mutual understanding between the various groups. Another small point which may be added is that there is a residual of mistrust and outright antagonism between tribal groups which the peaceful circumstance brought by colonial rule has not totally eliminated and which the struggle for political power following independence has accentuated. Because of all these circumstance, the role of tribal affinity in the choice of mate remains strong.

Table 8.14 shows females in monogamous marriages to heads of households classified by tribe and according to the tribe of the husbands. As expected, the predominant pattern

Table 8.14

FEMALES IN MONOGAMOUS MARRIAGES TO HEADS OF HOUSEHOLDS CLASSIFIED BY TRIBE AND ACCORDING  
TO THE TRIBES OF THE HUSBANDS

Tribe of Females	Tribes of Husbands											Row Total	
	Creole	Mende	Tenne	Loko	Limba	Sherbro	Susu	Other S L	Fula	Kru	Mandingo		Non S L
Creole	(285)	3	8	1	1	6	-	2	1	-	-	3	310
Mende	2	(143)	11	1	-	7	-	-	5	1	1	3	174
Tenne	14	21	(346)	15	15	3	8	3	13	1	7	5	451
Loko	4	3	4	(49)	5	3	2	-	3	-	1	5	79
Limba	1	7	10	1	(144)	1	2	4	4	1	2	1	178
Sherbro	3	9	3	1	-	(35)	-	1	-	-	-	1	55
Susu	1	1	4	1	3	1	(23)	-	2	-	-	3	39
Other S L	-	-	1	-	-	-	-	(7)	1	1	-	-	9
Fula	1	-	1	-	-	-	-	1	(107)	2	-	-	112
Kru	-	-	-	-	-	-	-	-	-	-	3	-	23
Mandingo	1	-	4	-	1	-	2	-	(23)	-	-	-	27
Non S L	3	-	2	-	-	1	-	-	-	3	(16)	3	49
Column Total:	315	187	394	69	169	57	37	18	139	26	32	63	1,506

Source : Author's analysis

Note: Numbers in brackets (-) indicate females married to males in the same tribe.

'Row Totals' give the number of females in each tribe.

'Column Totals' give the number of males in each tribe.

is one of unions between mates of the same tribe. Some 80.9 per cent of all such unions are in this category. Two tribes who show a fair distribution into other tribes are Temnes, whose females show 23.3 per cent married to males from other tribes, and the Fulas whose males have 23 per cent married to females from other tribes. In the case of Temne females, their large numbers in the community coupled with their outgoing character conditions them to marriage to persons from other tribes.

In the case of the Fulas, the most outstanding feature is the combination of a youthful population and an adverse sex-ratio which compels the males to look outside their own tribe for mates. Whilst Temne females married outside their own tribe show a fair spread among the various tribes, there is a marked clustering of Fula males married to Temne females. There is an affinity between the Fula and the Temne since both tribes show marked interests in commercial activities such as petty trading and taxi-driving. A similar affinity covering such aspects as homeland and language exists between Sherbros and Mendes. It may be added that Creoles are beginning to show a much more liberal outlook to the other tribes judging from the appreciable number of marriages involving both Creole males and females with people from other tribes<sup>18</sup>.

Whilst the pattern shown on Table 8.15 is basically the same as for married females in monogamous unions, there is a marked tendency for polygamously married females to choose mates from the same tribe. Compared with the 80.9 per cent of monogamous unions between partners belonging to the same

Table 8.15

FEMALES POLYGAMOUSLY MARRIED TO HEADS OF HOUSEHOLDS CLASSIFIED BY TRIBE AND ACCORDING TO THE TRIBE OF THE HUSBANDS

Tribe of Females	Tribe of Husbands											Row Total		
	Creole	Mende	Temne	Loko	Limba	Sherbro	Susu	Mator S L	Fula	Kru	Madingo		Non S L	
Creole	(2)	-	-	1	-	-	-	-	-	-	-	-	-	3
Mende	-	(33)	4	-	-	-	-	-	-	-	-	-	-	37
Temne	-	3	(177)	4	8	-	-	-	22	-	5	-	-	223
Loko	-	-	3	(20)	1	-	-	-	1	-	-	-	-	25
Limba	-	-	2	-	(76)	-	-	-	3	-	-	-	-	83
Sherbro	-	-	1	-	-	(2)	1	-	-	-	-	-	-	7
Susu	-	2	1	-	1	-	(8)	-	1	-	-	-	-	13
Mator S L	-	-	-	-	-	-	-	(8)	-	-	1	-	-	9
Fula	-	1	2	-	-	-	-	-	(18)	-	-	-	-	22
Kru	-	-	-	-	-	-	-	-	-	(2)	-	-	-	2
Madingo	-	-	1	1	-	-	1	-	-	-	(14)	-	-	17
Non S L	-	-	1	-	-	-	-	-	-	-	-	(2)	-	3

Source : Author's analysis

Note: Numbers in brackets (-) indicate females married to males in the same tribes

tribe, there are 81.5 per cent of females polygamously married who chose mates from the same tribe. This is not a great difference, but then it should be added that religious considerations, which affect the choice of mates in polygamous unions, will tend to reduce the effect of tribal affinity by itself. In this connection, the fact that Temnes and Fulas and also the Madingos are predominantly Muslim may in part explain the affinity between these tribes.

In support of the suggestion that religious considerations are important in polygamous unions, the 198 heads of households in such unions are shown on Table 8.16, classified by tribe and number of wives. Whilst the predominant form of polygamy is the marriage of two females to a male, the cases of three or more wives are restricted to the Temnes, the Limbas, the Fulas and the Madingoes. Among the Mendes, who also show a few cases of three females, polygamy is more a reflection of traditional privilege than of religious practice.

#### The Widowed and Divorced Population

A common feature of widowed and divorced persons is that they are individuals who were once in the married population but lost their partners through either death or a legal dissolution of the union. It is the difference in the mode of change of status that forms the basis of radical contrasts in the demographic and other characteristics of the two categories.

On Table 8.17 the widowed and divorced sample population is shown classified according to age and sex, tribe, employment status, occupation and living arrangement. Consistent with the differences in the way in which persons become widowed or divorced, the sex-ratio of the widowed sample is very low,

TABLE 8.16

## HEADS OF HOUSEHOLDS IN POLYGAMOUS MARRIAGES CLASSIFIED BY TRIBE AND NUMBER OF MATES

No of Mates	Tribe of Heads													Row Total
	Creole	Mende	Temne	Ioko	Limba	Sherbro	Susu	Minor S L	Fula	Kru	Madingo	Non		
Two	1	15	68	11	34	1	7	4	16	1	4	2	164	
Three	-	4	10	1	4	-	-	-	2	-	3	-	24	
Four	-	-	4	-	1	-	-	-	2	-	1	-	8	
Five	-	-	2	-	-	-	-	-	-	-	-	-	2	
Total	1	19	74	12	39	1	7	4	20	1	8	2	198	

Source: Author's analysis

TABLE 8.17

WIDOWED AND DIVORCED SAMPLE CLASSIFIED ACCORDING TO AGE-SEX CLASS, TRIBE, EMPLOYMENT STATUS, OCCUPATION AND LIVING ARRANGEMENT

Age Class	Widowed			Divorced		
	Male	Female	Total	Male	Female	Total
20 - 24	-	-	-	2	3	5
25 - 29	1	4	5	4	1	5
30 - 34	2	6	8	3	2	5
35 - 39	1	3	4	4	4	8
40 - 44	4	21	25	4	5	9
45 - 49	9	20	29	3	2	5
50 - 54	8	23	31	4	3	7
55 - 59	6	25	31	2	3	5
60 - 64	9	36	45	2	3	5
65+	21	93	114	1	4	5
Total	61	231	292	29	30	59
Tribe	Number Widowed		Number Divorced			
Creole	143		20			
Mende	22		3			
Temne	54		21			
Loko	5		2			
Limba	12		3			
Sherbro	13		3			
Susu	7		3			
Minor S L	1		1			
Fula	3		1			
Kru	7		1			
Madingo	3		1			
Non S L	22		-			
Total	292		59			
Employment Status	Number Widowed		Number Divorced			
Economic Employment	103		37			
Looking for Work	9		8			
Domestic Work	58		7			
Going to School	-		1			
Retired	43		1			
Disabled/Old Age	79		5			
Total	292		59			

Continued overleaf

TABLE 8.17 (Continued)

Occupation	Number Widowed	Number Divorced
Professional	11	4
Clerical	5	2
Sales	57	10
Farming	11	2
Mining	-	-
Transport Worker	4	3
Technical Worker	5	6
Manual/Unskilled	10	10
Other Occupations	-	-
Not Employed	189	22
<b>Total</b>	<b>292</b>	<b>59</b>

Living Arrangement	Number Widowed	Number Divorced
Head of House (Male)	35	23
Head of House (Female)	154	17
Relatives	99	16
Tenants and others	4	3
<b>Total</b>	<b>292</b>	<b>59</b>

Source: Author's analysis

with about four widows to every widower, whilst the number of male divorcees is about the same as that of female divorcees. Although account is, at the moment, not taken of the rate of re-marriage by widows and divorced persons, the pattern of sex-ratio is conclusive.

Turning to the age structure, the evidence suggests that, as expected, the loss of marriage partners through death is rather more age selective than loss through a dissolution of unions. The bulk of widowed persons are aged forty and above, while the number of male and female divorcees are shared evenly throughout the age classes.

The fair degree of conceptualisation which has been applied to comments on sex-ratio and age structure breaks down when attention is turned to the distribution of such persons by tribe. The case of the Mendes who positively frown on widowhood and by implication on divorce has been noted earlier. It is therefore hardly surprising that, considering the proportion of married Mendes in the sample population, there should be relatively few widows and divorcees in this tribe.

Far more strange is the huge proportion of widowed persons and to a lesser extent divorcees who are Creoles. This is strange but not totally unexpected, because it confirms the Creoles' contempt for marriage that widowhood and, to a lesser degree, being a divorcee should become something of a status symbol. It has been suggested that property and its transmission from generation to generation plays a significant role in the raison d'être of marriages and families and this is particularly true of groups who do have property, status and names to pass on<sup>19</sup>. The Creoles are such a

group. Forming predominantly monogamous, Christian and civil unions as they do, the framework for transmission of property is fairly well established<sup>20</sup>. Consequently, at the death of a husband, the widow frequently come into substantial wealth, and the prestige of such wealth belonging to females adds significantly to their status and image in the community. It may be added there that the ease with which other relationships less binding than marriage can be formed does not encourage re-marriage even when the widows are young.

About two-thirds of divorced persons belong to the Creole and Temne groups. But before explaining this pattern, it should be explained that, outside the Creole group, being divorced does not necessarily imply that the union was formed through civil ceremony, the same term being applicable to the dissolution of a traditional monogamous or polygamous union. Consequently, a distinction should be made between the incidence among the two tribes. Whilst most of the Creole divorcees may have been in a civil union, the bulk of those who are Temnes were probably in traditional unions. After considering the noted enterprise shown by Temnes in the choice of mates from other tribes and the ease of dissolution of unions in the Muslim and traditional framework, the high incidence of divorce is hardly surprising.

The employment status of widowed and divorced persons is closely related to their age structure. Whereas only a third of widowed persons are either economically employed or looking for work, 76.3 per cent of divorced persons are in these categories. As expected, from the older age structure of widowed persons, some 41.8 per cent of widowed persons are

either retired or disabled as a result of old age. The proportion of divorced persons retired or disabled is 10.2 per cent. The basic pattern of employment status is again reflected in the occupational structure, with 189 out of 292 widowed persons not in any occupation compared with 22 of the 59 divorced persons. It is the addition of persons in domestic work to those who truly have no occupation that resulted in the high proportions of both groups having no occupation. For the few who are occupied, the most favoured occupation is in sales, this occupation being particularly favoured by females.

In view of the comments made about widowhood among the Creoles, the display of data according to living arrangement of widowed and divorced persons is very significant. Of the 231 widows, 154 are heads of households, a status inherited from the dead partner. Slightly more than half the widowers are heads of their own households. An inspection of original data shows the bulk of the 99 widowed 'relatives' to be older relatives staying with relatively younger people. In general the distribution of divorced persons by status in household is about the same for the male and female sample, about equal numbers being heads of households or relatives. The living arrangement of persons, which will be discussed under family and household, should make the importance of the conclusions drawn so far more understandable.

#### Remarriage

One issue which affects the proportion of widowed and divorced persons in any group is the tendency and opportunity for remarriage. Where, as among the Mendes, institutional arrangements are available to actively encourage remarriage,

then they are taken. Where such is not the case, as in the extreme opposite example of the Creoles, demographic pointers exist which could help in estimating the chances of remarriage. In general, the younger the widow or the divorcee the greater the chances of remarriage, since younger individuals are more likely to be in employment and thus have greater opportunities of remarriage. These comments, which are conjectures to be interpreted in the light of the demographic and other characteristics of the widowed and divorced population, hint at the problem of a proper analysis of fertility implications of marital status, especially when the survey data are, by intention and execution, a more static accounting of population than is the case with demographic surveys.

#### Conclusion

The strongest influence on marital composition in the Western Area is age structure. The proportion of children is directly related to the proportions single in any demographic or social group. There is, therefore, a basic uniformity in the marital composition of the various areas and groups discussed. But, there is a noticeably higher proportion of married persons in the rural area than in the urban centres.

When attention is turned to the sex differential, a consistently higher proportion of females than males are married in various groups. This may, partly, be attributed to the practice of polygamy which makes the marriage of two or more females to one male possible. One in every five married females is in such unions.

There are some differences in the characteristics of

males and females in different forms of marriage. The proportion of monogamously married females in their reproductive ages is slightly less than the proportion in polygamous unions. This may be due to the greater age gap separating spouses in polygamous unions. The trend is for subsequent wives after the first to be progressively younger. In contrast, the age gap between couples in monogamous unions averages 5 years.

Arising out of the different basis of widowhood and divorce, widows are older and less economically active than divorcees. In all marital statuses, some tribal variation exists. The most remarkable is the low proportion of the Creoles married and the high male and low female proportions married in the Fula tribe and among non-Sierra Leoneans. The Mendes also have very few widows because there traditional channels for the 're-marriage' of widows to relatives in this tribe.

NOTES AND REFERENCESCHAPTER 8

1. Fox, R. Kinship and Marriage, Penguin Books, 1970 and Mair, L. Marriages, Penguin Books, 1971 are two useful background texts to an understanding of various aspects of marriage.
2. The clearest distinction <sup>b</sup>etween the two religions is on the issue of polygamy. Christians, however, when it suits them, practise polygamy under the framework of native and customary law.
3. See Table 6.2 of this thesis.
4. The inclusion of the age-class 10-14 in subsequent tabulation is to make sure that all married persons are covered.
5. See Smith, T.L. Fundamentals of Population Study Lippincott, 1960 pp. 217-220 for an application of this indicator.
6. ibid. p. 218. The use of wider age groups in United Nations, Demographic Yearbook, 1970, New York. Table 10 pp. 512-575 obscure comparable data for recent years;
7. Polygamy is the more common term employed, in <sup>preference</sup> ~~preference~~ to ~~polygamy~~, to describe the marriage of one man to two or more women.
8. Mair, op. cit., pp. 13-14 discuss the role of inheritance in marriages.
9. This assumption is not infallible but accords with the use of households as units of survey.
10. Factors such as the duration of marriage, and age at marriage for different forms of marriages are relevant to this concept. Such factors have not been covered in the survey data. An analysis of average live births is employed for the discussion in chapter 9.
11. My attention has been drawn to the study of marriages among the professional group in the Western Area by Harrell-Bond but it has not been possible to lay hands on this study. To make up for this inadequacy I have had extensive discussion on the legal and practical aspects of marriage among the Creoles with Mrs. Olive Francis, 3rd Year Law Student, University of Ife; herself a Creole.
12. Dixon-Fyle, S.R. 'Social Problems in Freetown' (Appreciation of discussions introduced at the seminar by G. Tregson - Roberts) in Freetown: A Symposium, Fyfe and Jones (eds) Sierra Leone University Press, Freetown, 1968 p. 168
13. It would appear that the aspiration of Creole youths and their expectation from the institution of marriage are

those of

very much higher than other groups or of their own parents. And although the attitude to marriage may be undergoing some change, the aspirations act as effective break to a major change of attitude. Having a home, a gas cooker and other modern conveniences and access to the means of obtaining these things would appear to be a strong consideration of the youths.

13. (Discussion with Mrs. Francis, December 1973.)
14. McCulloch, M. Ethnographic Survey of Africa - West West Africa Part II People of Sierra Leone, Forde, D. (ed.) International African Institute, London 1964 pp. 58, 80 extend the Mende and Loko Marriage practices to other tribes, with modifications.
15. United States Department of Health, Education and Welfare Demographic Characteristics of Persons Married Between January 1955 and June 1958, United States, National centre for Health Statistics series 21 No.2 Washington, April 1965 pp 10-11.
16. These statements are less applicable to the Creoles.
17. McCulloch op. cit. pp 21 ff.
18. The softening of Creole attitude to other tribes will appear to be a political necessity judging from the strategic alliances which such marriages forged between Creoles and politicians from the other tribes.
19. Mair op. cit. pp 13-14.
20. It is suggested that this is more in practise than in the legality of the unions between the couples. (Mrs. Francis, discussions).

CHAPTER 9FAMILIES AND HOUSEHOLDS

A discussion of families and household composition is made relatively difficult by the overlapping of two social institutions which have much in common, but are not synonymous. The basic feature of the family is that it is based on marriage and frequently based on a common residence which is usually described as a household. But the term household refers to units, the members of which eat and dwell together as a rule. The household need not necessarily contain cognatic groups or affines before exhibiting the feature of common domestic economy.<sup>1</sup> In fact quite a number of households included in the survey analysis contain one person and an individual cannot constitute a family.

Another difficulty arises from the practice of obtaining relationships of the members of a household stated to a single individual, the head of household. In reality, a married 'child' in a household has an additional relationship of 'husband' to a sub-family and it is this overlapping of two primary roles in a single person that are obscured.

In spite of these limitations, household data still, collectively, provide<sup>a</sup> a basis for the analysis of variations in the form, size and compositions of families and households. To understand the variations in forms and functions of the family is a step towards an appreciation of the economic and demographic impact of the individuals' status and roles in the families and households to which they belong, on the formation of values, attitudes and wider social relations in the community at large.<sup>2</sup>

Irrespective of the form and content of the relationship

between members of a household, the delimitation of household boundaries as laid down by the CSO, Freetown,<sup>3</sup> makes each household a discrete unit. Consequently, the analysis of household size is a logical starting point. This will be followed by a classification of the sample population into the various categories of families and households. Each of the family and household compositions will then be discussed with reference to distribution, characteristics and the relevant causes and effects of observable patterns.

As in the discussion of marital status, to which family and household composition is an extension, residential and tribal differentials in family forms and household compositions are to be expected. It can be hypothesised that the expectation is based on a consideration of the effects of placement of children, the norms and practices of matrimonial residence and the life pattern of individuals on family form and household composition. Consequently, the more traditional forms of household will be found in the rural areas and among tribes with more traditional outlook, (arising from degree of westernization in such aspects as education, religion and forms of marriage) will exhibit a different family and household composition from the more sophisticated tribes.

#### Household Size in the Western Area

Of the 3,003 dwelling units<sup>4</sup> included in this analysis, 224 were empty, and, at the other extreme, a few units <sup>e</sup>were occupied by households with as many as 20 members. With such a wide range in size, some precision is required in describing the distribution of household size. Table 9.1 shows the frequency distribution for each of the three residential areas, and some distribution parameters are included. Whilst the most common (modal) size in the Western

TABLE 9.1

FREQUENCY DISTRIBUTION OF HOUSEHOLD SIZE FOR EACH RESIDENTIAL AREA, DISTRIBUTION PARAMETERS AND T-TEST BETWEEN MEANS (1968)

Size of Household	Number of Households			
	Western Area	Freetown	W Urban	W Rural
0	224	152	61	11
1	410	303	84	23
2	416	290	102	24
3	449	304	112	23
4	402	272	95	35
5	313	211	74	28
6	245	182	44	19
7	238	169	58	11
8	111	80	26	5
9	55	37	15	3
10	46	31	12	3
11	28	20	5	3
12	24	18	5	1
13	13	8	4	1
14	6	2	3	1
15+	23	14	7	2
All Sizes	3003	2093	707	203

Distribution Parameters

Modal Size	3.0	3.0	3.0	4.0
Mean Size (Inc Zero)	4.0	4.0	4.0	4.1
Mean Size (Exc Zero)	4.4	4.3	4.4	4.4
Standard Deviation	2.86	2.85	2.96	2.77

T-Test between Means	T-Value	Degrees of Freedom
Freetown/West Urban	0.89	2584
Freetown/West Rural	0.45	2132
West Urban/West Rural	0.10	836

Source: Author's analysis

Area is three persons, the average calculated for all dwelling units is 4.0 or, if empty ones are excluded, 4.4. As would be expected from the more varied residential character of the suburban area, it is in the Western Urban districts that the widest variation in size is encountered. The standard deviation of 2.96 for these districts compared to the 2.77 for the rural districts, shows that the differences in distribution are not wide. To ascertain if any significance attaches to the differences in the distribution, a 'Student T-test' was carried out; from the very low t-values obtained, it is apparent that the differences between the pairs of residential areas is not at all significant.<sup>5</sup>

Table 9.2 shows selected households and the average household sizes for occupied households in each of the 21 unit areas. Although the general pattern is still one of very little variation, two areas, Cline Town and King Tom have averages of 3.9 and 3.8 respectively, and these are slightly lower than for other parts of the city. It is in these two units that the character of housing and its effect on household size is best illustrated.

In Cline Town, pressure on housing results in structures being highly subdivided into smaller dwelling units which can only accommodate households of limited size, and it is in such units that the low-income workers in the port services live.<sup>6</sup> On the other hand, the fashionable character of King Tom and the Brookfield area, and the social position of the people living there result in structures being less sub-divided and consequently attracting the educated, small-family households. The same statistical result of smaller

TABLE 9.2

NUMBER OF SELECTED HOUSEHOLDS AND AVERAGE HOUSEHOLD  
SIZE FOR OCCUPIED HOUSEHOLDS IN EACH OF THE 21 UNIT AREAS

Unit Area	Selected Households (a)	Number of Occupied Households (b)	Sample Population In Area (c)	Average Household Size c/b
<u>Freetown</u>				
CBD 1 - COMMERCIAL AREA	265	256	1,082	4.2
CBD 2 - COMMERCIAL AREA	290	266	1,188	4.7
EAST END 1 - BOMBAY STREET	240	223	1,060	4.8
EAST END 2 - SAVAGE SQUARE	264	246	1,073	4.4
EAST END 3 - KENNEDY STREET	243	220	895	4.1
EAST END 4 - CLINE TOWN	299	266	1,036	4.9
WEST END 1 - KING TOM	245	221	847	3.8
WEST END 2 - CONGO TOWN	247	243	1,130	4.7
<b>All Freetown:</b>	<b>2,093</b>	<b>1,941</b>	<b>8,311</b>	<b>4.3</b>
<u>W Urban</u>				
MURRAY TOWN	55	50	218	4.4
WILBERFORCE	50	50	214	4.3
LUMLEY	58	49	208	4.2
GODERICH	45	45	157	3.5
KISSY	206	185	771	4.2
WELLINGTON	97	84	389	4.6
WATERLOO RURAL (Macdonald Vgs.)	88	81	354	4.4
WATERLOO VILLAGE	35	33	157	4.8
HASTINGS VILLAGE	73	69	382	5.5
<b>All W Urban:</b>	<b>707</b>	<b>646</b>	<b>2,850</b>	<b>4.4</b>
<u>W Rural</u>				
NORTH/KOYA DISTRICT	22	20	100	5.2
SOUTH/KOYA DISTRICT	62	62	347	5.5
MOUNTAIN DISTRICT	32	26	107	4.1
YORK DISTRICT	87	84	283	3.4
<b>All W Rural:</b>	<b>203</b>	<b>192</b>	<b>837</b>	<b>4.4</b>
<b>WESTERN AREA:</b>		<b>2,779</b>	<b>11,998</b>	<b>4.3</b>

Source: Author's Analysis

average household size is thereby achieved through the operation of divergent socio-economic factors.<sup>7</sup>

In the Western Area, the lowest average is shown for Goderich. This is the unit area in which the specialised age and other characteristics of the population give an indication that the household size and, as will be shown, household composition are likely to be simple and small. An appreciable number of households in Goderich consist of young adults engaged in fishing and having relatively small and young families.<sup>8</sup>

On the high average shown for both units of Koya district, all that can be said is that this is not conclusive evidence of a clear urban/rural differential in household sizes since another rural area, York district, has the lowest average in the Western Area. However, the broad differences in housing in the Koya area when compared with the rest of the Western Area<sup>9</sup> render the type of comments made for parts of Freetown inappropriate. It is because of the many different factors that affect average household size that attention is turned to a measure of population density as a way of resolving the effect of such variables as housing, family composition and size on household size. The measure is the person per room index.<sup>10</sup>

The person per room index provides an approximate measure of the degree of overcrowding in various parts of the Western Area. Approximate, because such factors as variations in room size, the age of household members and the different demands on living space, that are known to occur, are not taken into account here. For example, in the typical masonry/board Creole houses, the size of rooms and the

condition of dwelling units differ from floor to floor. The upper floors, usually of boards may house a Creole family with characteristics very different from those of another family, usually from one of the provincial tribes, occupying the ground floor. It is against this situation that Table 9.3 showing the average number of living rooms per occupied dwelling unit and the average number of persons per room in each of the 21 unit areas must be viewed.

Although the set of indices does not show startling variation, it conclusively shows the greatest indication of overcrowding in Freetown, with the significant exception of King Tom. Conditions in the Western Urban area show a clear break between the main centres of Kissy and Hastings and other units where indices approximate those of the Western Rural area. Goderich has the highest index for the rural area, indicating that the relatively smaller household sizes go hand in hand with a high demand on available accommodation. The relationship between housing and household types ~~are given~~ <sup>will become clearer with classification of household types</sup>. In the meantime, the distribution of empty dwelling units provides a relevant though limited comment on the relationship.

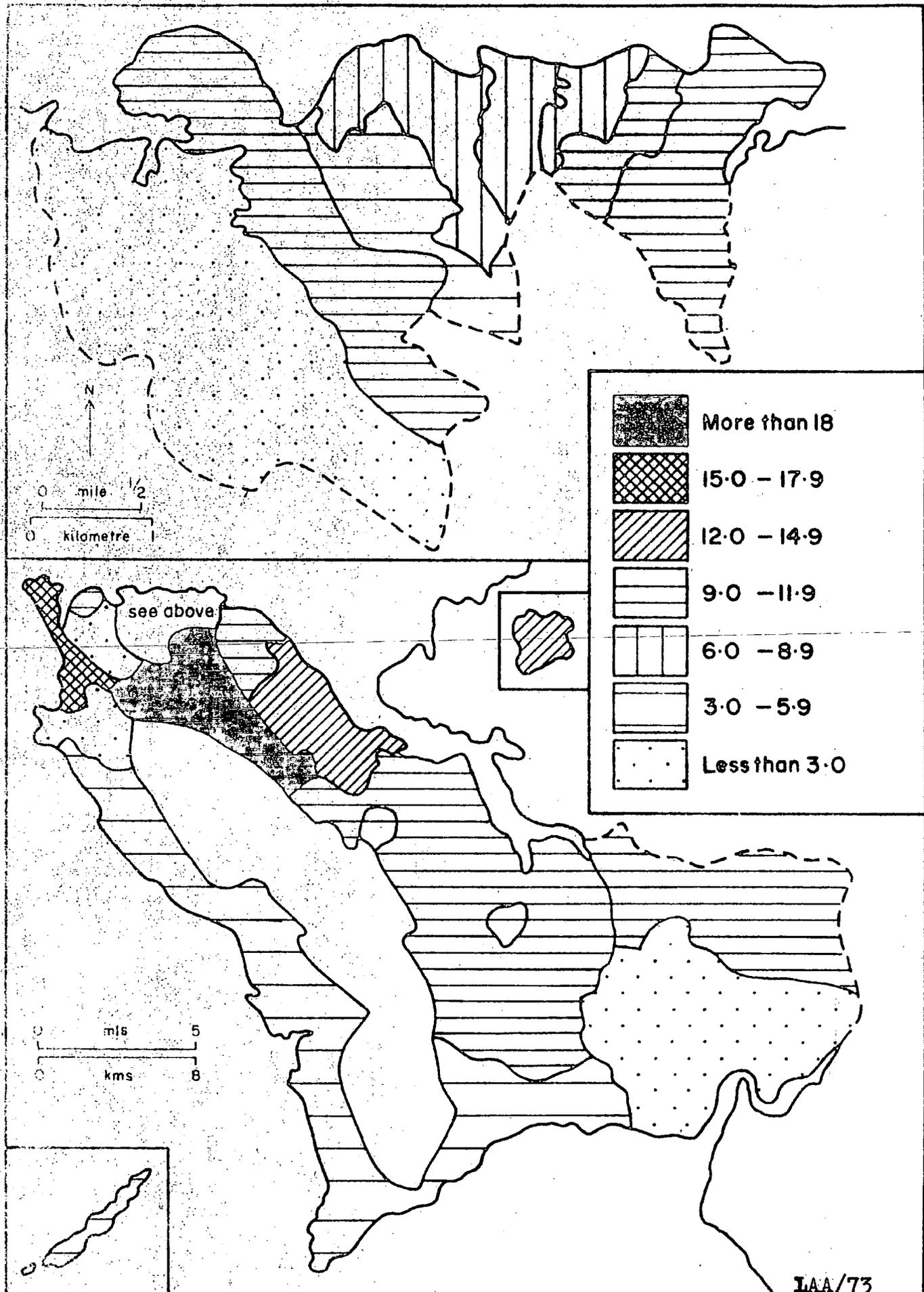
Figure 9.1 shows the empty dwelling units as a percentage of selected dwelling units in each of the 21 unit areas.<sup>11</sup> It would be expected that, because of the general decline of some settlements in the rural area, especially in York District, this would be the area to reveal the greatest proportions of empty dwelling units. In fact, it is in the Freetown area that the highest proportions are shown. This anomaly is the outcome of the sub-division of buildings in ~~the~~ urban area into smaller dwelling units

TABLE 9.3

AVERAGE NUMBER OF ROOMS PER OCCUPIED HOUSEHOLD AND AVERAGE  
NUMBER OF PERSONS PER ROOM IN EACH OF THE 21 UNIT AREAS

Area	Number of Occupied Households (a)	Number of Living Rooms (b)	Sample Population in Area (c)	Average No Rooms per Households b/a	Average No Persons Per Room c/b
<b><u>Freetown</u></b>					
CBD 1 - TOWERHILL AREA	256	535	1,082	2.1	2.0
CBD 2 - COMMERCIAL AREA	266	584	1,188	2.2	2.0
EAST END 1 - BOMBAY STREET	233	461	1,060	2.1	2.3
EAST END 2 - SAVAGE SQUARE	246	514	1,073	2.1	2.1
EAST END 3 - KENNEDY STREET	220	375	895	1.7	2.4
EAST END 4 - CLINE TOWN	266	445	1,036	1.7	2.3
WEST END 1 - KINT TOM	221	490	847	2.2	1.7
WEST END 2 - CONGO TOWN	243	578	1,130	2.4	2.0
<b>All Freetown:</b>	<b>1,941</b>	<b>3,982</b>	<b>8,311</b>	<b>2.0</b>	<b>2.1</b>
<b><u>W Urban</u></b>					
MURRAY TOWN	50	150	218	3.0	1.5
WILBERFORCE	50	155	214	3.1	1.4
LUMLEY	49	133	208	2.7	1.6
GODERICH	45	143	157	3.2	1.1
KISSY	185	337	771	1.8	2.3
WELLINGTON	84	200	389	2.4	1.9
WATERLOO RURAL (Macdonald Vgs.)	81	211	354	2.6	1.7
WATERLOO VILLAGE	33	85	157	2.5	1.9
HASTINGS VILLAGE	69	150	382	2.2	2.5
<b>All W Urban:</b>	<b>646</b>	<b>1,563</b>	<b>2,850</b>	<b>2.4</b>	<b>1.8</b>
<b><u>W Rural</u></b>					
NORTH/KOYA DISTRICT	20	64	100	3.1	1.6
SOUTH/KOYA DISTRICT	62	204	347	3.3	1.7
MOUNTAIN DISTRICT	26	88	107	3.4	1.2
YORK DISTRICT	84	331	283	3.9	0.9
<b>All W Rural:</b>	<b>192</b>	<b>684</b>	<b>837</b>	<b>3.6</b>	<b>1.2</b>
<b>WESTERN AREA:</b>	<b>2,779</b>	<b>6,229</b>	<b>11,998</b>	<b>2.2</b>	<b>1.9</b>

Source: Author's analysis  
Column b is based on Housing Survey Schedule, C.S.O, Freetown, 1967.



PERCENTAGE DISTRIBUTION OF EMPTY DWELLING UNITS

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to meet the heavy demand made on accommodation in such areas. Consequently, the much smaller sizes of dwelling units which are empty in the Freetown area compensate for the large number. These units are often single-room dwelling units temporarily empty between tenants.<sup>12</sup> In contrast, the empty dwelling units in the Mountain and York Districts are often very large buildings. Besides, large numbers of buildings in such settlements as York, Kent and Gloucester which are derelict were not even included in the dwelling unit listing carried out prior to the selection of sample.<sup>13</sup>

### Family and Household Composition

#### Household Relationship

One useful feature of data from household surveys is that everybody in each of the 2,779 occupied dwelling units has a ~~stated~~ <sup>stated</sup> relationship. Consequently, a classification of the sample population by household relationship provides the components for the construction of 'family' or 'non family' households. The classification of the 11,998 individuals ~~returned in the survey~~ into eight categories of household relationships is shown on Table 9.4. The following comments are necessary in preparation for the classification of households by composition which occurs later.

Table 9.4

#### SAMPLE POPULATION CLASSIFIED BY HOUSEHOLD RELATIONSHIP

<u>Relationship</u>	<u>Number</u>
Head	2761
Wife	1971
Child	4215
Grandchild	746
Relative	1408
In-law	278

Table 9.4 (Continued)

<u>Relationship</u>	<u>Number</u>
Ward/Domestic/Apprentice	445
Tenant	<u>174</u>
TOTAL	<u>11998</u>

Source: Author's analysis

The link between the first six categories is based on either blood or marriage relationship, consequently any two or more combinations of the six constitute a family, irrespective of the inclusion of persons in the other categories in such a combination. On the other hand, the link between any of the first six and any of the last two is contractual. Any household, therefore, which contains only one category of the first group and one or both of the second group does not constitute a family-household. It is a household of non-kin.

To illustrate the interpretation of these postulates, a few hypothetical examples are given below. A household consisting of head and relative is a family-household, so is one of head and in-law. The more conventional combinations of head, wife and children are too well known to require illustration. On the other hand, a household of head, tenant and domestic servant is not a family-household. And, as stated earlier, any household containing just one person cannot be classified as a family-household. Armed with these guidelines, the remaining task of classification of household by composition is to arrive at an acceptable delimitation of the various forms of family-household.

### Forms of Family

As can be seen from Table 9.5, showing the five compositions into which the 2,779 occupied households have been classified, categories I (one-person) and V (non-kin) account for 15.6 per cent of the total and are in any case marginal to this discussion of the three categories of family-households which have been recognised.

Category II consists of two types of Elementary Family household. A household of one male and one wife with or without their own children, but excluding all other household relationships, constitutes the two bases of elementary families. The assumption of monogamous marriage should be stressed.

Category III consists of five different ways in which Bilateral Extended family households are formed. In the first place, it is now shown that not all monogamous unions necessarily result in the formation of elementary families because, as the term bilateral-extended implies, a vertical extension by the addition of relatives of either husband or wife changes the basis of classification of a monogamously based family. The distinction between III a and b is the same as for II a and b, the presence in one of own children and the absence in the other. Another basis for classifying a family as bilateral-extended is the presence of more than one mate. A polygamous union therefore forms the common assumption for III c - e. In the cases of III c and d, the absence of relatives or in-laws distinguishes these forms from the last type of bilateral extended, III e.<sup>14</sup>

If the composition of elementary and bilateral-extended families has been fairly straightforward, the reason is

TABLE 9.5

SAMPLE HOUSEHOLDS CLASSIFIED BY FAMILY  
AND HOUSEHOLD COMPOSITION

Categories	Composition	Number of Households	Percentage
I	<u>Living Alone</u>	410	14.8
II	<u>Elementary Families:-</u>		
	(a) Head, wife and children	655	23.6
	(b) Head and wife only	237	8.5
III	<u>Bilateral Families:-</u>		
	(a) Head, wife, child and others	425	15.3
	(b) Head, wife and others	189	6.8
	(c) Head, wives and children	73	2.6
	(d) Head and wives only	13	0.5
	(e) Head, wives + children and others	112	4.0
IV	<u>Segments of Bilateral Families</u>		
	(a) One parent, child and others	351	12.6
	(b) Head and relative and/or in-law	260	9.4
	(c) Wife or child with relative	5	0.2
V	<u>Non-kin</u>	49	1.8
	TOTAL	2,779	100.0

Source: Author's analysis

that the components of the structure have been socially recognisable as complete. A male and his wife or wives, with or without their own children, constitute the accepted image of the term "family". The category of segments of bilateral families, V a - c, is more controversial. With regard to the marital status of a parent, it has been suggested that a household consisting of a widow or divorcee and her own children may be classified as an elementary family.<sup>15</sup> The consistency of the present classification is that, irrespective of the marital status of parents, in all cases of segments of bilateral-extended families, the children are in effect living with only one parent. The absence of the other parent may be due to various reasons,<sup>16</sup> but the gap in the family structure appears a strong factor for distinguishing these from the complete monogamous or polygamous unions. Categories IV b and c are just the sort of permutations which were suggested as possible from the various links between household relations, but in no way approach any conventional concept of family.

The category of non-kin households represents 1.8 per cent of all occupied households. This is an indirect comment on the strong influence of blood and marriage ties on living arrangements and the formation of households, as in most societies. But much more directly, it is an illustration of a phase in an individual's life cycle when, however briefly and rarely, he lives in a household of non-kin. This category is a hybrid of households of persons living alone and is often made up of the head and a domestic servant. The demographic characteristics of persons living alone will consequently throw an additional light on this residual classification.

### Geographic Distribution

Adopting the classification explained above, occupied households in each of the 21 unit areas<sup>are</sup> shown on Table 9.6. This table will form the basis of the discussion that follows.

#### One Person Households (Category I)

Whilst, in the main, persons living alone occupy small quarters, the relationship between the distribution of such persons as shown on Figure 9.2 and the location of small dwelling units is not a strong one. The age and previous household status of such persons affect their present living arrangements. A school leaver setting up house for the first time will be content with a single rented room, but a widow living alone may have no alternative but to stay on in a relatively large dwelling unit, the result of a previous period in the life cycle.

The age/sex structure, marital status, employment status and income levels for those living alone are shown in Table 9.7. In a limited way, the high proportion of one-person households in Freetown can now be seen as a reflection of the youthful age structure and a high employment rate shown by persons in this category. Besides the school leaver mentioned above, the many young, single, male tax-drivers and petty traders so visible in the streets of Freetown form the bulk of this category. In contrast, most of the one-person households in York and Mountain districts especially, are old persons, and five of the nine such households recorded in York District are widows. As would be expected, Koya area shows a negligible proportion of such households. This is because the stronger kinship ties operating in rural areas make the response to events of the life cycle different from those of the more urban and

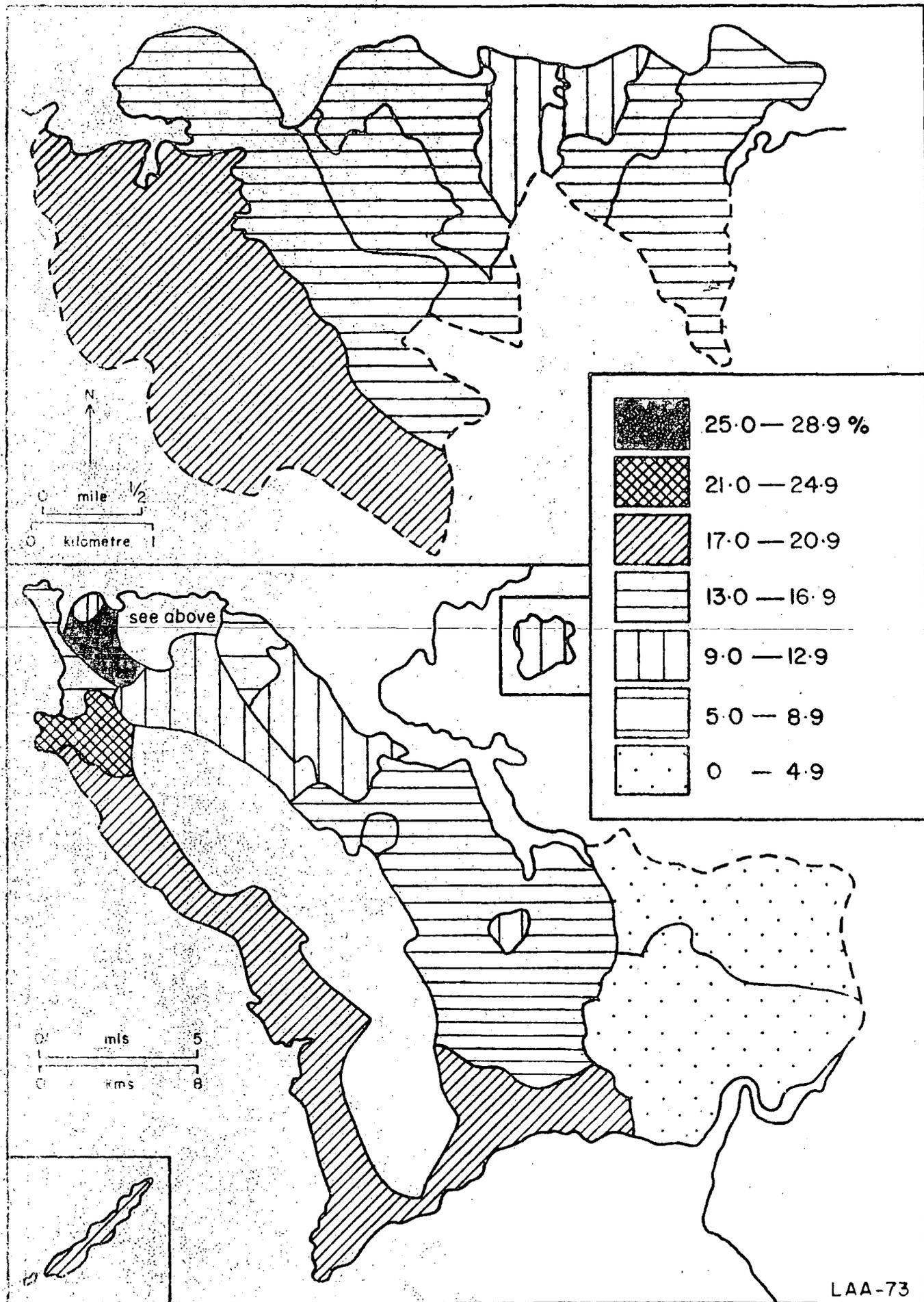
TABLE 9.6

## OCCUPIED HOUSEHOLDS IN EACH UNIT AREA CLASSIFIED BY COMPOSITION

Area	Number of Occupied Households	One Person Household I	Elementary Families IIa-b	Bilateral Extended IIIa-e	Segments of Bilat IVa-c	Non-Kin Households V
<b>Freetown</b>						
CBD 1 - TOWER HILL AREA	256	40	63	66	84	3
CBD 2 - COMMERCIAL AREA	266	38	68	83	73	4
EAST END 1 - BOMBAY STREET	233	25	62	83	48	5
EAST END 2 - SAVAGE SQUARE	246	32	80	67	65	2
EAST END 3 - KENNEDY STREET	220	34	76	51	53	6
EAST END 4 - CLINE TOWN	266	49	109	43	61	4
WEST END 1 - KING TOM	221	41	67	53	58	2
WEST END 2 - CONGO TOWN	243	44	103	71	17	7
<b>All Freetown:</b>	<b>1,941</b>	<b>303</b>	<b>628</b>	<b>517</b>	<b>459</b>	<b>34</b>
<b>W Urban</b>						
MURRAY TOWN	50	5	18	14	13	0
WILBERFORCE	50	14	14	18	3	1
LUMLEY	49	5	21	10	9	4
GODERICH	45	10	18	9	6	2
KISSY	185	18	68	53	44	2
WELLINGTON	84	9	29	32	14	0
WATERLOO RURAL (Macdonald Vgs.)	81	9	21	38	12	1
WATERLOO VILLAGE	33	4	7	10	12	0
HASTINGS VILLAGE	69	10	20	25	13	1
<b>All W Urban:</b>	<b>646</b>	<b>84</b>	<b>216</b>	<b>209</b>	<b>126</b>	<b>11</b>
<b>W Rural</b>						
NORTH/KOYA DISTRICT	20	0	4	15	0	1
SOUTH/KOYA DISTRICT	62	1	12	35	14	0
MOUNTAIN DISTRICT	26	4	7	8	7	0
YORK DISTRICT	84	18	25	28	10	1
<b>All W Rural:</b>	<b>192</b>	<b>23</b>	<b>48</b>	<b>86</b>	<b>31</b>	<b>4</b>
<b>WESTERN AREA</b>	<b>2,779</b>	<b>410</b>	<b>892</b>	<b>812</b>	<b>616</b>	<b>49</b>

Source: Author's analysis

FIGURE 9.2



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PERCENTAGE DISTRIBUTION OF ONE PERSON HOUSEHOLDS

western-type society.

Consistent with the youthful age structure and high employment the income levels reveal that earnings by such persons vary greatly. The actual levels of income, however, depend on other variables such as level of education or skills acquired. The five cases of incomes above one hundred leones are of individuals with university education. And most of the cases of persons with no income are those who are looking for employment or engaged in agriculture and so have an irregular source of income.

#### Elementary Family Households

In chapter 8 it has been shown that the predominant form of marriage in the Western Area is monogamy. It is therefore hardly surprising that the elementary family which is ipso facto monogamous should be the commonest form of household. But, because of the possibility of other relations taking up residence with a nuclear family, and consequently changing the classification of such a household to bilateral-extended family, the residential distribution of elementary families (Table 9.6) shows some interesting variations.

In Freetown, elementary families outnumber bilateral-extended families, in the Western Urban area the numbers of each type are about equal and in the Western Rural area bilateral extended families outnumber elementary families. It would therefore appear that the sociological exclusiveness of nuclear families in urban areas breaks down in the rural area.

Adopting the criteria of the presence or absence of own children as the basis for distinguishing the two types of elementary families - IIa and IIb (Table 9.5) - all

TABLE 9.7

PERSONS LIVING ALONE CLASSIFIED BY AGE-SEX CLASS, MARITAL STATUS  
EMPLOYMENT STATUS AND INCOME LEVEL

Classification	Males	Females	Males & Females
<u>Age Class:</u>			
15-19	8	-	8
20-24	33	-	33
25-29	91	5	96
30-34	74	7	81
35-39	34	2	36
40-44	31	7	38
45-49	23	7	30
50-54	19	9	28
55-59	8	7	15
60-64	9	9	18
65 and above	15	12	37
<b>Total:</b>	<b>345</b>	<b>65</b>	<b>410</b>
<u>Marital Status:</u>			
Single	246	16	262
Married	73	17	90
Divorced	10	4	14
Widowed	16	28	44
<b>Total:</b>	<b>345</b>	<b>65</b>	<b>410</b>
<u>Employment Status:</u>			
Employed	281	42	323
Unemployed	64	23	87
<u>Income Levels:</u> (Leones earned in previous month)			
0	59	20	79
1 - 10	43	24	67
11 - 20	84	12	96
21 - 30	91	6	97
31 - 40	35	1	36
41 - 50	17	-	17
51 - 60	5	1	6
61 - 70	4	-	4
71 - 80	1	-	1
81 - 90	1	-	1
91 - 100	1	-	1
Above 100	4	1	5
<b>All Levels:</b>	<b>345</b>	<b>65</b>	<b>410</b>

Source: Author's analysis

elementary families in each of the 21 unit areas are shown on Table 9.8 classified by these criteria. Although there are slight variations in the distribution of both sub-groups, the dominant feature is that roughly three-quarters of all elementary families have their own children in residence. Although all elementary families without own children cannot be presumed sterile, since other factors such as the age of the union and the separate domicile of children affect such families, the best estimate of average family size for these monogamous and elementary families should be based on those with own children.

Table 9.9 shows the numbers of married women, numbers of children and average family size for each of the 21 unit areas. In interpreting this data set, it is presumed that, in general, families preserving exclusiveness in residence are least likely to have children living elsewhere, except, of course, for those children who may be old enough to have formed their own households or those who may be living in an institution. Granted that these exceptions, which affect the ultimate reliability of the child per woman indices, the results obtained are reasonable. The average family size ranges from 1.7 to 4.0. The range is much smaller in Freetown, where all sizes cluster around Freetown's average of 2.8, and the same is true of the Western Rural area. The greatest variation is shown in the Western Urban area, where the distribution shows no conclusive pattern. The Western Area average of 2.7 for women in monogamous and elementary family households will be reviewed later when account is taken of women without own children and women in bilateral-extended families.

TABLE 9.8

HOUSEHOLDS OF ELEMENTARY FAMILIES CLASSIFIED BY PRESENCE OR  
ABSENCE OF OWN CHILDREN AND BY 2 UNIT AREAS

Area	No of Elementary Families	With own Children		Without own Children	
		Number	Percentage	Number	Percentage
<u>Freetown</u>					
CBD 1 - TOWER HILL AREA	63	48	76.2	15	23.8
CBD 2 - COMMERCIAL AREA	68	49	72.1	19	27.9
EAST END 1 - BOMBAY STREET	62	47	75.8	15	24.2
EAST END 2 - SAVAGE SQUARE	80	68	85.0	12	15.0
EAST END 3 - KENNEDY STREET	76	57	75.0	19	25.0
EAST END 4 - CLINE TOWN	109	81	74.3	28	25.7
WEST END 1 - KING TOM	67	37	55.2	30	44.8
WEST END 2 - CONGO TOWN	103	82	79.6	21	20.4
All Freetown:	628	469	74.7	159	25.3
<u>W. Urban</u>					
MURRAY TOWN	18	12	66.7	6	33.3
WILBERFORCE	14	12	85.7	2	14.3
LUMLEY	21	15	71.4	6	28.6
GODERICH	18	14	77.8	4	22.2
KISSY	68	49	72.1	19	27.9
WELLINGTON	29	18	62.1	11	37.9
WATERLOO RURAL (Macdonald Vgs.)	21	14	66.7	7	33.3
WATERLOO VILLAGE	7	5	71.4	2	28.6
HASTINGS VILLAGE	20	10	50.0	10	50.0
All W Urban	216	149	69.0	67	31.0
<u>W Rural</u>					
NORTH/KOYA DISTRICT	4	3	75.0	1	25.0
SOUTH/KOYA DISTRICT	12	8	66.7	4	33.3
MOUNTAIN DISTRICT	7	7	100.0	-	0.0
YORK DISTRICT	25	19	76.0	6	24.0
All W Rural:	48	37	77.1	11	22.9
WESTERN AREA	892	655	73.4	237	26.6

Source: Author's analysis

TABLE 9.9

**SAMPLE HOUSEHOLDS OF HUSBAND-WIFE ELEMENTARY FAMILIES WITH OWN CHILDREN  
CLASSIFIED BY RESIDENTIAL AND 21 UNIT AREAS AND THE AVERAGE NUMBER OF  
CHILDREN PER FAMILY**

Area	No of Women (H+W+C) Households	No of Children	Children Per Family
<b><u>Freetown</u></b>			
CBD 1 - TOWER HILL AREA	48	116	2.4
CBD 2 - COMMERCIAL AREA	49	122	2.5
EAST END 1 - BOMBAY STREET	47	130	2.8
EAST END 2 - SAVAGE SQUARE	68	199	2.9
EAST END 3 - KENNEDY STREET	57	145	2.5
EAST END 4 - CLINE TOWN	81	218	2.7
WEST END 1 - KING TOM	37	118	3.2
WEST END 2 - CONGO TOWN	82	250	3.0
<b>All Freetown:</b>	<b>469</b>	<b>1,298</b>	<b>2.8</b>
<b><u>W Urban</u></b>			
MURRAY TOWN	12	33	2.8
WILBERFORCE	12	29	2.4
LUMLEY	15	46	3.1
GODERICH	14	27	1.9
KISSY	49	112	2.3
WELLINGTON	18	36	2.0
WATERLOO RURAL (Macdonald Vgs)	14	30	2.1
WATERLOO VILLAGE	5	20	4.0
HASTINGS VILLAGE	10	26	2.6
<b>All W Urban:</b>	<b>149</b>	<b>359</b>	<b>2.4</b>
<b><u>W Rural</u></b>			
NORTH/KOYA DISTRICT	3	9	3.0
SOUTH/KOYA DISTRICT	8	19	2.4
MOUNTAIN DISTRICT	7	20	2.9
YORK DISTRICT	19	33	1.7
<b>All W Rural:</b>	<b>37</b>	<b>81</b>	<b>2.8</b>
<b>WESTERN AREA</b>	<b>655</b>	<b>1,738</b>	<b>2.7</b>

Source: Author's analysis

Bilateral Extended Family Households (Category IIIa - e)

Two sets of sub-groupings can be made for bilateral extended families. The first is to distinguish bilateral-extended families based on monogamous marriages from those based on polygamous marriages. Since all polygamous marriages are classified as bilateral-extended, the main contribution of Table 9.10, showing classification of bilateral-extended family households by form of marriage and for each of the 21 unit areas, is to demonstrate the extent to which the addition of relatives, in-laws and other relations have changed nuclear families to this category. The percentage distribution shown in the last column of this table reinforces the suggestion that the extent to which families of parents and children share residence with relatives is much higher in the rural area than in Freetown.

The second sub-grouping is that based on the presence or absence of own children in bilateral-extended families. This is the distinction between sub-groups IIa and IIIc on the one hand and sub-groups IIIb and IIId on the other (Table 9.5). But, instead of pursuing this distinction in the various unit areas, only polygamous families with own children (IIIc) will be considered, so that the average family size, similar to that calculated for women in monogamous and elementary families with own children (IIa), can be obtained. Table 9.11 shows the numbers of households containing such polygamous families, the numbers of wives and children in such households and the child per woman index for each of the 21 unit areas. The reliability of the various indices is comparable to those of the monogamous families since the assumptions for the completeness or otherwise of children in residence are the same. For those unit areas where relevant

TABLE 9.10

HOUSEHOLDS OF BILATERAL EXTENDED FAMILIES CLASSIFIED BY FORM  
OF MARRIAGE AND BY RESIDENTIAL AND 21 UNIT AREAS

Area	Monogamous Bilateral - H + W + C + others (a)	Polygamous Bilateral - H + Ws + C + others (b)	Total Bilateral (a+b)	Total as Percentage of Occupied Households in Unit Area (Table 9.3(a))
<u>Freetown</u>				
CBD 1 - TOWER HILL AREA	57	9	66	25.8
CBD 2 - COMMERCIAL AREA	61	22	83	31.2
EAST END 1 - BOMBAY STREET	56	27	83	37.2
EAST END 2 - SAVAGE SQUARE	54	13	67	27.2
EAST END 3 - KENNEDY STREET	40	11	51	23.2
EAST END 4 - CLINE TOWN	32	11	43	16.2
WEST END 1 - KING TOM	44	9	53	24.0
WEST END 2 - CONGO TOWN	56	15	71	29.2
<b>All Freetown:</b>	<b>400</b>	<b>117</b>	<b>517</b>	<b>26.6</b>
<u>W Urban</u>				
MURRAY TOWN	14	0	14	28.0
WILBERFORCE	12	6	18	36.0
LUMLEY	8	2	10	20.4
GODERICH	37	1	9	28.6
KISSY	20	12	32	38.1
WELLINGTON	27	11	38	46.9
WATERLOO RURAL (Macdonald Vgs.)	9	1	10	30.3
WATERLOO VILLAGE	12	13	25	36.2
HASTINGS VILLAGE				
<b>All W Urban:</b>	<b>147</b>	<b>62</b>	<b>209</b>	<b>32.4</b>
<u>W Rural</u>				
NORTH/KOYA DISTRICT	11	4	15	75.0
SOUTH/KOYA DISTRICT	24	11	35	56.5
MOUNTAIN DISTRICT	7	1	8	30.8
YORK DISTRICT	25	3	28	33.3
<b>All W Rural:</b>	<b>67</b>	<b>19</b>	<b>86</b>	<b>44.8</b>
<b>WESTERN AREA</b>	<b>614</b>	<b>198</b>	<b>812</b>	<b>29.2</b>

Source: Author's analysis

TABLE 9.11

HOUSEHOLDS OF POLYGAMOUS (BILATERAL EXTENDED FAMILIES) WITH  
OWN CHILDREN BY 21 UNIT AREAS AND SHOWING THE MEAN NUMBER OF  
CHILDREN PER WOMAN

UNIT AREA	Number of Households H + W <sup>s</sup> + C <sup>s</sup> (a)	No of Wives (b)	No of Children (c)	No of Children Per Woman (c/b)
CBD 1 - TOWER HILL AREA	4	13	15	1.2
CBD 2 - COMMERCIAL AREA	12	25	45	1.8
EAST END 1 - BOMBAY STREET	10	22	43	2.0
EAST END 2 - SAVAGE SQUARE	9	19	32	1.7
EAST END 3 - KENNEDY STREET	6	13	18	1.4
EAST END 4 - CLINE TOWN	5	10	14	1.4
WEST END 1 - KING TOM	3	6	14	2.3
WEST END 2 - CONGO TOWN	6	16	49	3.1
ALL Freetown:	55	124	230	1.9
MURRAY TOWN	0	0	0	-
WILBERFORCE	3	6	8	1.3
LUMLEY	0	0	0	-
CODERICH	0	0	0	-
KISSY	9	20	31	1.6
WELLINGTON	2	5	11	2.2
WATERLOO RURAL (Macdonald Vgs)	2	5	2	0.4
WATERLOO VILLAGE	0	0	0	-
HASTINGS VILLAGE	1	2	5	2.5
All W Urban:	17	38	57	1.5
NORTH/KOYA DISTRICT	0	0	0	-
SOURTH/KOYA DISTRICT	0	0	0	-
MOUNTAIN DISTRICT	0	0	0	-
YORK DISTRICT	1	3	2	0.7
All W Rural:	1	3	2	0.7
Western Area	73	165	289	1.8

Source: Author's analysis

parameters are available, the average family size ranges from 0.3 to 3.1. This range is much greater and the values generally smaller than for monogamous families. This then is the first conclusive evidence of differential fertility for women in different forms of marriage. The overall average family size of 1.8 for the Western Area is almost a whole number smaller than that for monogamous women. Freetown again shows a much more even distribution and values higher than in the rest of the Western Area.

#### Crude Family Size by Form of Marriage

So far the average family sizes are for actual live births as indicated by the children found in residence with both parents. On Table 9.12 all children living with both parents are related to the total number of wives in monogamous and polygamous unions. The inclusion of women in households without own children lowers the index for each type of marriage, but the average family size for monogamous unions is still significantly higher than for polygamous unions. In addition, the higher fertility level in Freetown becomes much more conclusive.

It should be pointed out at this stage that children in households containing only one parent (Segments of Bilateral Extended Families) have been left out of consideration, because to introduce them into the computation at this stage would be so obscure the form-of-marriage differential which was the main objective in the discussion of Elementary and Bilateral Extended Families. The demographic and other characteristics of husbands and wives have also been ignored since these were discussed in the chapter of marital status (Chapter 8).

Table 9.12

**CRUDE FAMILY SIZE BY FORM OF MARRIAGE, OF WIVES OF HEADS OF HOUSEHOLDS AND FOR 21 UNIT AREAS**

Area	Monogamy			Polygamy			Both Forms		
	No of Women	No of Child.	Crude Family Size	No of Women	No of Child.	Crude Family Size	Women	Child.	Crude Family Size
GBD 1 - TOWER HILL AREA	120	235	2.0	23	33	1.4	143	268	1.9
GBD 2 - COMMERCIAL AREA	129	209	1.6	49	84	1.7	178	293	1.6
EAST END 1 - BOMBAY STREET	118	229	1.9	59	71	1.2	177	300	1.7
EAST END 2 - SAVAGE SQUARE	134	289	2.2	28	42	1.5	162	331	2.0
EAST END 3 - KENNEDY STREET	116	234	2.0	25	34	1.4	141	268	1.9
EAST END 4 - CLINE TOWN	141	281	2.0	22	25	1.1	163	306	1.9
WEST END 1 - KING TOWN	111	211	1.9	18	17	0.9	129	228	1.8
WEST END 2 - CONGO TOWN	159	370	2.3	34	71	2.1	193	441	2.3
All Freetown:	1,028	2,058	2.0	258	377	1.5	1,286	2,435	1.9
MURRAY TOWN	32	60	1.9	0	0	-	32	60	1.9
WILBERFORCE	26	51	2.0	13	18	1.4	49	69	1.8
LIMLEY	29	61	2.1	5	3	0.6	34	64	1.9
GODERICH	26	43	1.7	2	1	0.5	28	44	1.6
KISSY	105	175	1.7	37	56	1.5	142	231	1.6
WELLINGTON	49	69	1.4	27	29	1.1	76	98	1.3
WATERLOO RURAL (Macdonald Vgs.)	48	61	1.3	26	21	0.8	74	82	1.1
WATERLOO VILLAGE	16	34	2.1	2	6	3.0	18	40	2.2
HASTINGS VILLAGE	32	62	1.9	30	47	1.6	62	109	1.8
All W. Urban:	363	616	1.7	142	181	1.3	505	797	1.6
NORTH/KOYA DISTRICT	15	15	1.0	8	9	1.1	23	24	1.0
SOUTH/KOYA DISTRICT	36	44	1.2	27	25	0.9	63	69	1.1
MOUNTAIN DISTRICT	14	27	1.9	2	3	1.5	16	30	1.9
YORK DISTRICT	50	56	1.1	7	3	0.4	57	59	1.0
All W Rural:	115	142	1.2	44	40	0.9	157	182	1.1
WESTERN AREA	1,506	2,816	1.9	444	598	1.3	1,950	3,414	1.8

Source: Author's analysis

Segments of Bilateral Extended Families (Category IVa -b)

Two broad elements make up the households in this category. There are the 351 households (IVa, Table 9.5) which, because they contain one parent, male or female, who is the head of the household and at least one own child, can be considered as a variation of a family structure. In addition, there are 265 households containing the head and other consanguineous or affinal relatives. Since such households contain neither the wife nor the child of the head of household, they cannot strictly be classified as families. They are essentially adjunctive households, being a development from the one-person household formed by the addition of other adults to an existing household. Discussion will therefore focus on the first element - the one-parent household.

There are four possible explanations of the presence of only one parent in a household. The first is that one of the parents is dead, in which case the <sup>surviving</sup> ~~surviving~~ head of the household will be returned as widowed. Secondly the parents may be divorced, in which case the custody of children will decide the resulting household composition. Thirdly, the parent may be single and in this case the children will theoretically be considered as illegitimate. Finally the parents may both be alive but maintaining different residence; as with divorce, the principles guiding the residence of minors - children as well as grandchildren - will decide the composition of the two households resulting from separate domicile.

It will be observed that the four explanations offered above hinge on the marital status of the heads of this category of segments of bilateral families and also on the

position of the children in such families. Consequently, the heads of such households were classified by marital status (Table 9.13).

Table 9.13  
HEADS OF SEGMENTS OF BILATERAL HOUSEHOLDS CLASSIFIED BY  
MARITAL STATUS AND BY SEX

Marital Status	Males	Females	M+F
Single	17	43	60
Married	67	125	192
Divorced	5	9	14
Widowed	20	65	85
Total	109	242	351

Source: Author's analysis

Apart from the low sex-ratio of headship of such households, the most significant aspect of the marital status is that more than half the males and females are married, another 24.2 per cent of both sexes are widowed, 4.0 per cent divorced and a surprisingly high proportion of 17.1 are single. Viewing these figures for their sociological implications, they provide strong evidence of instability of marriages in the community. Predictably, fewer men than women are prepared to live on their own with the children of marriage, but the existence of such a large number of married women maintaining a separate domicile requires further investigation. This will take the form of a discussion of tribal variations in family and household composition.

The implications for the children of variations in family and household composition can be summarised as follows. Of the 4,215 persons, 35.1 per cent of the sample population,

recorded as children, 2,816 live in monogamous families and another 598 in polygamous families, leaving a balance of 101 or 26.1 per cent of all children who are living with only one parent. This is unavoidable in the case of divorced or widowed parents, but a large proportion results from parents living apart.

The treatment of illegitimacy presents some problems, since the criteria for classifying children as illegitimate are difficult to apply to survey data.<sup>17</sup> The use of the stated marital status of parents ~~is~~ here is thus a compromise. There are sixty heads of households having children of their own who claim to be single and, although it may be assumed that there are others who will not reveal their true status, only these sixty households will be further analysed.

The 93 children recorded for single-parent households represent 2.2 per cent of all children in the sample. This is equal to an illegitimacy rate of 30.0 illegitimate children born per 1,000 unmarried women.<sup>18</sup> Another feature of illegitimacy as observed for the sixty households is that more than half of all single parents belong to the Creole tribe.<sup>19</sup>

#### Tribal Variation in Family and Household Composition

In spite of the limitations of survey data for a detailed analysis of family and household composition, it is to be expected that any observable pattern in the structure of households will reflect the norms and usage of moral values and the principles guiding relationships in the various tribal groups. The type of material about mating principles, attitudes to legitimacy and the traditional usage of child

custody or the residence of minors is available for a few of the tribes.<sup>20</sup> An inductive approach to the survey data is, therefore, employed as a compromise.

On Table 9.14, all the 2,779 occupied households have been classified according to the tribal affiliation of the head and the percentage distribution of households by composition shown for each tribe. Consistent with the analysis that the one person household was a phase in an individual's life cycle, and that this phase coincided with the ages 20 - 34, particularly in a male's life cycle, the tribes which have been shown to have a high mobility rating and a high sex-ratio show a higher representation of one-person households. The Minor Sierra Leone tribes and the Fulas are the two dominant examples.

With reference to the percentage distribution of the three major categories of family-household, the variations in the dominance of any one category amongst a tribe shows interesting patterns. For most tribes the proportion of elementary families is about equal to that of bilateral-extended families and the proportion of segments of bilateral-extended families at about the average of 22.2 per cent. This general pattern is however reversed for the Creole. This group has its highest proportions in the segments of bilateral families and, considering that it is for the Creole that the institution of marriage was demonstrably less attractive, and in view of the implications suggested for this category of household composition, the dominance of segments of bilateral families is to be expected.

Where, as in the case of the Kru and, to a lesser degree, the Madingo tribes the elementary family is strongly represented,

TABLE 9.14  
OCCUPIED HOUSEHOLDS CLASSIFIED BY FAMILY AND HOUSEHOLD COMPOSITION AND BY TRIBE OF HEAD  
 (Percentage Distribution)

Tribe of Head	No. of Occupied Households	P e r c e n t a g e s					Non-Kin Household	Total
		One Person	Elementary Family	Bilateral Extended	Segements of Bilateral Extended			
Creole	659	12.3	26.9	21.1	37.6	2.1	100.0	
Mende	259	16.6	36.9	32.9	13.2	0.3	100.0	
Temne	738	14.9	31.2	33.6	19.1	1.2	100.0	
Loko	114	15.8	33.3	37.7	13.1	0.0	100.0	
Limba	288	12.5	34.0	38.2	12.8	2.4	100.0	
Sherbro	89	12.4	34.8	30.3	18.0	2.2	100.0	
Susu	71	7.0	33.8	28.2	25.4	5.6	100.0	
Minor S L	39	23.1	28.2	28.2	15.4	5.1	100.0	
Fula	269	21.9	36.1	23.0	16.7	2.2	100.0	
Kru	42	14.3	42.9	21.4	21.4	0.0	100.0	
Mandingo	62	11.3	37.1	27.4	24.2	0.0	100.0	
Non S L	113	16.8	31.9	25.7	23.0	2.7	100.0	
Total:	2,779	14.8	32.1	29.2	22.2	1.8	100.	

Source: Author's analysis

this may be interpreted as an indication of stability in marriage. A similar high proportion of elementary families among Fulas is outweighed by the fact that this tribe features a relatively high representation of the one-parent households (IVa) and also of the single-parent household. Such evidence of family disorganisation is not to be viewed in isolation, but against the distortion in age structure, sex-ratio and, consequently, limitations on choice of mate which the migratory behaviour of the Fula has imposed on the group.

#### Family Membership and Obligations

The household unit has formed the basis of analysis so far. But when it comes to understanding living arrangements, the status of a member in a household and the extent to which each member is able to carry out his obligations, then it is the variations in the characteristics of household components that matter. It is by going into the socio-economic content of such classifications as 'relative' that knowledge of the principles behind family and household structure can be improved.

In discussing the marital status of the population of the Western Area, the characteristics of two household components received sufficient attention to justify their omission from this discussion. The two are: heads of family-households and their wives. Since the two together constitute the social class - parents, with obligations about which there is little confusion, a repetition of their economic and demographic characteristics is not necessary.

## Children

The family is the institution responsible for the bringing up of children and their socialisation. In order to carry out its obligations some degree of specialisation in role relation has been necessary in the family and in most societies. Of the two major bases of allocating responsibility, age and sex, age is more widely applied. Adults provide for the upkeep of the minors. Conceptually, the term 'child' therefore suggests an automatic classification as minor and dependent. In reality the classification has two distinct elements, one is the biological fact of parenthood and the residence of a child, which has nothing to do with age, and the other is the social image of a child. The extent to which the child population in the survey data can be considered as dependents should resolve the bio-socio contradiction resulting from the statement of relationship to a single head.

Table 9.15 shows the 4,215 children of heads of households classified by sex, age, marital and employment status and the income levels of those children in employment. Consistent with the biological position of children in families and in society, nearly three-quarters of all children are aged 0 - 14 years. Since the bulk of the child population is in the early stages of life where most people, male or female, are unmarried, the marital status shows 97.7 per cent single and the remaining 2.3 per cent constitute those who were ever married and living with parents. The employment rate of the child population is also low, with only 7.8 per cent in employment. It would therefore appear that the attainment of a critical age and economic indepen-

TABLE 9.15

CHILDREN OF HEADS OF HOUSEHOLDS CLASSIFIED BY SEX, AGE, MARITAL  
STATUS, EMPLOYMENT STATUS AND INCOME LEVEL OF EMPLOYED  
CHILDREN

Classification	Male	Female	Male & Female
<u>Age Class</u>			
0 - 4	551	571	1,122
5 - 9	580	593	1,173
10 - 14	395	389	784
15 - 19	319	275	594
20 - 24	154	146	300
25 - 29	50	66	116
30 - 34	23	24	47
35 - 39	14	16	30
40 - 44	10	10	20
45 - 49	4	7	11
50 - 54	6	8	14
55 - 59	0	2	2
60 - 64	1	1	2
65 and above	0	0	0
All Ages	2,107	2,108	4,215
<u>Marital Status</u>			
Single	2,059	2,060	4,119
Married	46	47	93
Divorced	1	-	1
Widowed	1	1	2
Total	2,107	2,108	4,215
<u>Employment Status</u>			
Employed	188	141	329
Unemployed	1,919	1,967	3,886
Total	2,107	2,108	4,215
<u>Income Levels for (329 Employed (Leones))</u>			
No Income	42	7	49
1 - 10	20	30	50
11 - 20	28	17	45
21 - 30	32	52	84
31 - 40	30	18	48
41 - 50	15	12	27
51 - 60	7	1	8
61 - 70	4	-	4
71 - 80	2	-	2
81 - 90	-	1	1
91 -100	3	1	4
Above 100	5	2	7
All Levels	188	141	329

Source: Author's analysis

dence, going with gainful employment, are the pre-conditions as well as the aspects of a life cycle necessary for the establishment of a new household. Although the income levels attained by those employed show a broad similarity for males and females, about a quarter of the males have no income at all. Since the emphasis of economic support of a new family or household largely lies with males, it is to be expected that males will tend to retain links with parents until such time as they achieve reasonable levels. On the other hand, children do have a traditional role of supporting parents when they are old, and there is quite an appreciable proportion of households where the child is the bread-winner. This is the case in households where the parents are old and retired or a surviving parent, often the female head, has no independent source of income besides the child's earnings. Among the Creole population, the protracted period of education and the consequent delay in marriage and establishment of a new household result in young males and females with substantial incomes staying on with their parents.

### Relatives

The extended family, the basic trait of which is the presence of non-conjugal members, is often conceived as essentially typical of a rural environment. Its presence in the urban milieu in the Western Area is evidence of the strength of the traditional extended family and of the extent to which practices can be transplanted from a rural society and adapted to conditions in changing social and economic circumstances.<sup>21</sup> The main advantage of the extended family system is mutual usefulness, although at any one time one group may be giving more than it takes. This is

particularly true of the different sets of demands and responses made on the individual in an urban economy as distinct from those of subsistent and rural economies. It is to ascertain to what extent the extended family system is being exploited that the "relative" population will be analysed.

Table 9.16 shows the relatives of heads of households classified into the same categories as for the child population. The age/sex structure is less distorted than for the child population, with the exceptions that there is a high sex-ratio at the productive ages, 15 - 59, with 2,165 males per 1,000 females, and a low sex-ratio at ages sixty and above, with only 370 males per 1,000 females. Assuming that the young children of relatives are an involuntary classification, it would appear that male relatives require assistance mostly in their productive ages and females in their old ages. This broad pattern is reinforced by the pattern of marital status: 13.4 per cent of the female relatives are widowed compared to 2.9 per cent of the male. The evidence of employment status is not conclusive on its own but, viewed against the low levels of income attained by those in employment, the following explanations can be offered. The adult male relative looks to the more fortunate head of household to offer shelter when he is looking for a job, and to help support him and his family until he has enough income to set up a new household. It is the male relative's economic viability that has priority over the female, who meanwhile would carry on her normal domestic activities. The male employment rate is consequently higher than the female. A variation of this explanation is for the adult male relative to arrive on his own leaving his

TABLE 9.16

RELATIVES OF HEADS OF HOUSEHOLDS CLASSIFIED BY SEX, AGE,  
MARITAL STATUS, EMPLOYMENT STATUS AND INCOME LEVEL OF  
EMPLOYED RELATIVES

<u>Classification</u>	<u>Males</u>	<u>Females</u>	<u>Male &amp; Female</u>
<u>Age Class</u>			
0 - 4	51	54	105
5 - 9	92	80	172
10 - 14	116	66	182
15 - 19	136	61	197
20 - 24	143	53	196
25 - 29	117	32	149
30 - 34	62	34	96
35 - 39	31	15	46
40 - 44	24	18	42
45 - 49	21	14	35
50 - 54	19	16	35
55 - 59	10	17	27
60 - 64	11	31	42
65 and above	23	61	84
<b>All Ages</b>	<b>856</b>	<b>552</b>	<b>1,408</b>
<u>Marital Status</u>			
Single	692	407	1,099
Married	133	61	194
Divorced	6	10	16
Widowed	25	74	99
<b>Total</b>	<b>856</b>	<b>552</b>	<b>1,408</b>
<u>Employment Status</u>			
Employed	267	64	331
Unemployed	589	488	1,077
<b>Total</b>	<b>856</b>	<b>552</b>	<b>1,408</b>
<u>Income Levels for (331) Employed (Leones)</u>			
No income	29	19	48
1 - 10	58	26	84
11 - 20	66	9	75
21 - 30	67	8	75
31 - 40	23	2	25
41 - 50	13	-	13
51 - 60	3	-	3
61 - 70	-	-	-
71 - 80	2	-	2
81 - 90	1	-	1
91 - 100	1	-	1
Above 100	3	-	3
<b>All Levels</b>	<b>267</b>	<b>64</b>	<b>331</b>

Source: Author's analysis

dependents in the Provinces, to find a job and economic stability and later to send for his family. This framework will help explain the additional evidence that the number of married male relatives outnumbers by two to one the married female relatives. Although a few male relatives achieve income levels of more than one hundred leones, the modal income level is 21 - 30 leones, and this is attained by only 7.8 per cent of male relatives.

In the series of explanations of the workings of the extended family, the tribal role is implicit. On Table 9.17, the tribal differential is investigated. The 1,408 relatives of heads of households are classified by frequency in households and by tribe of relatives and according to the residential areas. In addition the "relative" population belonging to each tribe is expressed as a percentage of the tribe's sample population to give an indication of the extent to which each tribe requires the assistance of other family members. With respect to the frequency distribution and the proportion, the Temnes come first and second respectively. The Lokos and the Limbas also show a high rate of distribution whilst the Krus have the highest proportion of their population as relatives. The Creoles significantly have the lowest proportion, although the frequency distribution is comparable to that of the other tribes. When allowance is made for the variation in sample from the different residential areas, there appears little difference in frequency distribution or proportion. In effect, it is the tribal differential that is most important in deciding to what extent the traditional rights of the extended family system are exercised.

Table 9.17

RELATIVES CLASSIFIED BY FREQUENCY IN HOUSEHOLDS AND BY TRIBE FOR EACH OF THE THREE RESIDENTIAL AREAS

Tribe	Freetown										W Urban										W Rural										W Area										Tribe's % Pop'n
	Frequency					Tribe's Total	Frequency					Tribe's Total	Frequency					Tribe's Total	Frequency					Tribe's Total																	
	1	2	3	4	5		1	2	3	4	5		1	2	3	4	5		1	2	3	4	5																		
Creole	73	21	13	7	2	201	20	6	5	1	51	31	1	1	1	1	5	96	28	18	8	2	257	8.5																	
Mende	39	8	7	-	-	91	16	3	1	2	47	71	1	1	1	1	12	62	12	9	2	1	150	12.4																	
Temne	94	29	15	6	2	268	44	10	6	2	120	185	4	5	3	1	88	156	44	25	11	7	476	13.9																	
Loko	9	5	3	1	3	47	4	-	1	1	21	4	1	-	-	-	7	17	5	5	2	5	75	13.9																	
Limba	47	15	4	5	3	124	9	2	1	3	43	1	-	-	-	-	1	57	17	5	8	3	168	13.0																	
Sherbro	3	4	1	1	-	18	3	-	-	-	3	3	2	-	-	-	7	9	6	1	1	-	28	8.8																	
Susu	11	3	3	-	-	26	4	2	-	-	8	-	-	-	-	-	-	15	5	3	-	-	34	11.3																	
Minor SL	5	2	-	1	-	13	-	-	-	-	-	-	-	-	-	-	-	5	2	-	1	-	13	9.9																	
Fula	34	14	3	2	-	79	8	1	3	1	23	1	-	-	-	-	1	43	15	6	3	-	103	12.2																	
Kru	5	4	4	1	-	29	-	-	-	-	-	-	-	-	-	-	-	5	4	4	1	-	29	16.3																	
Mandingo	11	2	-	1	-	19	3	1	-	-	5	1	-	-	-	-	1	15	3	-	1	-	25	8.8																	
Non S L	19	2	2	-	-	41	5	2	-	-	9	-	-	-	-	-	-	24	4	2	-	-	50	11.6																	
All Tribes	350109555251031-32					956	116271785211111					330	38965311--					122	50414578381862-43					1408	11.7																

Source : Author's analysis

### In-laws

In most societies, traditional or modern, a degree of avoidance operates between wife-takers and wife-givers. It is, therefore, not surprising that there are far fewer affinal relatives than cognatic. On Table 9.18 the 278 in-law population is shown classified by sex, age, marital and employment status and the income levels attained by those employed. It would appear that the tolerance of affines operates more in favour of females and the young than in favour of males and aged persons. It would also appear from the pattern of marital status that the married female in-law is more easily integrated than the single females in-law. The employment and income pattern shown for in-laws is similar to that of cognatic relatives. The contribution of in-laws to the domestic economy must be assumed to be essentially the same as for other relatives.

The social position of young persons in a household is generally much more uniform since little attention is paid to their classification as in-laws, relatives or own child. Rather they are viewed collectively from the degree of economic and physical maintenance they require. In the Western Area young persons aged 14 and under are either going to school, or, if too young, receive the traditional care and attention of the adult population necessary for their upbringing.

### Grandchildren and Generations

Families can be extended laterally by the addition of relatives and in-laws or vertically by the addition of grandchildren. The vertical aspect has so far been ignored. There are two broad principles which affect the presence of more than the two parent/child generations in any household.

TABLE 9.18

IN-LAWS OF HEADS OF HOUSEHOLDS CLASSIFIED BY SEX, AGE,  
MARITAL STATUS, EMPLOYMENT STATUS AND INCOME LEVEL OF  
EMPLOYED IN-LAWS

Classification	Males	Females	Male & Female
<b>Age-Class</b>			
0 - 4	3	6	9
5 - 9	4	11	15
10 - 14	7	15	22
15 - 19	20	24	44
20 - 24	12	34	46
25 - 29	9	34	43
30 - 34	8	19	27
35 - 39	2	12	14
40 - 44	7	8	15
45 - 49	2	8	10
50 - 54	2	4	6
55 - 59	2	4	6
60 - 64	2	8	10
65 and above	2	9	11
<b>All Ages</b>	<b>82</b>	<b>196</b>	<b>278</b>
<b>Marital Status</b>			
Single	61	93	154
Married	19	94	113
Divorced	1	1	2
Widowed	1	8	9
<b>Total</b>	<b>82</b>	<b>196</b>	<b>278</b>
<b>Employment Status</b>			
Employed	25	38	63
Unemployed	57	158	215
<b>Total</b>	<b>82</b>	<b>196</b>	<b>278</b>
<b>Income Levels for (63) Employed (Leones)</b>			
No Income	5	6	11
1 - 10	9	14	23
11 - 20	4	8	12
21 - 30	4	7	11
31 - 40	1	1	2
41 - 50	1	1	2
51 - 60	-	1	1
61 - 70	1	-	1
<b>All Levels</b>	<b>25</b>	<b>38</b>	<b>63</b>

Source: Author's analysis

The first is the expectation of life and the other is the practice of child placement. These two aspects can be best illustrated by using two variables to analyse those households where grandchildren are in residence. These variables are the age of the heads of such households and the form of the household.

Table 9.19 shows a classification of heads of household with grandchildren classified by sex and age and by form of household. Although there are a few cases of grandparents who are still in their thirties, the threshold age would appear to be forty years. Most males who are heads of multi-generation households are married, which accounts for the complete family structure which such households exhibit and the classification of the households as bilateral extended families. In contrast, when there is a female head, in more than half the cases she is widowed, which accounts for the classification of such households as segments of bilateral extended households.

The effect of child placement in the composition of these households is that the presence of grandchildren is not usually evidence of a three-generation household. The children of the heads are often grown up with households of their own, and the grandchildren are often placed with the old parents as companions whilst they go to school. This procedure is particularly true for the widowed and provides an essential social service of the care of the old.

Another variation shown by households headed by females is that a few contain female children, some married, who take up residence with the old parent with her siblings, thereby providing a three-generation household. Except that the Creoles have the highest proportion of widowed females and

TABLE 9.19

HEADS OF HOUSEHOLDS WITH GRANDCHILDREN CLASSIFIED BY SEX, AGE CLASS AND MARITAL STATUS AND ACCORDING TO THE FORM OF FAMILY

Age Class	Male					Female					Male + Female
	Married	Single	Divorced	Widowed	Total	Married	Single	Divorced	Widowed	Total	
30 - 34	1	0	0	0	1	0	0	0	0	0	1
35 - 39	6	0	0	0	6	1	0	0	0	1	7
40 - 44	13	0	0	1	14	3	1	2	7	13	27
45 - 49	18	1	0	2	21	13	5	0	6	24	45
50 - 54	19	0	0	0	19	5	0	1	8	14	33
54 - 59	16	1	1	0	18	4	2	1	4	11	29
60 - 64	24	2	0	1	27	8	1	0	9	18	45
65 and above	39	0	0	5	44	14	8	0	49	71	115
<b>Total</b>	<b>136</b>	<b>4</b>	<b>1</b>	<b>9</b>	<b>150</b>	<b>48</b>	<b>17</b>	<b>4</b>	<b>83</b>	<b>152</b>	<b>302</b>
<b>Forms of Families</b>											
<b>Form</b>						<b>No of Households</b>					
Bilateral Extended						124					
Segments of Bilateral Extended						178					
<b>Total:</b>						<b>302</b>					

probably the highest expectation of life, there is no significant variation in tribal child placement and the presence of multi-generation households.

#### Domestic Servant/Ward

A large proportion of this group is made up of persons who are in paid employment with a principal household. In addition, there is an element of child-placement operating here. Children from the less privileged section of the community are often sent into other homes where they are expected to acquire some sophistication and improved opportunities in education whilst carrying on the odd domestic obligations along with a formal education in schools. The two variables pertinent to an understanding of the system are the age/sex structure of the domestic servant/ward and the tribal flow in their placement.

Table 9.20 shows the domestic servants and wards of heads of households classified by age/sex class and by own tribe and according to those serving with heads of same or different tribe. Although a few are in the age class 0 - 4, the modal age is 10 - 14, and those aged thirty and above an exception. Only half are serving with heads of the same tribe. The Lokos, Mendes and the Minor Sierra Leone tribes have the highest proportion of their population in domestic service. These are followed by the Temnes and the Non-Sierra Leoneans, mostly Nigerians. Although the Creoles have a very small proportion of their population in domestic service, they are the tribe employing and receiving an appreciable proportion of all placements from the other tribes. The 62 Creole servants constitute 14.4 per cent of the total number of servants, and all but five of these

TABLE 9.20

SERVANTS AND WARDS OF HEADS OF HOUSEHOLDS CLASSIFIED BY  
AGE/SEX CLASS, OWN TRIBE AND ACCORDING TO THOSE SERVING  
WITH HEADS OF SAME OR DIFFERENT TRIBE

Age Class	Males	Females	Male & Female
0 - 4	6	16	22
5 - 9	57	16	120
10 - 14	71	55	126
15 - 19	68	15	83
20 - 24	42	5	47
25 - 29	14	4	18
30 - 34	7	4	11
35 - 39	3	0	3
40 - 44	2	1	3
45 - 49	1	2	3
50 - 54	1	0	1
55 - 59	0	0	0
60 - 64	0	1	1
65 and above	0	1	1
All Ages	272	162	439

.../continued

TABLE 9.20 (Continued)

Tribe of Servant	Number of Servants	Serving with Head Same Tribe	Serving with Head Different Tribe	% of Tribe's Population Servants
Creole	62	57	5	20.0
Mende	73	36	37	6.0
Temne	161	72	89	4.7
Loko	38	14	24	7.1
Limba	42	8	34	3.3
Sherbro	6	-	6	1.9
Susu	5	1	4	1.7
Minor S L	9	2	7	6.9
Fula	16	7	9	1.9
Kru	3	3	-	1.7
Madingo	3	2	1	1.1
Non S L	21	8	13	4.9
All Tribes	439	210	229	3.7

Source: Author's analysis

62 are with other Creole households. An additional 99 domestic servants and wards from other tribes are with Creole households. The social position occupied by the Creoles is a product of their educational and historical background. It ~~is~~<sup>remains</sup> to be seen if a stronger sense of nationalism will affect the response of emulation which the Creole have expected and received from the other tribes.

In conclusion to the analysis of families and households, attention may be drawn, in retrospect, to the various social and demographic determinants which affect the composition of families and households. The one person household is basically a stage in the development of a family household. The eventual composition of any one household will depend on the age, tribe and other characteristics of the head, changes from elementary to other forms may be temporary, as in the addition of a relative who requires assistance in establishing his own household, or permanent if the form of marriage is changed by the addition of subsequent wives, or alteration in the marital status of the head of household. Forms of marriage have also been shown to have implications for differing levels of fertility. Variations in tribal responses to household formation and composition have also been shown to exist. It is the wide range of socio-economic and demographic aspects covered by family and household that makes their inclusion in spatial terms a vital aspect of population geography.

NOTES AND REFERENCES

CHAPTER 9

1. CSO., Freetown, Instruction to Enumerators, Xerox-copy with this writer, p.2 emphasises the condition of a common domestic economy in the following words: "They (the members of a multi-person household) usually eat together and combine their income and other resources in a common fund from which they draw to purchase or otherwise obtain food, clothing, housing and other goods and services for household living.
2. Goode, W.J., The Family, Prentice-Hall, 1964, pp. 44 ff, Bohannan, P., Social Anthropology, Holt Rinehart and Winston, 1966, pp. 100 ff, and Smith, M.G. West Indian Family Structure, University of Washington Press, 1962, pp. 3-23, contain methodological discussions which have proved very useful in writing the introduction to this chapter.
3. CSO., op. cit., passim.
4. The term dwelling unit is employed here because an empty unit is not technically a household. See assumptions for the diting of the survey data as set out in chapter 1.
5. Toyne, P. and Newby, P.T., Techniques in Human Geography, MacMillan, 1971, p. 63. The t-values do not even reach the 10% probability.
6. See chapter 7 of this thesis for a discussion of the effect of small dwelling units and the frequency of one-person households on sex-ratio in Cline Town.
7. Information on the sub-division of structure in the Western Area were obtained from the dwelling unit survey questionnaire (Form A, Appendix 1.) ).
8. See references to the age-structure index, dependency ratio and the sex-ratio of Goderich in chapters 6-8.
9. Outside of former Creole settlements such as Campbell Town houses in the Koya lowland are small heaped roof structure of the types identified in the interior of Sierra Leone by Harvey, M.E. 'Rural House Types' in Sierra Leone in Maps, (ed. Clarke), University of London Press, 1966, pp 64-5.
10. Clarke, J.I. Population Geography, Pergamon, 1966, pp 32-33
11. Calculated as  $\frac{\text{number of vacant households}}{\text{number of selected households}} \times 100$ , using Table 9.2 (col. a. - col. b/col. a).
12. Although urban decay and renewal may produce vacant plots and properties, these are generally a temporary feature because of high land values. But in the rural

area, especially one in a state of decline, vacant plots and properties are a syndrome of its depression.

13. It is a fine distinction between 'vacant' and 'derelict' dwelling units. Whilst vacant dwelling units were to be listed (the definition of a dwelling unit was flexible, CSO., op. cit., p. 3), derelict houses were to be edited out, ibid., p.6.
14. Recommendations of the Committee for the Royal Anthropological Institute quoted in Smith, op. cit., p.10.
15. Clarke, op. cit., p. 83.
16. Banton, M., West African City: A Study of Tribal Life in Freetown, Oxford University Press, 1960, pp.196 - 212 provide some useful and comparative data and analysis of households in Freetown.
17. A knowledge of mating system and the principle of legitimacy is essential to a determination of illegitimacy.
18. Bogue, D.J., Principles of Demography, Wiley, 1969, p. 688, for a definition of illegitimacy rate calculated here as 
$$\frac{93 \text{ 'illegitimate'}}{3,095 \text{ unmarried females}} \times 1,000$$
19. Banton, op. cit., pp. 204 - 6 for other features of Creole households.
20. Little, K., The Mendes of Sierra Leone, Rutledge and Kegan Paul, 1967 and McCulloch, M. People of Sierra Leone in Ethnographic Survey of Africa, West Africa, Part II, have considerably increased knowledge of the Mendes, but less so with the study of the other tribes, for whom the Mende model is frequently extended.
21. See Goode, op. cit., chapter 7, on strength of the extended family system.

CHAPTER 10ECONOMIC COMPOSITION

Three categories of economic status were determined from the survey data. These are:-

- (a) The employed population, consisting of all persons who claimed to be employed at the time of the survey, irrespective of their receiving any income from such employment.
- (b) The temporarily unemployed population, consisting of those who may have an occupation or profession but, at the time of the survey, claimed to be looking for work.
- (c) The unemployed population, consisting of those who, for various reasons, were not in employment and including all housewives but excluding those in paid domestic service.

Categories (a) and (b) together constitute the working population.

In this chapter, the analysis of the survey data is carried out in three broad sections. The first investigates the degree of participation in economic activities by various demographic and social groups in the Western Area. The second details the industrial structure of the employed population and the third deals with the occupation structure of the working population.

In accordance with the stated hypothesis that population characteristics based on acquired traits and special skills, will exhibit some clustering of persons with such traits and skills in areas, where they can best exploit them, a marked residential clustering in industrial and occupation structures is to be expected. This expectation is based on the marked clustering of manufacturing industries, commerce and service, requiring labour with special qualifications, in the urban area. The predominance of agriculture, with a different labour input in the rural area, is a concomitant factor in the area

differentiation in industrial and occupation structures.

Parallel to the residential variation, is the more socially significant tribal differential which is the outcome of the differences in literacy and the differences in acquired skills. Consequently, there are differences in access to specific industrial and occupation groups. A similar differential based on skills and employment opportunities operates between males and females.

#### Activity Rates in the Western Area

The proportion of the working population to the total population in any demographic or social group is known as the Activity Rate for the group. The proportion is expressed in percentages and can be computed for age, sex, marital and other sub-divisions of the population when it becomes a specific activity rate.<sup>2</sup> Table 10.1 shows the percentage distribution of the sample population from each unit area and from each residential area by economic status and activity rate.

The basic feature of the pattern displayed is that about a third of the sample population in each area is employed, an average of 5.2 per cent temporarily unemployed and the remaining 63.3 per cent is unemployed. It can also be observed that the highest activity rates are recorded for the rural area and the lowest for Freetown.

Within each residential area some variations occurs, particularly so in the Western urban and rural areas. All units in the immediate environs of Freetown, irrespective of their classification as rural or urban, have an activity rate close to the overall average of 36.7 per cent. But units further away from Freetown, especially in the Koya lowland have rates of more than 40.0 per cent. Goderich, for reasons other than its location close to Freetown, has the highest

TABLE 10.1  
PERCENTAGE DISTRIBUTION BY ECONOMIC STATUS AND ACTIVITY RATE OF THE SAMPLE POPULATION IN THE 21 UNIT AREAS

Area	Sample Population	Percentage Employed (a)	Percentage Looking for Employment (b)	Activity Rate % (a+b)	Percentage Unemployed	Total % for Unit Area
CBD 1 - GOVERNMENT AREA	1,082	30.0	5.9	35.5	64.5	100.0
CBD 2 - COMMERCIAL AREA	1,188	33.5	4.7	38.2	61.8	100.0
EAST END 1 - BOMBAY STREET	1,060	32.5	6.2	38.7	61.3	100.0
EAST END 2 - SAVAGE SQUARE	1,073	31.7	5.5	37.2	62.8	100.0
EAST END 3 - KENNEDY STREET	895	30.4	6.1	36.5	63.5	100.0
EAST END 4 - CLINE TOWN	1,036	28.7	5.6	34.3	65.7	100.0
WEST END 1 - KING TOWN	847	28.1	7.0	35.1	64.9	100.0
WEST END 2 - CONGO TOWN	1,130	26.5	5.2	31.7	68.3	100.0
All Freetown:	8,311	30.2	5.7	35.9	64.1	100.0
<u>W Urban</u>						
MURRAY TOWN	218	32.6	3.2	35.8	64.2	100.0
WILBERFORCE	214	36.4	1.4	37.8	62.2	100.0
LUMLEY	208	31.7	7.2	38.9	61.1	100.0
GODERICH	157	47.8	2.5	50.3	49.7	100.0
KISSY	771	30.9	6.7	37.6	62.4	100.0
WELLINGTON	389	28.0	6.9	34.9	65.1	100.0
WATERLOO RURAL (Macdonald Veg.)	354	39.0	3.4	42.4	57.6	100.0
WATERLOO VILLAGE	157	29.3	4.5	33.8	66.2	100.0
HASTINGS VILLAGE	382	29.8	5.0	34.8	65.2	100.0
All W Urban:	2,850	32.8	5.1	37.9	62.1	100.0
<u>W Rural</u>						
SOUTH/KOYA DISTRICT	347	38.6	0.6	39.2	60.8	100.0
NORTH/KOYA DISTRICT	100	41.0	1.0	42.0	58.0	100.0
MOUNTAIN DISTRICT	107	23.4	6.5	29.9	70.1	100.0
YORK DISTRICT	283	47.0	0.7	47.7	52.3	100.0
All W Rural	837	39.8	1.4	41.2	58.8	100.0
WESTERN AREA	11,998	31.5	5.2	36.7	63.3	100.0

Source: Author's analysis

rate of 50.3 per cent.

This clear break between the urban and rural areas is a reflection of the nature of economic activities and employment conditions in the two environments, which a quantitative measure such as the activity rate has highlighted.

In urban area, employment in the secondary and tertiary sectors of the economy is sufficiently well defined to make the numerical accounting of the working population easy. In contrast, the predominant agricultural and subsistent economy in the rural area and the nature of employment in them is able to disguise the true state of unemployment.<sup>3</sup> Since agriculture depends largely on family labour, participation is much more easily accessible than in other sectors of the economy, where other, more stringent qualification than family membership is required. Consequently, when an individual moves into the urban area, chances for automatic recruitment into employment are fewer.<sup>4</sup> However, the high rural activity rates are also an indication of the prosperity of such activities as fishing in Goderich and other settlements and rice farming in the Koya lowland.

These crude activity rates in the Western Area cloak the variations that occur from age class to age class, and between other groups in the population. This is because of the association of age and other criteria with entry into the working population. Consequently, Tables 10.2 and 10.3 show the percentage distribution of the sample population at each age class and for the sexes, by economic status.

Although participation begins at very early ages, the modal age class for the percentage employed is 45-49, and 24-29 for the percentage looking for employment. The activity

**TABLE 10.2**  
**PERCENTAGE DISTRIBUTION BY ECONOMIC STATUS AND ACTIVITY RATE OF THE SAMPLE POPULATION AT EACH AGE CLASS**

Age Class	Sample Population	Percentage Employed (a)	Percentage Looking for Employment (b)	Activity Rate a+b	Percentage Unemployed
0 - 4	1,495	0.0	0.0	0.0	100.0
5 - 9	1,705	0.8	0.0	0.8	99.2
10 - 14	1,286	2.3	0.9	3.2	96.8
15 - 19	1,139	9.8	8.3	18.1	81.9
20 - 24	1,025	42.1	14.8	56.9	43.1
25 - 29	1,032	56.8	10.0	66.8	33.2
30 - 34	986	61.5	6.2	67.7	32.3
35 - 39	755	62.1	7.3	69.4	30.6
40 - 44	775	67.9	6.5	74.4	25.6
45 - 49	575	71.7	7.7	79.4	20.6
50 - 54	400	67.0	3.8	70.8	29.2
55 - 59	209	51.2	6.2	57.4	42.6
60 - 64	257	48.6	5.8	54.4	45.6
65 and above	359	27.0	3.3	30.3	69.7
All Ages	11,998	31.5	5.2	36.7	63.3

Source: Author's analysis

TABLE 10.3  
PERCENTAGE DISTRIBUTION BY ECONOMIC STATUS AND SEX-SPECIFIC ACTIVITY RATE OF THE SAMPLE  
POPULATION IN EACH RESIDENTIAL AREA

Residential Area	Sex	Sample Population	Percentage Employed (a)	Percentage Looking for Employment (b)	Activity Rate (a+b)	Percentage Unemployed
<u>Freetown</u>	Male	4,253	41.9	8.7	50.6	49.4
	Female	4,058	18.0	2.5	20.5	79.5
	M+F	8,311	30.2	5.7	35.9	64.1
<u>Urban</u>	Male	1,490	44.2	8.3	52.5	47.5
	Female	1,360	20.3	1.6	21.9	78.1
	M+F	2,850	32.8	5.1	37.9	62.1
<u>Rural</u>	Male	440	57.7	2.5	60.2	39.8
	Female	397	20.0	0.2	20.2	79.8
	M+F	837	39.8	1.4	41.2	58.8
<u>Area</u>	Male	6,183	43.6	8.0	51.6	48.4
	Female	5,815	18.7	2.4	21.1	78.9
	M+F	11,998	31.5	5.2	36.7	63.3

rate for the 10-14 age class is 3.2 per cent, it reaches 56.9 per cent for the 20-24 age class after which there is an increase to 79.4 per cent for the 45-49 age class and a decline thereafter to 30.3 per cent for those aged 65 years and above.

Although age - and sex-specific activity rates have not been included, Table 10.3 shows a consistently lower rate for females in all residential areas. Other variations known to occur with sex and age include the higher rates for older females than for older men. This is because petty trading activity in urban areas is essentially a sedentary and quasi-domestic activity, in which old females can engage without taxing themselves.

Whilst the effect of age and sex on participation in economic activities is broadly similar for both developing and advanced economies<sup>5</sup> and such effects are fairly predictable, the effect of marital status on participation can only be interpreted in the knowledge that such status also depends on the age and sex of individuals.

As shown on Table 10.4, the lowest rates are recorded for the single population in each residential area. The single population is the group including the bulk of population which, because it is too young, is excluded from economic activity. The observed higher activity rates for the married and divorced than for the widowed also include the built-in effect of the age structure of the different marital status groups. The widowed population consists largely of old persons who have relatively low activity rates. But for the predominance of older females in the widowed population, who as pointed earlier take part in petty trading,

TABLE 10.4

PERCENTAGE DISTRIBUTION BY ECONOMIC STATUS AND ACTIVITY RATE  
OF THE SAMPLE POPULATION IN EACH RESIDENTIAL AREA AND BY  
MARITAL STATUS

Residential Area and Marital Status	Sample Population	Percentage Employed (a)	Percentage Looking for Employment (b)	Activity Rate (a+b)	Percentage Unemployed
<u>Freetown</u>					
Married	3,058	54.8	5.5	60.3	39.7
Single	5,019	14.9	5.8	20.7	79.3
Divorced	195	33.8	2.1	35.9	64.1
Widowed	39	64.1	17.9	82.0	18.0
All Freetown	8,311	30.2	5.7	35.9	64.1
<u>W Urban</u>					
Married	1,177	56.8	4.8	61.6	38.4
Single	1,587	14.9	5.4	20.3	79.7
Divorced	69	31.9	4.3	36.2	63.8
Widowed	17	47.1	5.8	52.9	47.1
All W Urban	2,850	32.8	5.1	37.9	62.1
<u>W Rural</u>					
Married	382	58.4	1.3	59.7	40.3
Single	424	21.7	1.7	23.4	76.6
Divorced	28	57.1	0.0	57.1	42.9
Widowed	3	66.7	0.0	66.7	33.3
All W Rural	837	39.8	1.4	41.2	58.8
<u>W Area</u>	11,998	31.5	5.		
Married	4,617	55.6	4.9	60.5	39.5
Single	7,030	15.3	5.5	20.8	79.2
Widowed	292	35.6	2.4	38.0	62.0
Divorced	59	59.3	13.6	72.9	17.1
All W Area	11,998	31.5	5.2	36.7	63.3

Source: Author's analysis

the rates would be much lower. The married population accounts for the bulk of the working population, and the rate for this group reflects the natural anxiety of persons in this category to provide for their dependents.

A consideration of the tribal variation at this stage provides a summary for the demographic aspects which have been discussed so far. Table 10.5 shows the economic status and activity rates for the various tribes. Except for the Sherbros and the Fulas who have markedly high activity rates, the other groups have rates closer to the average rate of 36.7 per cent for the Western Area. On the surface, it is tempting to interpret these figures as representing the extent of economic opportunities open to the various tribes. To do so is to underline the flaw in using activity rates as an index of degree of participation in economic activity. Each person in the working population, for the purpose of computing the activity rate, carried equal weight, which does not discriminate as to the productivity of the activity engaged in. The broad uniformity in activity rates is, consequently, nothing more than a summation of the broad similarity observed for residence, age, sex and marital status.

Consistent with the fact that economic status is based <sup>on</sup> essentially an acquired rather than an innate characteristic, the factor most likely to point to significant variations in opportunities for participation is education. The eleven education levels identified from the survey data are shown on Table 10.6 with the percentage distribution by economic status of the sample population at each level displayed.

More than half the sample population has no education, another 46.3 per cent are distributed among the three formal

TABLE 10.5

PERCENTAGE DISTRIBUTION BY ECONOMIC STATUS AND ACTIVITY RATE  
OF THE SAMPLE POPULATION IN EACH TRIBE

Tribe	Sample Population	Percentage Employed (a)	Percentage Looking for Employment (a+b)	Activity Rate (a+b)	Percentage Unemployed
Creole	3,030	27.4	4.6	32.0	68.0
Mende	1,214	29.7	6.0	35.7	64.3
Temne	3,436	33.3	5.2	38.5	61.5
Loko	539	30.6	5.4	36.0	64.0
Limba	1,289	31.0	7.7	38.7	61.3
Sherbro	320	42.2	5.9	48.1	51.9
Susu	300	31.7	5.0	36.7	63.3
Minor S L	131	32.1	7.6	39.7	60.3
Fula	846	38.4	3.6	42.0	58.0
Kru	178	30.3	5.1	35.4	64.6
Madingo	285	28.1	4.6	32.7	67.3
Non S L	430	35.8	3.0	38.8	61.2
All Tribes	11,998	31.5	4.2	36.7	63.3

Source: Author's analysis

TABLE 10.6

Education Level	Sample Population	Percentage Employed (a)	Percentage Looking for Employment (b)	Activity Rate (a+b)	Percentage Unemployed
No Educ'n	6,161	33.8	5.0	38.8	61.2
Primary	3,269	17.4	3.7	21.1	78.9
Pre-Primary	31	3.2	0.0	3.2	96.8
Secondary	2,212	41.2	8.5	49.7	50.3
University	81	58.0	1.2	59.2	40.8
Teacher Tr	18	66.7	0.0	66.7	33.3
Tech Coll	14	35.7	0.0	78.3	21.7
Arabic	203	73.4	4.9	78.3	21.7
Educ Inst	4	50.0	25.0	75.0	25.0
Trade Sch'l	3	100.0	0.0	100.0	0.0
Self Educ'd	2	100.0	0.0	100.0	0.0
All Levels	11,998	31.5	5.2	36.7	63.3

Source: Author's analysis

education levels - primary, secondary and tertiary. Whilst the activity rate for persons with no education is close to the average, marked departures can be observed for the formal levels of education. The activity rate for the primary level is much lower than for the secondary and tertiary. Since the sample population at each education level consists of persons who have left school at that level and persons who are still receiving a formal education, the low activity rate for the primary level is the result of the youthful age structure of persons at this level. Conversely, the high activity rate for the secondary and tertiary levels is complementary to the high age-specific activity rate observed for persons at about ages 15 - 29 who may have received or be in the process of receiving a secondary or tertiary education.

When the activity rates for the different education levels are viewed against the educational composition of the different tribes (Chapter 11), the Creoles and Non-Sierra Leoneans, with a markedly high proportion of their population at the formal education levels, stand a better chance of employment in the better jobs which require a paper qualification than tribes with high illiteracy rates.

It is for the purpose of improving on the analysis based on economic status that the industrial and occupational structure of the population are investigated in the rest of this chapter. But, before the consideration of industrial and occupational structure, it should be pointed out that the unemployed population is considered essentially as a residual classification. Although the demographic and social composition of the unemployed population can be interpreted as the mirror image of the activity rates, the household

survey data are inadequate for analysing the nature and the remote causes of unemployment. The variation in working hours, the cyclical nature of work in agriculture and other variables are essential for an understanding of disguised unemployment and these are features which have not been investigated in the survey. It is enough to note here that a quantification of such variables is a difficult task.<sup>6</sup>

### Industrial Structure

The discussion of industrial structure covers only 3,782 or the 31.5 per cent of the sample population who were actually engaged in productive employment at the time of the survey and, therefore, reported a 'place of work' or industry in response to Item 12 on the household survey questionnaire, (Form B, Appendix 1).

The classification used here is based on the International Standard Industrial Classification devised by the United Nations Statistical Commission.<sup>7</sup> The nine divisions, corresponding to the coding of the survey data, are as follows:

1. Agriculture, forestry, hunting and fishing;
2. Mining and quarrying;
3. Manufacturing industries;
4. Construction;
5. Electricity, gas, water and sanitary services;
6. Commerce;
7. Transport, storage and communication;
8. Services; and,
9. Others not classifiable elsewhere.

One feature of the economy in developing countries, in general, which can help explain the pattern of industrial

structure in the various units, (Table 10.7), is the transfer of population from primary production. This transfer from rural to urban areas is then expected to provide a source of labour for manufacturing industries and a consequent expansion of the economy. But, as is increasingly apparent, this typology is more a reconstruction of patterns of industrial revolution in advanced countries than a format for industrialisation elsewhere.<sup>8</sup> Consequently, whilst the shift from agriculture goes on in countries such as Sierra Leone, the absence of a large manufacturing sector results in this labour pool going into an increasingly unbalanced service sector, consisting largely of retail trading and transportation.

Viewed against this sketch of economic transformation, the spatial variation of industrial structure in the Western Area provides a comprehensive illustration of the results. The key industries in this context are numbers 1, 3 and 6 - 8. At the Freetown end of the scale, only 0.6 per cent of the city's sample is in agriculture, another 12.1 per cent are in manufacturing industry and 78.5 per cent are shared by commerce, transport and services. This pattern is reversed in the Western Rural area, with 74.2 per cent in agriculture, another 10.6 per cent in manufacturing and 18 per cent in the distributing and service sectors. In the Western Urban area, such units as Kissy and Hastings approximate the Freetown model, whilst places such as Goderich and Macdonald Villages approximate the rural model. The Mountain District, in spite of its classification as rural, also closely approximates the Freetown model.

The very negligible representation of the mining and quarrying industry in the Western Area reflects the absence

TABLE 10.7  
PERCENTAGE DISTRIBUTION OF EMPLOYED POPULATION IN EACH UNIT AREA BY INDUSTRY

Area	Employed Population	Industrial Codes								
		1	2	3	4	5	6	7	8	9
CBD 1 - GOVERNMENT AREA	327	0.9	0.0	10.7	8.6	3.1	30.0	15.0	31.8	0.0
CBD 2 - COMMERCIAL AREA	397	0.8	0.0	12.6	5.0	1.5	45.3	14.4	20.4	0.0
EAST END 1 - BOMBAY STREET	342	0.3	0.0	13.5	3.2	1.2	47.1	12.6	21.9	0.3
EAST END 2 - SAVAGE SQUARE	342	0.6	0.3	15.2	2.6	1.2	46.8	18.4	14.9	0.0
EAST END 3 - KENNEDY STREET	269	0.0	0.0	11.9	5.2	4.5	37.2	28.3	13.0	0.0
EAST END 4 - CLINE TOWN	289	1.7	0.0	12.4	7.0	1.0	32.9	26.8	18.1	0.0
WEST END 1 - KING TOWN	239	0.0	0.0	11.7	10.9	2.9	30.5	21.8	22.2	0.0
WEST END 2 - CONGO TOWN	300	0.7	0.3	8.0	12.7	2.0	26.7	13.0	36.3	0.3
All Freetown	2,514	0.6	0.1	12.1	6.6	2.1	37.8	18.3	22.4	0.1
MURRAY TOWN	71	11.3	1.4	2.8	11.3	1.4	31.0	11.3	29.6	0.0
WILBERFORCE	78	1.3	0.0	3.8	11.5	5.1	17.9	12.8	47.4	0.0
LUMLEY	67	10.4	3.0	6.0	17.9	1.5	25.4	9.0	26.9	0.0
GODERICH	73	27.0	1.4	2.7	9.6	0.0	41.1	4.1	4.1	0.0
KISSY	239	0.8	0.8	9.6	5.4	0.4	36.8	25.9	20.1	0.0
WELLINGTON	109	12.8	0.9	18.3	6.4	0.9	37.6	14.7	8.3	0.0
WATERLOO RURAL (Macdonald Vgs ad)	137	54.0	0.0	3.6	0.7	0.7	29.2	8.8	3.6	0.0
WATERLOO VILLAGE	46	6.5	0.0	8.7	4.3	2.2	63.0	4.3	10.9	0.0
HASTINGS VILLAGE	115	15.7	0.0	16.5	5.2	0.0	33.0	17.4	12.2	0.0
All W Urban	935	16.5	0.7	8.8	7.0	1.0	34.1	14.9	17.1	0.0
SOUTH/KOYA DISTRICT	136	83.1	0.0	8.1	0.0	0.0	8.8	0.0	0.0	0.0
NORTH/KOYA DISTRICT	40	82.5	0.0	2.5	0.0	0.0	15.0	0.0	0.0	0.0
MOUNTAIN DISTRICT	25	4.0	0.0	4.0	4.0	8.0	20.0	12.0	48.0	0.0
YORK DISTRICT	122	75.8	0.0	1.5	0.8	5.3	16.7	0.0	0.0	0.0
All W Rural	333	74.2	0.0	4.5	0.6	2.7	13.5	0.9	3.6	0.0
WESTERN AREA	3,782	11.0	0.2	10.6	6.2	1.9	34.7	15.9	19.4	0.1

Source: Author's analysis

of economic mineral deposits in this part of a country with extensive mineral deposits.<sup>9</sup> The low representation of the construction industry in the rural units is also the result of differential rates of settlement renewal and expansion between the urban and the rural areas. The preceding comments on industrial structure have dwelt on their economic significance so that the demographic and social variations in industrial structure can be seen as both end results and contributory factors to the level of economic development.

With 93.0 per cent of the employed population falling in the productive ages, 15 - 59, not much variation was expected in the age structure of the individual industries. As Table 10.8 shows, most industries have an age structure which is similar to that of the combined total. Limited variations as to the modal age-class occur. In the absence of a legal age of retirement, except for the minority in government and institutionalised employment, the extent of teenage or old aged participation in any industry remains the basis of comparison. For example, agriculture shows the highest proportions of teenage and old aged. In contrast, very low proportions of teenagers are employed in the other industries, and the participation of persons aged sixty years and above is low in industries, groups 5 and 7. These contrasts are the outcome of the demographic and economic differences in the areas in which the industries are carried out and in the conditions of employment.

The nature of agricultural activities would appear to be sufficiently varied and entry to this industry flexible enough to permit the participation of both young and old persons. Since farming depends largely on family labour,

TABLE 10.8

PERCENTAGE DISTRIBUTION BY AGE CLASS OF EMPLOYED POPULATION IN EACH INDUSTRY

Age Class	Industrial Codes									All Industries
	1	2	3	4	5	6	7	8	9	
0-4	417	9	401	234	70	1314	601	734	2	Total Employed 3782
5-9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10-14	1.9	0.0	0.0	0.0	0.0	0.3	0.0	0.1	0.0	0.3
15-19	3.4	0.0	0.5	0.0	1.4	0.5	0.2	0.5	0.0	0.8
20-24	8.8	0.0	4.2	0.9	1.4	3.6	1.5	3.0	50.0	3.0
25-29	22.2	22.2	12.4	9.0	8.6	12.8	9.2	15.4	0.0	11.4
30-34	12.2	33.3	18.1	12.8	15.7	16.5	14.8	15.7	0.0	15.3
35-39	15.6	11.1	13.1	14.5	18.6	17.1	17.6	14.7	0.0	16.0
40-44	10.1	11.1	15.8	9.0	8.6	13.0	13.6	11.4	0.0	12.4
45-49	13.8	11.1	12.6	19.2	18.6	12.0	17.0	12.8	00.0	13.9
50-54	12.5	0.0	8.2	16.7	8.6	9.9	10.6	11.5	50.0	10.9
55-59	7.7	0.0	6.9	9.0	12.9	4.9	8.3	8.8	0.0	7.1
60-64	3.1	0.0	3.0	2.1	4.3	2.6	3.2	2.8	0.0	2.8
65 and above	6.0	0.0	2.5	3.4	0.0	3.7	2.8	2.2	0.0	3.3
	1.7	11.1	2.7	3.4	1.4	3.0	1.1	3.0	0.0	2.6
All Ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Author's analysis

Note: For Industrial Codes, see text

the recruitment of teenagers who do not go to school is virtually automatic. Since the rural areas also have the lowest proportions of children in school, it is possible for a significant number to take part in farming.

Commerce and the small-scale retailing, which form the bulk of this industry, are urban activities. Participation at the retailing end is also flexible as to capital and other conditions of entry. The large number of young men selling a handful of belts and other such wares on the streets of Freetown are evidence of the limited capital outlay needed for engaging in trade. A couple of months' salary from domestic service often provides the needed capital. The retailing of agricultural produce such as oranges, bananas and a trayful of okro is also ubiquitous in Freetown and for this the vendors are predominantly female. Consequently, although a wide range of age structure is possessed by this industry's labour force, most persons are in the age group 20 to 30. A low sex ratio is also a feature of this industry which provides an outlet for female urban unemployment.

The sex-ratio for the employed population is 2,484 males per 1,000 females. Such a high sex-ratio summarises the various cultural and economic differentials applied to the sexes in developing countries. Predictably, female participation is lowest in the construction industry, (Table 10.9) although a few openings exist in the less arduous aspects such as the supply of water to building sites and the clerical duties related to the industry. The highest female participation is in commerce which is the only industry where female employment outnumbered male. As mentioned earlier,

TABLE 10.9

THE EMPLOYED POPULATION CLASSIFIED BY INDUSTRY AND PERCENTAGE  
DISTRIBUTION BY SEX

Industry Group Code	Employed Population	Percentage Male	Percentage Female
1	417	87.3	12.7
2	9	66.7	33.3
3	401	85.8	14.2
4	234	93.6	6.4
5	70	98.6	1.4
6	1,314	42.8	57.2
7	601	96.2	3.8
8	734	74.0	26.0
9	2	50.0	50.0
All Groups	3,782	71.3	38.7

Source: Author's analysis

the entry into this industry is fairly easy, and such features as the possibility of combining commerce with domestic duties makes female participation much easier. In industries which may be said to offer equal opportunity for male and female participation, such as the service industry, the differential rates of sex participation are the result of the lower literacy rate for the female population.

On Table 10.10 the proportion of employed persons in each marital status is shown by industry. And in support of the comments on sex structure, there is a marked heaping of married persons, mostly female, in commerce. The widowed employed population, again mostly female, has 57.7 per cent in commerce.

TABLE 10.10

EMPLOYED POPULATION CLASSIFIED BY MARITAL STATUS AND  
PERCENTAGE DISTRIBUTION BY INDUSTRY

Marital Status	Employed Population	Industrial Codes								
		1	2	3	4	5	6	7	8	9
Married	2,569	10.3	0.2	10.0	6.7	1.7	37.3	16.6	17.2	0.1
Single	1,074	12.7	0.2	12.8	5.4	2.3	26.5	15.5	24.5	0.1
Widowed	104	11.5	0.0	3.8	1.9	0.9	57.7	7.7	16.3	0.0
Divorced	35	11.4	0.0	11.4	8.6	0.0	34.3	2.9	31.4	0.0
Total	3,782	11.0	0.2	10.6	6.2	1.9	34.7	15.9	19.4	0.1

Source: Author's analysis

Note: For Industrial Codes, see text

In order to summarise the effect of the various factors to affecting participation in industries and show how the different tribes respond, the employed population in each tribe is shown on Table 10.11 as percentage distribution by

TABLE 10.11

PERCENTAGE DISTRIBUTION BY INDUSTRY OF EMPLOYED POPULATION IN EACH TRIBE

Tribe	Employed Population	Industrial Codes								
		1	2	3	4	5	6	7	8	9
Creole	830	1.1	0.2	11.3	8.3	1.7	25.3	20.0	34.0	0.1
Mende	360	17.2	0.6	10.6	8.6	1.9	16.7	21.9	22.5	0.0
Tiemne	1,143	16.6	0.2	10.9	4.1	1.4	42.3	14.3	10.0	0.1
Loko	165	17.6	0.6	9.7	8.5	2.4	23.6	13.3	24.2	0.0
Limba	399	5.3	0.3	8.8	9.0	5.3	40.1	15.0	16.3	0.0
Sherbro	135	49.6	0.7	5.9	3.0	1.5	16.3	8.9	14.1	0.0
Susu	95	3.2	0.0	12.6	7.4	2.1	46.3	13.7	14.7	0.0
Minor Sierra Leonean	42	11.9	0.0	11.9	2.4	0.0	19.0	26.2	28.6	0.0
Fula	325	2.2	0.0	12.0	1.5	0.3	60.9	4.9	18.2	0.0
Kru	54	1.9	0.0	7.4	1.9	0.0	13.0	63.0	13.0	0.0
Mandingo	80	11.3	0.0	10.0	6.3	0.0	38.8	16.3	17.5	0.0
Non Sierra Leonean	154	9.1	0.0	11.0	9.1	1.9	33.1	18.2	17.5	0.0
All Tribes	3,782	11.0	0.2	10.6	6.2	1.9	34.7	15.9	19.4	0.1

Source: Author's analysis

Note: For Industrial Codes, see text

industry. Compared to the 11.0 per cent of the employed population in agriculture in the Western Area, the Creoles, with a high literacy rate and a large urban residence, have only 1.1 per cent of their employed population in this industry. The most marked clustering for this tribe is in the service industry, where about a third of the Creole employed population is to be found.

The Creole pattern is the exact mirror image<sup>of</sup> the distribution shown for the Sherbros. With a lower rate of literacy and a higher proportion in rural residence, nearly half the employed Sherbro population is in agriculture. Other notable concentrations include the industrial specialisation shown by the Krus, who have 63 per cent in the transport industry. The close association of this tribe with maritime activities in the Western Area is long-standing.<sup>10</sup> So also is the association of the Fulas with trading<sup>11</sup> which employs 60.9 per cent of the 325 Fulas in employment. Except for these special associations, the tribal response to employment in the different industries is largely constrained by the economic emphasis on the primary and service sectors.

The real basis of differentiation in participation in industry can best be summarised by the education structure and the income structure. The relationship of these two variables to industrial participation is that the industries which require a formal education also give higher incomes than those to which entry is easier. The effect of this relationship on earning by different ages, sexes and tribes should be obvious. On Tables 10.12 and 10.13 the two percentage distributions are shown.

The widest distribution by industry is shown by those

TABLE 10.12  
EMPLOYED POPULATION CLASSIFIED BY EDUCATION LEVEL AND PERCENTAGE DISTRIBUTION BY INDUSTRY

Education Level	Employed Population No.	Industrial Codes								
		1	2	3	4	5	6	7	8	9
No Education	2,080	16.1	0.2	9.8	4.9	1.9	42.9	12.3	11.8	0.1
Primary	569	7.6	0.2	12.5	9.0	1.8	27.1	24.8	17.0	0.2
Pre-Primary	1	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Secondary	912	0.9	0.3	11.5	8.1	2.0	21.5	21.2	34.5	0.0
University	47	0.0	0.0	6.4	4.3	2.1	17.0	2.1	68.1	0.0
Teacher Training	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Technical College	5	0.0	0.0	0.0	0.0	0.0	20.0	0.0	80.0	0.0
Arabic	149	20.1	0.0	11.4	2.7	0.7	41.6	5.4	18.1	0.0
Educational Institute	2	0.0	0.0	50.0	0.0	0.0	50.0	0.0	0.0	0.0
Trade School	3	0.0	0.0	0.0	0.0	0.0	0.0	33.3	66.7	0.0
Self Educated	2	0.0	0.0	0.0	50.0	0.0	0.0	50.0	0.0	0.0
All Levels	3,782	11.0	0.2	10.6	8.2	1.9	34.7	15.9	19.4	0.1

Source: Author's analysis

Note: For Industrial Codes, see text

TABIE 10.13  
PERCENTAGE DISTRIBUTION BY INCOME LEVEL OF THE EMPLOYED POPULATION IN EACH INDUSTRY

Industry Code	Employed Population in Industry	No Income	Income Levels in Leones Earned Previous Month											
			1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101+	
1	417	26.1	39.1	23.3	7.0	2.6	0.7	0.5	0.5	0.0	0.0	0.0	0.2	
2	9	22.2	11.1	0.0	44.4	11.1	0.0	11.1	0.0	0.0	0.0	0.0	0.0	
3	401	4.5	19.7	30.7	21.7	10.5	5.5	2.2	0.7	1.5	1.0	0.7	0.7	
4	234	0.9	2.6	20.5	38.0	7.7	3.0	2.6	2.1	0.0	0.9	3.4	3.4	
5	70	2.9	0.0	11.4	45.7	22.9	8.6	2.9	0.0	2.9	0.0	1.4	1.4	
6	1,314	2.3	38.4	28.0	14.8	6.6	3.3	2.4	0.9	0.6	0.8	1.6	1.6	
7	601	3.2	1.7	11.0	37.1	18.5	13.1	5.8	3.2	2.0	0.7	2.5	2.5	
8	734	2.0	7.6	20.2	29.7	15.8	7.8	4.6	2.2	1.4	1.6	6.1	6.1	
9	2	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
All Industries	3,782	5.2	21.6	22.7	23.2	11.2	6.1	3.2	1.5	1.1	0.8	2.6		

Source: Author's analysis

Note: For Industrial Code, see text

with no education and the highest concentration by those with professional training. The moderately wide scatter of persons with a university education is possible because some occupations suitable for such individuals are common to a number of industries. The position may be illustrated by the argument that agriculture depends wholly on persons with no formal education, whilst the service industry draws labour from all levels.

With regard to income levels, whilst 65.2 per cent of persons in agriculture have under ten leones income a month, the service industry has only 9.6 per cent in this category, and whilst there is no person in agriculture with an income in excess of one hundred leones a month, 7.1 per cent of the employed population in the service industry are at this income level. In commerce, the modal income is one to ten leones a month, with a gradual fall-off into the higher income levels. The very varied capital input into commerce, ranging from the petty trading concern to the larger Lebanese stores, makes the rationalisation of the effect of education and other variables on income rather difficult. Such explanations can only be achieved when the occupations of individuals are taken into account.

#### Occupational Structure

The occupation of an individual provides the most adequate estimate of his economic potential and reflects such acquired traits as education or skills. This is why occupational structure has been used as a basis for social classification.<sup>12</sup> Such attempt is, however, made difficult by the complexity of occupations in advanced economies.<sup>13</sup> In contrast, the economies of the developing countries are

sufficiently unsophisticated to allow an easy classification of occupations. Consequently, the relationship between occupations and social prestige are so clear cut as to require little attention.<sup>14</sup> The rest of this discussion on occupation structure will therefore leave the question of social stratification and mobility largely in the background.

This analysis includes all persons who are actually employed or temporarily unemployed at the time of the survey but reported their occupation. These two elements make up the working population used earlier in the computation of activity rates. The classification used here is based on the International Standard Classification of Occupations devised by the International Labour Office.<sup>15</sup> The following categories are recognised from the survey data:-

1. Professional, technical and related workers;
2. Managerial, administrative, clerical and related workers;
3. Sales Workers;
4. Farmers, fishermen, hunters, lumbermen and related workers;
5. Workers in mine, quarry and related occupations;
6. Workers in operating transport occupations;
7. Craftsmen, production process workers;
8. Service workers; mostly manual and unskilled labourers;
9. Other occupations not elsewhere classified.

The main modification in this classification lies in the distinction between the skilled craftsman and the unskilled manual labourer. A tailor is classified as a skilled craftsman whilst a nightwatchman is classified as an unskilled labourer.

The most outstanding feature of the spatial variation in occupation between the different unit areas of the Western Area as shown on Table 10.14 is the expected predominance of farmers and related workers in the rural area. The highest percentage is recorded in the rice-growing South Koya area. Proportions are also high in York district and in the Macdonald village area, where farming practices approximate those of the Koya district. Goderich, in spite of its classification into the Western urban area, has more than a third of its working population returned as farmers and related workers because of the fishing activities in this settlement.

In contrast, the Mountain district, partly because of its nearness to Freetown and partly because of its specialised agriculture consisting mostly of market gardening, has an occupation structure approximating the more varied structure of Freetown. Only 6.3 per cent of the working population living in the Mountain district are engaged in farming and related occupation. These are mostly employed in growing vegetables for the Freetown market in the alluvial valleys on River Orugu and the limited summit flats, to which reference was made in chapter 2. The high proportions in occupation groups 2, 7 and 8 can only be the result of persons working in Freetown coming into the mountain villages. Employment opportunities outside of the teaching profession are virtually absent in the mountain villages.

The uniformity of economic composition in the different units of Freetown noted in connection with activity rates and industrial structure is also visible in occupational structure. The conclusion is that a clear urban/rural differentiation in occupational structure occurs only in

TABLE 10.14

PERCENTAGE DISTRIBUTION OF THE WORKING POPULATION IN EACH UNIT AREA BY OCCUPATION

Area	Working Population	Occupation Codes									No Stated Occupation
		1	2	3	4	5	6	7	8	9	
CBD 1 - GOVERNMENT AREA	384	11.7	15.6	20.6	0.8	0.0	9.4	14.6	23.2	0.3	3.9
CBD 2 - COMMERCIAL AREA	454	8.8	13.9	24.4	0.2	0.0	8.4	14.5	19.8	0.0	2.0
EAST END 1 - BOMBAY STREET	410	7.3	8.3	33.9	0.5	0.0	8.5	15.9	20.2	0.0	5.4
EAST END 2 - SAVAGE SQUARE	399	6.5	12.3	36.3	0.5	0.0	8.0	17.8	18.3	0.0	0.3
EAST END 3 - KENNEDY STREET	227	5.2	13.8	24.2	0.3	0.3	9.5	12.8	30.6	0.0	3.4
EAST END 4 - CLINE TOWN	355	4.5	13.8	23.7	0.8	0.0	16.1	18.0	21.7	0.0	1.4
WEST END 1 - KING TOWN	297	11.8	17.5	19.2	0.0	0.3	13.5	15.8	19.5	0.0	2.4
WEST END 2 - CONGO TOWN	359	15.6	11.7	18.1	0.6	0.6	9.2	18.9	24.0	0.0	1.4
All Freetown	2,985	8.9	12.9	26.9	0.5	0.1	10.1	16.0	22.0	0.0	2.5
MURRAY TOWN	78	12.8	16.7	23.1	7.7	0.0	7.7	19.2	9.0	0.0	3.8
WILBERFORCE	81	19.8	11.1	13.6	1.2	0.0	4.9	19.8	28.4	0.0	2.5
LUMLEY	81	6.2	6.2	13.6	8.6	0.0	6.2	25.9	18.5	0.0	14.8
GODERICH	79	3.8	2.5	35.4	34.2	0.0	1.3	16.5	1.3	0.0	5.1
KISSY	290	7.2	10.7	25.9	0.3	0.7	14.5	22.1	11.7	0.3	6.6
WELLINGTON	136	2.9	4.4	27.2	9.6	0.0	6.6	32.4	16.9	0.0	0.0
WATERLOO RURAL (Macedonald Vgs.)	150	0.7	1.3	26.7	51.3	0.0	3.3	5.3	7.3	0.7	3.3
WATERLOO VILLAGE	53	7.5	5.7	50.9	9.4	0.0	1.9	15.1	9.4	0.0	0.0
HASTINGS VILLAGE	133	8.3	6.8	24.1	12.8	0.0	6.8	17.3	19.5	4.5	0.0
All W Urban	1,081	6.9	7.4	25.8	14.2	0.2	7.6	19.6	13.4	0.7	4.2
SOUTH/KOYA DISTRICT	136	0.0	1.5	8.8	81.6	0.0	0.0	6.6	1.5	0.0	0.0
NORTH/KOYA DISTRICT	42	0.0	0.0	16.7	73.8	0.0	0.0	2.4	7.4	0.0	0.0
MOUNTAIN DISTRICT	32	6.3	25.0	6.3	6.3	0.0	3.1	18.9	34.4	0.0	0.0
YORK DISTRICT	135	0.0	0.7	16.3	72.6	0.7	0.0	6.7	3.0	0.0	0.0
All W Rural	245	0.6	3.2	12.5	70.1	0.3	0.3	7.2	5.8	0.0	0.0
WESTERN AREA	4,411	7.8	10.8	25.5	9.3	0.2	8.7	16.2	18.6	0.2	2.7

Source: Author's analysis

farming and, to a lesser extent, in the service occupations. This is consistent with the known location of manufacturing industries, and institutions such as schools and hospitals which offer some employment in parts of the Western Area away from the marked cluster in the Freetown waterfront.<sup>16</sup>

As in the case of the age structure of the employed population in each industry, not much variation occurs when analysis is based on a classification by occupation (Table 10.15). In as much as the working population in farming and related activities is the same as the group classified in agriculture, forestry, hunting and fishing industry, it is hardly surprising that there is no change in the age structure. Farming and related occupations still remain the group with the highest proportion of young and old aged persons. Sales workers and craftsmen also include a high proportion of old aged.

One anomaly in age structure of the various occupations is the fairly high proportion of older persons in the professions. Since these are the workers who, with the managerial and administrative class, are mostly to be found in government services, it would be expected that the operation of a retirement scheme would exclude persons who are above sixty years. But the classification into occupations has ignored the employment status for which there is no satisfactory data. Consequently, a number of professionals who have formally retired from government service but subsequently become self-employed account for the older persons in the professions. It is to be noted that the deliberate employment of old aged persons in some situations in the civil services is restricted largely to the manual and un-

PERCENTAGE DISTRIBUTION BY AGE CLASS OF WORKING POPULATION CLASSIFIED BY OCCUPATION

TABLE 10.15

Age Class										No state Occupation but in Working Pop	Working Population (Me. In Group)
	1	2	3	4	5	6	7	8	9		
0 - 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5 - 9	0.0	0.0	0.4	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.3
10 - 14	0.0	0.4	0.6	3.4	0.0	0.3	0.6	1.1	0.0	0.0	0.9
15 - 19	3.2	7.4	3.7	8.3	0.0	3.1	4.9	4.4	11.1	11.1	4.7
20 - 24	17.0	24.6	12.4	13.3	42.9	7.5	11.2	10.0	11.1	11.1	13.2
25 - 29	12.9	17.9	16.5	9.1	42.9	15.3	14.4	16.3	33.3	33.3	15.6
30 - 34	12.3	10.9	17.3	14.6	0.0	20.3	13.5	15.4	22.2	22.2	15.1
35 - 39	12.0	10.1	12.9	9.7	0.0	13.8	14.2	11.4	11.1	11.1	11.9
40 - 44	15.5	9.0	11.8	14.6	0.0	17.4	14.2	13.5	0.0	0.0	13.1
45 - 49	9.9	8.0	10.1	12.2	0.0	7.3	10.6	13.4	11.1	11.1	10.3
50 - 54	9.6	5.7	5.0	7.8	14.2	8.1	6.8	6.3	0.0	0.0	6.4
55 - 59	3.5	2.5	2.8	3.2	0.0	2.1	2.9	2.9	0.0	0.0	2.7
60 - 64	2.0	1.7	3.7	6.1	0.0	3.1	2.8	2.0	0.0	0.0	3.2
65 and above	2.1	1.9	3.0	1.7	0.0	1.9	3.7	2.5	0.0	0.0	2.6
	312	476	1126	409	7	385	716	821	9	120	441
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Author's analysis Note: For Occupational Codes, see text

skilled positions, a group which also has a markedly high participation of old aged persons on Table 10.15.

The sex-ratio in the various occupations (Table 10.16) provides little additional information, except to confirm the high sex-ratio in the working population and the uniqueness of the low ratio amongst sales workers. The comparatively strong representation of females in the professions and in the managerial and administrative occupations may appear to contradict the low levels of education attained by females. But the more balanced education of the sexes among the Creole is sufficient to allow for significant recruitment of females into the more education-selective occupations.

On Table 10.17 the working population in each marital status is shown as a percentage distribution by occupation. The outstanding feature of this data display is the heaping of married persons and widows in the sales and allied occupations.

By turning to the occupational structure among the different tribes, the implication of some of the demographic variables discussed so far will become more apparent. On Table 10.18 the Creoles are shown to have nearly half their working population in the professions and the managerial occupations. The Lokos and the Limbas, with much lower literacy rates, have less than 5 per cent in these two occupations. Only 0.6 per cent of the Creole working population is in farming, whilst the proportion increases for all other tribes to a maximum of 42.9 per cent for the Sherbro. The specialisation of the Temnes and the Fulas in retailing trade is again illustrated by the high proportion

TABLE 10.16

THE WORKING POPULATION CLASSIFIED BY OCCUPATION AND PERCENTAGE DISTRIBUTION BY SEX

Occupation Group Code	Working Population	Percentage Male	Percentage Female
1	342	65.2	34.8
2	476	66.0	34.0
3	1,126	35.5	64.5
4	409	87.0	13.0
5	7	100.0	0.0
6	385	97.1	2.9
7	716	91.8	8.2
8	821	93.1	6.9
9	9	77.8	22.2
Note Stated	120	71.7	28.3
<b>TOTAL</b>	<b>4,411</b>	<b>72.3</b>	<b>27.7</b>

Source: Author's analysis

TABLE 10.17  
THE WORKING POPULATION CLASSIFIED BY MARITAL STATUS AND PERCENTAGE DISTRIBUTION BY OCCUPATION

Marital Status	Working Population	Occupation Codes									No Stated Occupation
		1	2	3	4	5	6	7	8	9	
Married	2,797	7.7	8.0	29.9	9.2	0.1	9.7	16.6	17.7	0.3	1.3
Single	1,460	7.7	16.6	15.3	9.3	0.3	7.3	16.4	20.8	0.1	5.5
Widowed	111	10.9	7.3	51.8	10.9	0.0	3.6	4.5	10.9	0.0	0.9
Divorced	43	9.3	4.7	25.6	7.0	0.0	7.0	16.3	25.6	0.0	7.0
Total	4,411	7.8	10.8	25.5	9.3	0.2	8.7	16.2	18.6	0.2	2.7

Source: Author's analysis

Note: For Occupation Codes, see text

TABLE 10.18  
 PERCENTAGE DISTRIBUTION BY OCCUPATION OF THE WORKING POPULATION IN EACH TRIBE

Tribe	Working Population	Occupation Codes									No Stated Occupation
		1	2	3	4	5	6	7	8	9	
Creole	970	20.0	27.7	15.7	0.6	0.2	5.7	18.0	7.4	0.3	4.3
Mende	433	7.4	10.9	11.3	13.4	0.0	12.9	21.0	18.9	0.2	3.9
Tamne	1,322	2.5	5.3	34.2	14.1	0.1	9.2	14.8	18.4	0.2	1.5
Loko	194	1.5	3.6	16.0	14.9	0.5	6.7	19.1	36.1	0.5	1.0
Limba	498	1.6	2.8	24.3	5.2	0.4	8.8	14.5	37.8	0.0	4.6
Shenbro	154	5.8	11.7	12.3	42.9	0.6	2.6	15.6	8.4	0.0	0.0
Susu	110	2.7	3.6	39.1	2.7	0.0	11.8	26.4	13.6	0.0	0.0
Minor S I	52	9.6	9.6	11.5	7.7	0.0	11.5	15.4	28.8	1.9	0.0
Fula	355	3.4	2.0	49.6	2.0	0.0	3.9	10.7	26.2	0.3	2.0
Kru	63	9.5	7.9	9.5	1.6	0.0	49.2	7.9	12.7	0.0	1.6
Madingo	93	10.8	6.5	29.0	9.7	0.0	10.8	14.0	12.9	0.0	6.5
Non S I	167	16.2	14.4	26.3	8.4	0.0	9.6	16.8	7.2	0.0	1.2
All Tribes	4,411	7.8	10.8	25.5	9.3	0.2	8.7	15.2	18.6	0.2	2.7

Source: Author's analysis

Note: For Occupation Codes, see text

of sales workers recorded for the two tribes. Another clustering is that of the Krus, with nearly half their working population reported as workers in operating transport occupations, mainly maritime transport. In other occupations there are no marked preferences shown by the tribes.

Again education provides the basis for identifying the real causes of differentiation in the demographic and social structure of the population in the various occupations. On Table 10.19 persons with formal education at the technical, teacher training and university levels show a marked concentration in the professions. When account is taken of the managerial and clerical group, the secondary level also reveals a marked bias in the choice of occupations. The widest distribution by occupation is shown at the primary school level and, to lesser extent, by persons with no education. The incursion of a few workers with no education or with only a primary education into the professions is the outcome of the classification of such occupations as native doctors and para-medical staff in the professional, technical and related category.

Some of the inconsistencies, between the occupational classification and education levels attained, are also reflected in the income structure for each occupation (Table 10.20). The distributions of the professional workers and managerial group are bi-modal with peaks at 31 - 40 leones and the 100 leones or more. The two income levels approximate the monthly salary for secondary and university graduates respectively, and these are the two education levels accounting for the bulk of the two groups of workers. The lowest modal income level of 1 - 10 leones is recorded for sales workers and for farmers and related workers. Such a low income level is consistent with the low education and

TABLE 10.19

THE WORKING POPULATION CLASSIFIED BY EDUCATION AND PERCENTAGE DISTRIBUTION BY OCCUPATION

Education Level	Working Population	Occupation Codes									No Stated Occupation
		1	2	3	4	5	6	7	8	9	
No Education	2,386	0.9	0.2	34.1	14.0	0.1	8.0	14.8	26.0	0.0	1.8
Primary	691	4.3	11.0	19.2	5.6	0.3	17.4	23.2	12.9	0.3	5.8
Pre-Primary	1	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Secondary	1,101	20.3	35.2	10.7	0.4	0.3	6.0	15.9	7.4	0.5	3.4
University	48	81.3	6.3	4.2	0.0	0.0	0.0	4.2	4.2	0.0	0.0
Teacher Tr	12	75.0	0.0	8.3	0.0	0.0	0.0	0.0	8.3	8.3	0.0
Technical	5	60.0	20.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0
Arabic	159	8.8	0.6	35.8	18.9	0.0	4.4	15.1	16.4	0.0	0.0
Educ Inst	3	0.0	33.3	0.0	0.0	0.0	0.0	33.3	33.3	0.0	0.0
Trade School	3	66.7	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0
Self Educated	2	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All Levels	4,411	7.8	10.8	25.5	9.3	0.2	8.7	16.2	18.6	0.2	2.7

Source: Author's analysis

Note: For Occupation Codes, see text

TABLE 10.20

THE WORKING POPULATION CLASSIFIED BY OCCUPATION AND PERCENTAGE DISTRIBUTION BY INCOME LEVEL

Occupation Group Code	Working Population	No Income	Income Levels - Leones Earned Previous Month										
			1-10	11-20	23-30	31-40	41-50	51-60	67-70	76-80	81-90	91-100	100+
1	342	7.0	2.3	2.9	19.3	20.2	10.5	5.7	4.4	4.1	2.9	2.3	19.0
2	476	28.2	0.4	1.9	19.3	17.0	14.5	7.8	3.6	1.9	1.5	0.6	3.4
3	1,126	4.1	44.6	29.0	11.0	4.7	2.7	1.9	0.5	0.4	0.4	0.1	0.6
4	409	27.1	40.3	24.0	5.4	2.2	0.2	0.0	0.5	0.0	0.0	0.2	0.0
5	7	0.0	0.0	28.6	14.3	28.6	0.0	0.0	0.5	0.0	0.0	0.0	0.0
6	385	14.8	2.9	9.9	33.0	17.1	7.8	7.0	1.5	1.5	0.5	1.8	2.3
7	716	17.0	12.4	20.1	25.0	11.9	6.7	2.2	1.5	0.8	0.4	0.7	1.1
8	821	21.4	8.3	28.4	32.3	6.8	1.5	0.4	0.1	0.4	0.4	0.1	0.0
9	9	0.0	11.1	0.0	22.2	33.3	11.1	0.0	0.0	11.1	0.0	0.0	11.1
Not Stated	120	69.2	22.5	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	4,411	17.1	19.7	19.8	19.9	9.6	5.2	2.7	1.3	1.0	0.7	0.6	2.4

Source: Author's analysis

Note: For Occupation Codes, see text

capital requirement for entry into these two occupations.

Much more informative than the modal income level for any occupation is the income range encountered. Here again, the widest range is for the professional and managerial classes. Workers in operating transport occupations also show a wide distribution except that the modal income is at 21 - 30 leones. This distribution is related to the economy of scale in the operation of transport ranging from the one-taxi concern to the truck chains operated by the Lebanese. Sales workers, in a similar economic situation, show a distribution very close to that of workers in operating transport occupations. The most limited income ranges are reported for farmers, who have 99.1 per cent at 40 leones and below, and for persons with no stated occupation who show 100 per cent at twenty leones and below.

In conclusion, it is true to say that the strong link between education attainment and levels of income represents a strong element in the social awareness and respectability of the white-collar professions. Although the service sector offers spheres of activities which are equally remunerative, attainment of the higher income levels is very slow and difficult for most people. The few exceptions are those with relatively easy access to capital for starting in business. The privileged position of the educated Creoles and the economic advantages of access to capital by some non-Sierra Leoneans, notably the Lebanese, are elements in the social stratification in the Western Area which should reward further research.<sup>17</sup>

#### Summary

In conclusion, two points may be made about the economic composition of the sample population.

First, consistent with the expected residential variation in industrial and occupation structures, the much more varied economic base of the urban area shows up in the industrial and occupation structures. Freetown may be the dominant focus of employment in industry and in the service sector, but the districts of Wilberforce and Kissy attract appreciable proportions of the labourforce. Whilst Wilberforce is primarily a residential area for some people working in Freetown, Kissy district, and especially in the Wellington area has substantial resident working population attached to the Industrial Estate.

In the rural areas, the limiting factor to employment in agriculture and related industry appears to be the nature of farming and fishing activities in the respective districts. The limited opportunity for farming in the Mountain district, and the nearness of the district to Freetown increases the proportions of the working population who are engaged in non-farming activities and who commute to the Freetown area to work.

Second, and by far the more significant observation is the effect of education on employment opportunities and choice, on the income levels attained in the different occupations and by the various tribes. The discussion in this chapter provide supporting evidence of the importance of the economic factor in social and tribal differentiations in the Western Area.<sup>18</sup> Although cultural differences and political affiliations may also help to highlight the economic factor,<sup>19</sup> the headstart enjoyed by the Creoles can only be gradually eroded when the other tribes attain increased literacy rates to lend weight to the political power that they have. The validity of this observation is further

enhanced by discussion of ethnic composition in the next chapter as well as by the ~~analysis~~ analysis of intervariations in population traits carried out in the last chapter.

NOTES AND REFERENCESCHAPTER 10

1. The three categories are adopted as convenient because they do not overlap but adequately cover all the sample population. For a discussion of alternative definitions of the active population see Clarke, J.I. Population Geography, Pergamon Press, 1966, p. 84.
2. United Nations, Demographic Aspects of Manpower, Report I, Sex and Age Pattern of Participation in Economic Activities, UN 1962, p. 4.
3. Charles H.C. Kao, Kurt R. Anshel, and Carlk Eicher 'Disguised Unemployment in Agriculture: A survey' in Agriculture in Economic Development (eds Eicher and Witt) McGraw-Hill, 1964 p. 141 suggest a token 5 per cent disguised unemployment in underdeveloped countries as defined by a zero marginal product of labour and the condition of 'ceteris paribus'
4. This statement does not apply strictly to petty trading activities.
5. The earlier entry into the labour force and a later retirement among males in agriculture are the major differences, it is likely that the effect of inflation of ages of male adults in the rural area is showing; see also footnote no. 11, chapter 7.
6. See Kuznets, S., 'Economic Growth and the Contribution of Agriculture: Notes on Measurement' and Johnson, G.L., 'A Note on Nonconventional Inputs and Conventional Production Functions' in Eicher and Witt eds. op. cit. pp. 102-119, 120-124.
7. International Labour Office, The International Standardisation of Labour Statistic, I.L.O., Geneva, 1959 pp. 26-30.
8. See Ranis, G. and Fei, J.C.H. 'A Theory of Economic Development' on Eicher and Witt (eds) op. cit. pp. 181-200, especially p. 182.
9. Platinum and gold are two of the minerals that are known to occur in the Western Area, see Sierra Leone Government (SLG). Report of the Mines Division of the Ministry of Lands, Mines and Labour, Freetown, 1964 p. 21 for production and earning from these minerals in Sierra Leone. Whilst Platinum is localised in the Western Area., the occurrence of gold is widespread in Sierra Leone.
10. Fyfe, C., 'A History of Sierra Leone' Oxford University Press, 1962, p. 78.
11. Ibid., pp. 57 - 142.
12. Reiss, A.J., et al, Occupations and Social Status,

Free Press, 1961 is a good example.

13. See Clarke op. cit. p. 91 on the variety of occupations in England and Wales.
14. Banton, M. West African City: A Study of Tribal Life in Freetown, Oxford University Press, 1960 p. 215 points out the overlap of racial and economic basis of social prestige.
15. I.L.O. op. cit. pp. 30-37
16. Swindell, K. 'Manufacturing Industries' in Sierra Leone in Maps (ed. Clarke), University of London Press, 1966, p. 101.
17. Banton op. cit. p. 96 points out position of the white-collar jobs in estimation of prestige.
18. Ibid., p. 97.
19. Kilson, M. Political Change in a West African State: A Study of the Modernization Process in Sierra Leone. Harvard University Press, 1966 chap. 15 pp. 231-251 discusses the basis of power and influence in Sierra Leone political parties.

CHAPTER 11TRIBAL COMPOSITION

With less than 1 per cent of the sample population reported as Europeans and Lebanese, and the remaining 99 per cent being persons of African extraction, the discussion in this chapter is primarily one of tribal affiliation of the African population, with racial and ethnic composition considered in passing.

As in other West African states, notably, Nigeria and Ghana, tribal identity forms the basis of very strong feelings separating people into social, religious, cultural and economic groups. The feeling, at times, is backed by a long history of inter-tribal conflict but, more often, it is the result of differences in colonial experience separating those tribes with access to economic and political power from those not having such access. When, as in the case of the Creoles, a group enjoyed a historical momentum of association with the colonial administration, those differences are more accentuated.

Various writers<sup>1</sup> have examined the basis of tribal and ethnic relations and of economic and political power in Sierra Leone. What is intended in this chapter is a summary of the compositional features of the tribes carried out against the background of their movement into the Western Area, and the socio-economic niche which they now occupy in the area.

The summary falls into three parts. First, is a discussion of the size and distribution of the tribes in the area. Second is the summary discussion of the main demographic and socio-economic differences which have been pointed out in greater detail in the earlier chapters. And third, is a statistical analysis of the intervariation of the differences. This third part employs partial correlation techniques by

way of a pretest of some variables to be used for the analysis of population characteristics and residence in the last chapter.

### Tribal Composition and Distribution

Table 11.1 shows the sample population classified by tribe, with proportions shown. At this stage, the 430 non-Sierra Leoneans are considered as a residual classification, in much the same way as the tribes with very small samples,<sup>2</sup> who have, collectively, been classified as Minor Sierra Leone tribes. Except for the Creoles, who were exclusively settled in the Western Area, and the Temnes, the original owners of the area, the proportions of the other tribes largely reflects their proportions in the country as a whole.<sup>3</sup>

Although the Mendes and the Limbas have approximately equal proportions of the sample, they number three Mendes to one Limba in Sierra Leone. When account is taken of the much larger population of Mendes in Sierra Leone and the greater distance of the Limba heartland from the Western Area,<sup>4</sup> it will appear that a much higher rate of Limba immigration into the area is indicated.

The Sherbros represent a coastal incursion into the Western Area from the Southern Province. This is also the tribe with strong association with fishing in the Western Area, especially in York and Koya districts.<sup>5</sup>

Of the three tribes originating from outside Sierra Leone,<sup>6</sup> the Kru tribe is most exclusively associated with the Western Area. The Fula and the Madingo tribes are represented in the Northern Province and in the Eastern Province in two distinct axes, one linking the Western Area with the Falaba entry zone and another running the length of the Sewa River valley. The attraction of the metropolitan area and of diamond

TABLE 11.1DISTRIBUTION OF SAMPLE POPULATION BY TRIBE

Tribe	Number	Percentage
Creole	3,030	25.3
Temne	3,436	28.6
Mende	1,214	10.1
Loko	539	4.5
Limba	1,289	10.7
Sherbro	320	2.7
Susu	300	2.5
Minor Tribes from Sierra Leone	131	1.1
Fula	846	7.0
Kru	178	1.5
Madingo	285	2.4
Non-Sierra Leoneans	430	3.6
Total	11,998	100.0

Source: Author's analysis

mining activities, to the two tribes, is obvious.

The low proportion of the sample population classified as non-Sierra Leoneans in a country where the proportions and problems associated with foreigners are said to be acute,<sup>7</sup> must be seen in the context of the relatively insignificant position of the Western Area in the mining industry of the country. It is in the diamond mining areas that the presence of foreigners is particularly pronounced and resented.

As shown on Table 11.2 nearly three-quarters of the non-Sierra Leoneans are Nigerians, a group coming from a country with long association with Sierra Leone. They have also shown a greater interest in the commercial activities of Freetown and other urban centres than in the mining activities.<sup>8</sup> With the exception of the Lebanese interest in trade, the Ghanaian interest in fishing, and the British in administration and education, the interests of the other smaller groups are less distinct.

The regional pattern of the countries of origin is also of some interest, as it shows 86.7 per cent of non-Sierra Leoneans coming from other African countries.

#### Residential Preferences by Tribes

The distribution of the tribes within the Western Area in urban or rural residence is related primarily to the economic interests of the tribes, and the role of historic association with specific areas appears to be secondary. Table 11.3 shows the percentage distribution of each tribe's sample population by unit areas and by residence.

The greatest clustering is shown by the Kru tribe, with 99.4 per cent living in Freetown, and much more significant, having two-thirds of the sample population living in King Tom, the

TABLE 11.2

DISTRIBUTION OF NON-SIERRA LEONEANS BY COUNTRY OF ORIGIN  
AND BY WORLD REGION

Region	Country of Origin	Number	Percentage
<u>West Africa</u>	Nigeria	307	71.4
	Ghana	40	9.3
	Gambia	9	2.1
	Liberia	6	1.4
	Togo	5	1.2
Sub Total		367	85.3
<u>Rest of Africa</u>	Morocco	4	1.0
	South Africa	1	0.2
	Congo	1	0.2
Sub Total		6	1.4
<u>Europe</u>	Britain	8	1.9
	Germany	3	0.7
	Spain	3	0.7
Sub Total		14	3.3
<u>Middle East</u>	Lebanon	31	7.2
	Syria	1	0.2
Sub Total		32	7.4
<u>Rest of the World</u>	Ceylon	4	1.0
	Pakistan	3	0.7
	West Indies	3	0.7
	India	1	0.2
Sub Total		11	2.6
TOTAL		430	100.0

Source: Author's analysis

TABLE 11.3

RESIDENTIAL PREFERENCE BY ETHNIC GROUPS  
 Sample Population of Ethnic Group Living in Area  
 Sample Population of Ethnic Group in Total Sample x 100

Population of each Group in Total Sample	C	M	T	O	B	H	U	Others	F	W	D	N
CBD 1 - TOWER HILL AREA	3030	1214	3436	539	1289	320	300	431	846	478	285	430
CBD 2 - COMMERCIAL AREA	16.0	12.3	5.0	4.1	7.3	2.2	13.7	11.5	6.4	10.1	4.2	3.5
EAST END 1 - BOMBAY STREET	10.6	5.8	10.7	5.8	7.9	5.0	19.7	---	14.3	---	17.9	11.9
EAST END 2 - SAVAGE SQUARE	5.8	2.6	11.5	6.7	10.1	1.6	11.0	10.7	14.1	---	22.1	13.7
EAST END 3 - KENNEDY STREET	10.2	3.3	12.8	4.6	10.1	1.6	8.3	2.3	11.6	---	11.9	10.2
EAST END 4 - CLINE TOWN	5.7	7.0	6.5	13.4	11.9	0.6	0.3	4.6	5.1	---	6.3	23.7
WEST END 1 - KING TOM	6.3	9.5	7.8	6.9	14.2	11.9	14.3	13.7	9.5	10.1	6.0	8.8
WEST END 2 - CONGO TOWN	12.6	5.8	2.2	1.9	6.7	2.2	4.3	16.0	6.3	67.4	3.2	0.2
All Freetown:	10.7	15.5	4.8	8.3	15.5	13.4	6.0	21.4	6.4	11.8	6.3	7.2
MURRAY TOWN	77.9	61.8	61.3	51.7	77.4	38.5	77.6	79.9	73.7	99.4	77.9	79.2
WILBERFORCE	4.1	0.6	1.4	1.5	0.2	0.6	0.7	5.3	1.3	---	---	1.9
LUMLEY	1.6	1.8	1.4	4.8	0.9	---	6.7	---	2.6	---	0.4	3.7
GODERICH	2.0	2.6	1.2	4.8	1.6	0.6	0.3	3.0	1.7	---	0.7	0.9
KISSY	0.6	0.4	0.9	0.2	0.8	9.4	1.4	---	2.8	---	2.3	6.5
WELLINGTON	6.0	11.4	6.0	9.5	7.7	3.8	5.3	0.8	5.2	---	0.7	1.9
WATERLOO RURAL (Macdonald Estate)	1.7	2.6	5.4	3.2	3.8	3.8	2.0	---	3.3	---	0.7	1.9
WATERLOO VILLAGE	0.4	7.0	3.4	4.1	2.7	1.2	3.0	3.1	3.7	---	9.5	1.9
HASTINGS VILLAGE	2.1	1.6	1.3	---	0.7	0.3	0.3	0.8	1.2	---	1.1	1.4
All W Urban	1.4	1.6	5.7	9.3	1.9	0.9	1.0	2.3	3.9	---	2.8	---
NORTH/KOYA DISTRICT	19.9	29.6	26.7	37.6	20.3	20.6	20.7	15.3	25.7	0.0	18.2	20.1
SOUTH/KOYA DISTRICT	0.2	0.8	7.1	3.0	0.1	16.5	---	0.8	0.7	---	3.5	1.2
MOUNTAIN DISTRICT	---	1.2	1.8	2.0	0.6	---	---	3.8	---	---	---	---
YORK DISTRICT	1.8	1.9	0.3	2.6	0.2	---	---	---	---	---	---	0.2
All W Rural:	0.2	4.9	3.0	1.7	1.4	24.4	0.7	---	0.4	1.6	1.4	0.2
WESTERN AREA	2.3	8.8	12.2	9.3	2.3	40.9	0.7	4.6	9.8	0.6	4.9	0.6

Source: Author's analysis

unit area in which Kru Town (~~Now Kru Town Road~~) is classified. This is followed by the Sherbros, who have the highest proportion of any tribe living in the rural area, where farming and fishing, engage the majority of the Sherbro adult population. It is the association of Sherbro with fishing that account for 9.4 per cent of this tribe living in Goderich.

Of the four tribes with samples of more than 1,000 each, the Creole and the Limbas show a greater preference for Freetown and a few other urban centres than the Mendes and Temnes who are more proportionally distributed by residence. The withdrawal of Creole from the rural areas has been often remarked,<sup>9</sup> the places where significant proportions of Creoles are still to be found are Murray Town, Kissy Village and the Mountain districts, all close to Freetown. The other historical centres such as Hastings, Waterloo Village and Wellington also contain some Creole population.

When it is recalled that only a small proportion of the Limba sample population is in agriculture and that most of the tribe are to be found in the sales, transport and service sector<sup>10</sup> the attraction of Freetown and the suburbs is understandable. A similar occupational specialisation by the Fula, with half of its working population in small scale retailing, results in the preference shown by this tribe for urban areas.

In contrast to the Limbas and the Fulas, the Temnes and the Mendes have appreciable proportions of their working population in agriculture and consequently show a distribution in urban and rural areas similar to that of the total sample. The Lokos, who are attracted to roughly the same type of occupations as the Limbas show a difference by having appreciable proportion in farming. Their distribution in the Western Area therefore, approximates those of the larger tribes than the smaller tribes. The Madingo, Susus

and the minor tribes are to be found in Freetown and in parts of the urban area.

The distribution of the Non-Sierra Leoneans is the resultant of different components, since it is not easy to generalise the economic interest of non-Sierra Leoneans as urban or rural. For example, the Nigerian element, mostly interested in trade, find the urban centre more suitable. Even in Freetown, there are distinct areas which are preferred by the Nigerian community. To all intents and purposes, such streets as James, Sackville and Horton, situated south-east of the commercial area, constitute a Nigerian ghetto. Over the years a number of properties have been acquired by Nigerians some of whom have settled in the properties whilst the absentee landlords prefer having other Nigerian as tenants. Yoruba and Hausa, two of <sup>the</sup> Nigerian languages can be heard along Sackville street.<sup>11</sup>

The Ghanaian element, mostly associated with fishing, are to be found in the fishing settlements of Goderich and Lumley and in smaller centres in York district. In the case of the more diverse group of foreigners, interests vary from the British association with administration and education to the commercial interest of the Lebanese. But in general these other foreigners are mostly to be found in the select residential areas such as Wilberforce and Kissy.<sup>12</sup>

#### Demographic Characteristics

In the discussion of the different population characteristics attention has been drawn to the tribal differential in the patterns observed. It was noted that the migratory experiences of the tribes had effects on their demographic composition in the Western Area : age structure and sex ratio are the two most sensitive to the effects of migration. It is also evident that the level of literacy, the amount of formal education and the employ-

ment opportunities open to the different tribes are variables that should be considered before one can account for the differences in occupation and industrial structure and, as will be shown, the income received.

Table 11.4 shows the age structure index for each of the tribes. The scores reveal the general youthfulness of the sample population. The Lokos have the most youthful population and the Krus the oldest. In spite of the association between sample size and youthfulness, noted in chapter 6, it is observable that the association is not very strong with reference to tribal composition. This is because the range in the spatial ageing is more directly related to the shifts of persons at specific ages to residential areas than the result of the age composition of the individual tribes. However, it is still noticeable that the tribes with much larger samples have more youthful populations than those with small samples. The tendency is for persons belonging in the minor tribes to be in their working ages, have fewer children and consequently, possess an older age structure than the more balanced family structure observed for the Temnes, Mendes and the Creoles, (chapter 9).

Differences in sex-ratio are more conclusive evidence of the migratory basis of tribal population growth in the Western Area than age structure has been. The main features are the low sex ratio among Creoles, on the one hand, and the very high sex ratio among the Fulas and minor Sierra Leone tribes, on the other.<sup>13</sup>

But by far the most significant difference between the tribes is occupation and industrial structure discussed in chapter 10. The effect of this difference may be summarised here by referring to levels of income. The working population

TABLE 11.4  
AGE STRUCTURE INDEX FOR EACH TRIBE

Tribe	Age Structure Index
Creole	23,618
Mende	25,095
Temne	25,916
Loko	27,042
Limba	25,664
Sherbro	23,791
Susu	25,705
Minor S Leone	23,927
Fula	26,117
Kru	21,131
Madingo	25,921
Non S Leone	24,537

Source: Author's analysis

in the sample had an average income of 25 leones.<sup>14</sup> In comparison, the Creoles, Krus and non-Sierra Leoneans had 35, 32 and 30 leones respectively. Next, the minor tribes, the Madingos and the Mendes had averages of 28, 26 and 25.9 leones respectively. All other tribes had averages of between 20 and 23 leones each. These differences are not startling but they give an indication of the end result of the different education levels attained and the employment opportunities open to the tribes. It is with the aim of giving some precision to the description of these differences that attention is now turned to a partial correlation of selected variables.

#### Partial Correlation

The choice of Spearman's rank correlation technique is based on the simplicity of computation as well as on the fact that the ranking of the tribes on various traits does not depend on the fine accuracy of the data.<sup>15</sup> Accuracy which cannot be claimed for all the variables which have been discussed so far.

For each tribe, 11 parameters have been chosen which might be said to sum the demographic and socio-economic characteristics. The variables are as follows:-

1. Sample size
2. Age Departure Index (ADI)<sup>16</sup>
3. Age Structure Index (ASI)
4. Sex Ratio
5. Proportion married
6. Proportion living in Freetown
7. Proportion illiterate
8. Proportion employed in agriculture
9. Income per capita<sup>17</sup>
10. Crude Activity Rate (CAR)
11. Crude Migration Index (CMI)

Variables 1 to 5 provides different demographic measures; variable 6 is a single index of urbanisation; variables 7 to 10 are basically economic, whilst variable 11 is a measure of the migratory tendencies shown by the different tribes.<sup>18</sup>

In ranking the tribes on each of these variables (Table 11.5) each variable is ranked to reflect the effect of the last variable on the ranking. For example, it has been shown that the sex-ratios of the tribes is associated directly with the migration. Consequently, the highest sex-ratio is assigned number 1 and the lowest, number 12. In contrast, the tribe with the largest ASI score, that is, the most youthful age structure has been assigned number 1.

This care in ranking is primarily for the convenience of interpreting negative and positive signs in the 'r' matrix, Table 11.6. It should be observed that the diagonal position on the matrix has not been shown; this is because the values are <sup>all</sup>  $\neq 0$ . Figure 11.1 shows a *diagrammatic* representation of the correlation structure of the matrix.

In spite of the conceptual link between the ranking and migration, the greatest structural linkage in the correlation is with variable 9, that is, income per capita for the working population. This is evidence that the level of income constitutes the best measure of the differences between the tribes and that the tendency to migrate is of secondary importance.

The next sub-system falls into two groups, one consists of demographic factors such as ASI<sup>(3)</sup> and sex-ratio<sup>(4)</sup> which show substantial relationship with income level. The other group, made up of proportions living in Freetown,<sup>(6)</sup> proportions illiterate<sup>(7)</sup> and proportions in agriculture,<sup>(8)</sup> are all variables which have a more direct relationship with level of income than the demographic variables.

The last sub-system is made up of variables which are less effectively linked with others. Of this sub-system, the poorest linkage is for proportion married. This is not very surprising since the marital habits of the tribes are influenced

TABLE 11.5  
RANKING OF TRIBAL SCORE ON 11 VARIABLES

Tribe	Sample Size	ADI	ADI	Sex Ratio	Proportion Married	Proportion in Preetown	Proportion Illiterate	Proportion in Agriculture	Income per Capita	CAR	CMI
Creole	2	4	11	12	12	5	1	11	1	12	10
Mende	4	12	7	2	5	9	4	10	6	9	8
Temne	1	11	4	9	9	10	9	9	9	6	9
Loko	6	8	1	4	10	11	12	11	11	8	4
Limba	3	10	6	5	7	7	11	5	8	5	3
Sherbro	8	5	10	3	6	12	6	12	12	1	12
Susu	9	7	5	10	1	6	8	4	7	7	2
Minor S L	12	1	9	6	11	2	5	8	4	2	7
Fula	5	3	2	1	3	8	10	3	10	3	1
Kru	11	2	12	11	4	1	7	2	2	10	5
Madingo	10	6	3	8	8	4	3	7	5	11	6
Non S L	7	9	8	7	2	3	2	6	3	4	11

Source: Author's analysis

TABLE 11.6

CORRELATION ( $r_s$ ) BETWEEN 11 VARIABLES FOR TRIBAL GROUPS

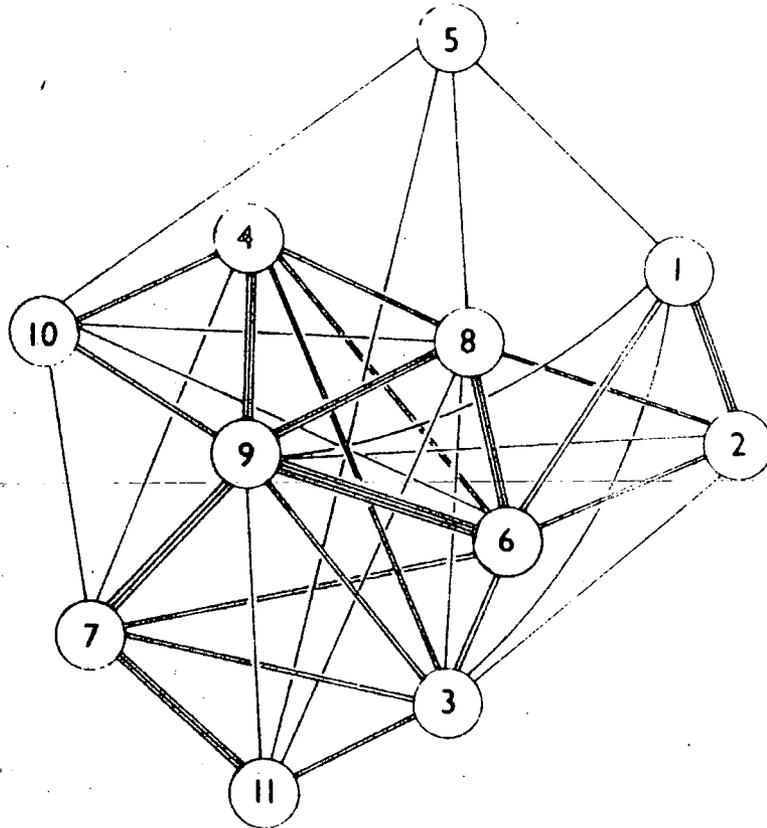
1											
2	-.61										
3	.21	-.37									
4	.10	-.19	.40								
5	-.22	-.13	.04	.15							
6	-.55	.49	-.45	-.56	.09						
7	-.17	.15	-.56	-.35	-.08	.48					
8	.01	.14	-.27	-.55	.21	.63	.16				
9	-.22	.28	-.59	.66	-.08	.87	.71	.61			
10	-.14	.11	.03	.56	.22	-.24	-.29	-.36	-.51		
11	-.13	.13	.55	.14	.27	.07	-.66	.36	-.22	-.08	
	1	2	3	4	5	6	7	8	9	10	11

Source: Author's analysis

For variables, see text

FIGURE 11.1

## CORRELATION STRUCTURE OF 11 VARIABLES



## KEY

- .20-.39
- == .40-.59
- === .60-.79
- ==== .80 and above

by a variety of cultural and social considerations that are not easily quantified. Similarly, it is expected that sample size shows only substantial relationships with proportions **living** in Freetown and for ADI. The largest samples were drawn from Freetown and the larger samples tended to have a more typical age structure than the smaller samples for which gaps in age structure <sup>were</sup> revealed.

Predictably, ~~variable~~ 10, Crude Activity Rate is linked to sex-ratio and to income level, but the association is stronger for sex-ratio than for income level. This is because the very much higher levels of participation in economic activities by males is more effective in deciding the participation level by a tribe than the variations in the income of those persons who are employed in any tribe.

In short, it is the economic factor, which depends, in turn, on such variables as education, occupation and industrial structure, that determines the level of income attained by the tribes. The strong influence of income level in this analysis is, therefore, to be regarded as the outcome of the different historical and economic backgrounds of the various tribes. It may be added that changes are occurring, the dominant position of the Creoles in the administration and in the professions is being eroded by competition from other tribes and by the shift of political and economic power in Sierra Leone.<sup>19</sup> The most visible area where such social changes are taking place is the urban area.

The provision of education and employment opportunities in the urban area attracts persons from the different tribes. There is therefore the likelihood that intervariation in population characteristics will increasingly be differentiated more along residential lines than in the strictly ethnic sense. The factor

analysis in the next chapter, along residential lines, should provide the concluding evidence of the way that the population is grouped with reference to the various traits which have been discussed in this thesis.

NOTES AND REFERENCESCHAPTER 11

1. Cartwright, J.R. Politics in Sierra Leone 1947-1967 University of Toronto Press, 1970; Banton, M.P. West African City: A Study of Tribal Life in Freetown, Oxford University Press, 1960 and Kilson, M. Political Change in a West African State, Harvard, 1966.
2. The 131 sample population classified as minor Sierra Leone tribes are made up of 44 Kissis, 38 Konos, 23 Bassas, 14 Yalunkas, 10 Kurankos and one member each from the Soso and Gissi tribes.
3. See Harvey, M.E. 'Ethnic Groups' in Sierra Leone in Maps, (Clarke ed.) University of London Press, 1966 p. 36.
4. ibid., maps on p. 37.
5. See Table 10.18 and discussions in chapter 10 of this thesis.
6. It has not been possible to establish the nationality or citizenship of members of the Kru, Madingo and Fula tribes though some, no doubt, have citizenship of their country of origin. Consequently, this group is considered as being Sierra Leoneans.
7. Banton, op. cit. pp. 99-101 indicates that the contribution of such foreigners as the Lebanese to the economy is often ignored and attention drawn to the role they play in diamond dealing. Cartwright, op. cit. pp. 249-255 also contains discussion of objections to the Fulas based on their role in events surrounding the 1967 General Election. It may be added that envy of the success enjoyed by foreign elements is often at the root of the objections raised.
8. Opportunities for their engaging in direct 'legal' diamond mining activities are restricted by government control, consequently, the Nigerian element, particularly the women living in Kenema are predominantly in the trading sector, see Gamble, D.P. 'The Population of Kenema' in Sierra Leone Geographical Journal, No. 11, 1967, p. 22.
9. Banton, op. cit. p. 103 and reference to Richardson, E.M. and Collins, G.R. 'Economic and Social Survey of the Rural Areas of the Colony of Sierra Leone' a report to the Colonial Social Science Research Council, Colonial Office Research Department, a copy of this unpublished report was used by this writer in a discussion of the decreasing Creole population in the rural areas. See Adeokun, L.A. A Geographical Study of the Rural Population of the Sierra Leone Peninsula, B.A. dissertation, Fourah Bay College, Freetown, 1964, pp. 23-25.
10. See Table 10.18 of this thesis.
11. Discussions with Alhaji Ado, a Nigerian businessman who played host to this writer in June-October, 1964 and again

briefly on July 7, 1973 and who owns a number of properties on Sackville Street. The close association of Yorubas and Hausas in Sierra Leone is a phenomenon that may be the result of a common Muslim religion and the presence of an appreciable numbers of Yorubas who come from the former Northern Nigeria.

12. Kissy is emerging as a fashionable residential area with a number of embassies residing there and attracting some professionals to the Main Road linking Kissy with Wellington, the stretch of road is supplementing the Kissy Dockyard Flats.
13. See Table 7.3 of this thesis.
14. This is the average of amount earned in the previous month.
15. Convention for interpreting Spearman's rank correlation can be found in McNemar, Q. Psychological Statistics, Wiley Toppan, 1962, p. 24.
16. The Age Departure Index (ADI) has been designed by this writer as a numerical expression of differences (positive and negative) between two sets of percentage age composition. This index is obtained by substituting in the formula.

$$ADI(p_2) = p_1^x(0-99) - p_2^x(0-99)$$

Where  $p_2$  = the population for which the ADI is being calculated

$p_1^x$  = the proportion of the sample population at age  $x$   
 $x$  can be in age classes or age groups

The differences are summed ignoring the signs. The range of the index will vary from 0.0 for two populations with identical structure to a maximum of 200.0 for two populations one with all male and one with all female. When the populations do not belong to these two extremes the ADI can serve as a quantification of a range of observed differences which pyramids cannot do.

17. Income per capita is computed for the working population to control the effect of age structure.
18. See the discussion of the crude migration index in chapter 7, under Migration and Sex ratio.
19. See Kilson, *op. cit.*, pp. 77-78 on Mende educational advancement, Cartwright, *op. cit.* pp. 108-109 on the affiliation of politicians to ruling houses and p. 263 on the relative backwardness of the northern tribes.

CHAPTER 12SUMMARY AND CONCLUSIONS AND AN IDENTIFICATION OF  
POPULATION AREAS USING A PRINCIPAL COMPONENTS  
ANALYSIS

Two points emerge from chapter 1. First, is that the household survey of 1967/8 carried out by the CSO., Freetown formed the basis of the analysis of selected population characteristics in chapters 6 to 11. The second point is that reliance on this source created some problems which limited the use to which such data could be put. One major problem was the determination of the adequacy of the sample size for the estimate of various parameters. The calculation of sampling errors for various sample sizes and proportions based on such samples (Table 1.3) provided a satisfactory basis for assessing the reliability of conclusions based on the survey data.

Chapter 2 presented the essential features of the natural environment and their effects on population distribution and patterns. The relief factor, and especially the distribution of lowland, was shown to be the most important influence. On this influence has been grafted the historical momentum created by the siting of the Freetown settlement on the southern shores of the Sierra Leone river.

Since the patterns of population distribution and composition in the Western Area have their origin in events which took place as far back as the 18th century, an original attempt was made in chapter 3 to estimate the size and probable distribution of the population in the area prior to the establishment of the 1787 settlement. The conclusion reached was that the population numbered about 3,000 persons and the distribution has probably not radically altered since then. The superior geographical

Location of the Freetown site vis-a-vis the present York district, and the economic advantages of the location as regards maritime trade, remained essentially the same.

The estimate made in chapter 3 provided a starting point for the discussion of population growth from 1787 to 1963 in chapter 4. The available census data were presented and adjusted to take account of the changes in territorial extent of the former colony which later became the Western Area. The discussion highlighted the role of waves of immigration of Liberated Africans roughly covering the first half of the 19th century. The other, and by far less accurately documented, was the volume of immigration of native Africans, from other parts of Sierra Leone and further afield, into the area.

The effect of the population growth on settlement pattern was summarised by a discussion of population distribution by residence as reported in the 1963 census. The variations in the character, size and economic composition of the working population in each settlement were presented as background to the topic by topic discussion of population characteristics. The residential classification resulting from the discussion in chapter 5 also clarifies the basis of the sub-divisions of the Western Area into unit areas for the analysis of the survey data.

Chapters 6 and 7 discussed age and sex compositions of the sample population in the light of the first research hypothesis. It was shown that variations in age structure from urban to rural area were associated with the movement of persons at the adult age group into specific areas. Much more significant was the association of high sex-ratio with the tendency to migrate shown by ethnic groups, on the one hand, and with the nature of economic activity in different residential areas.

Some rural activities, such as fishing, attracted a predominantly male labour force whilst the urban areas, as <sup>the</sup> location of more employment and education opportunities, also attracted an excess of males. It was concluded that the strength of the interaction between the Western Area and the rest of country was less than that between diamond mining areas of Sierra Leone and other parts of the country.

Chapters 8 and 9 dealt with marital status and families and household compositions. These two chapters should be viewed against the hypothesis that the principle underlying marriages and the forms of families and households have their basis in cultural and traditional practices and are, consequently, only slowly responsive to modernising influences. Further, that the rural area is the frontier of an urban based modernisation process. The higher proportion of rural sample married, and of rural female sample in polygamous unions are features of marital status which support the research hypothesis. A lower rural proportion of nuclear families, the high proportion of bilaterally extended households, and the low proportion of one person households, are also evidence of a much more traditional influence on families and households in the rural area than in the urban centres.

The last research hypothesis suggested that economic composition was based on acquired traits, such as education level attained, and on special skills and that persons with particular qualities cluster in areas where they can best exploit those qualities. In chapter 10, the crude activity rate provided <sup>a</sup> limited basis for distinguishing the rural area from the urban. This was partly due to the fact that there are economic activities in both urban and rural areas and partly due to the crudeness of the rates which regarded members of

the working population as units of equal weight. When attention is turned to the industrial and occupational composition, then the relevance of the hypothesis is more apparent.

The location of manufacturing industries in urban centres contrasts with the predominance of agriculture and allied activities in the rural area. The differences in the economic bases of both residential areas are reflected in the occupational composition. The professional group is highly clustered in urban centers whilst the farming population are in the rural area. The basis of the clear urban/rural break was the education levels attained by persons in different occupations. The more educated and more highly skilled live and work in the urban centers whilst the bulk of the farming population had no formal education.<sup>1</sup> The effect of this differential in education and skills was revealed in the income levels for the respective occupations.

In chapter 11, a preliminary effort was made to identify the pattern of intervariation between various population characteristics and among the different tribes. By the use of Spearman's correlation technique, 11 variables were inter-correlated. The variables covered demographic and socio-economic aspects of each tribe. Three main clusters of association emerged. First was that the economic factor, made up of such influences as education, occupation, and industrial structure, was the most significant basis for distinguishing the tribes, Second was that purely demographic factors such as sex-ratio, showed some relationship with the economic factor but were, by themselves, less significant. Finally, the cultural differences, as measured by proportion married were peripheral and poorly related to other tribal characteristics.

Arising out of the significance of the economic factor in differentiating the tribes is the final objective of this

chapter which is to relate variations in population characteristics to the residential areas identified in the Western Area. The underlying assumption, which was codified in the three hypotheses, is that spatial distribution of economic activities produce variations in the social, cultural and demographic characteristics of the respective residential areas, and a precise identification of the relationship between these areas and population characteristics is a prerequisite to an understanding of the conditions of the people and to development and social planning for them.

#### Selection of Parameters and Technique

The selection of parameters and of a principal components analysis was based on the relative importance of such parameters emerging from the discussion in previous chapters and on the use of a technique which has been tested effectively by other writers.<sup>2</sup> Whilst the objective of this analysis is not coterminous with the studies cited, it benefits from the method of presentation and discussion employed in them.

For each of the 21 unit areas demarcated, 14 parameters were chosen, values for the different areas on each parameters were ranked 1 to 21.<sup>3</sup> The 21 by 14 data matrix shown on Table 12.1 was then subjected to a Principal Components Analysis.

#### Principal Components Analysis

By using principal components analysis, it was possible to minimise the number of independent dimensions needed to account for most of the variance in the original set of data. In order to keep the number as small as possible, only those eigenvalues (of correlation coefficients) greater than or equal to 1.0 are retained in the analysis.<sup>4</sup> Further more, the varimax rotation of the factor matrix was aimed at simplifying the grouping into components.<sup>5</sup> Table 12.2 shows the rotated

TABLE 12.1  
DATA MATRIX for 21 UNIT AREAS and 14 PARAMETERS

UNIT AREAS	Population Density	Proportion in Agric.	A.S.I	Child/Woman Ratio	Total Sex Ratio	Crude Activity Rate	Mean Income	Proportion Married	Proportion Professions	Distance to Tower Hill	Proportion no Educ.	Dependency Ratio	Propn. One person Hhld	Proportion Nuclear Family
1. CBD1 - TOWER HILL AREA	8	14	9	14	11	14	3	19	5	1	18	10	7	18
2. CBD2 - COMMERCIAL AREA	4	15	11	15	15	8	6	10	6	2	14	13	10	17
3. EAST END 1 BOMBAY STREET	1	19	1	1	14	7	7	11	9	4	7	5	14	14
3. EAST END 2 SAVAGE SQUARE	2	20	3	5	12	11	9	11	9	5	15	6	12	8
5. EAST END 3 KENNEDY STREET	3	18	7	7	10	12	12	13	11	6	10	16	11	9
6. EAST END 4 CLINE TOM	10	12	8	6	16	18	14	12	14	8	12	4	5	3
7. WEST END 1 KING TOM	6	21	18	16	19	15	8	14	15	3	17	2	4	10
8. WEST END 2 CONGO TOWN	13	17	6	10	7	20	4	15	2	7	16	3	6	2
9. MURRAY TOWN	9	16	16	9	20	13	2	21	3	10	21	12	18	6
10. WILBERFORCE	7	2	2	2	3	9	1	9	1	9	11	3	1	13
11. LUMLEY	15	10	10	4	5	6	5	8	1	12	8	1	2	1
12. GODERICH	16	12	12	20	1	10	10	4	13	9	4	6	19	4
13. KISSY	5	5	5	17	13	10	11	6	10	11	9	1	16	5
14. WELLINGTON	14	14	14	11	17	16	15	5	17	15	5	7	15	7
15. WATERLOO RURAL (Macedonald Vgs)	19	21	21	21	2	3	19	2	8	17	6	9	13	16
16. WATERLOO VILLAGE	12	17	17	13	18	3	17	18	7	18	19	1	9	19
17. HASTINGS VILLAGE	11	4	4	3	9	19	13	18	8	16	13	4	21	12
18. NORTH KOYA DISTRICT	18	19	19	18	21	4	20	1	20	20	3	1	20	20
19. SOUTH KOYA DISTRICT	17	15	15	8	8	5	21	7	20	21	1	19	17	21
20. MOUNTAIN DISTRICT	20	20	20	12	4	21	16	20	12	14	20	2	8	15
21. YORK DISTRICT	21	13	13	19	6	2	18	3	20	19	2	20	3	11

Source: Author's analysis

TABLE 12.2

COMPONENT MATRIX (AFTER VARIMAX ROTATION)

Components Eigenvalue	1	2	3	4
Cumulative %	43.1	60.7	71.6	80.5
Parameters				
1. Population Density	0.848	-0.105	-0.257	0.358
2. Proportion in Agriculture	-0.845	0.271	-0.005	-0.166
3. A S I	0.485	0.076	0.197	0.769
4. Child/Woman Ratio	0.137	-0.304	-0.027	0.879
5. Total Sex-ratio	-0.302	0.207	0.786	0.159
6. Crude Activity Rate	-0.113	0.876	0.012	-0.068
7. Mean Income	0.761	-0.182	0.322	0.213
8. Proportion Married	-0.284	0.886	-0.028	-0.117
9. Proportion professionals	0.648	-0.581	0.176	0.085
10. Distance to Tower Hill	0.925	-0.173	0.109	0.075
11. Proportion with no Education	-0.403	0.871	-0.046	0.152
12. Dependency Ratio	-0.035	-0.865	-0.197	0.185
13. Proportion one person household	0.270	-0.149	0.793	-0.147
14. Proportion Nuclear Family	0.259	0.064	0.418	0.309

factor matrix on the four components with eigenvalues equal to or greater than 1.0.

The 14 parameters were reduced to four components that, combined, explain 80.5 per cent of the variation observed in the original data. The contribution of each variable to each of the components is represented by the values shown.

The first component explains 43.1 per cent of the variation and has four parameters contributing strongly to it, taking loading values equal to or greater than  $\pm 0.70$ , namely, population density, proportion of working population in agriculture, mean income and distance of unit area to Tower Hill.<sup>6</sup> There is another parameter contributing substantially to this component, taking a loading of between  $\pm 0.50$  and  $\pm 0.70$ , namely proportion of the working population in the professional occupations.

Since components are extracted<sup>c</sup> in order of importance and magnitude,<sup>7</sup> the composition of this first component is further confirmation of the economic dimension in explain<sup>ing</sup> the intervariation in the population characteristics. Much more, the association of economic activities and urbanization is justified by the positive contributions made by high population density, high mean income and a high proportion in professions, whilst the proportion in agriculture is negative but highly significant. This component is therefore designated the 'Urban Component'.

The second component accounts for an additional 17.6 per cent of the variation and is made up of 4 parameters contributing strongly, taking loading values greater than  $\pm 0.80$  in each case. Crude activity rate is high and positive, proportion married is also high and positive and the proportion with no education is high and positive. But dependency ratio

is negative. These are four parameters which emerged in earlier chapters as symptomatic of the rural area. The second component is, therefore designated the 'Rural Component'.

The third component, made up of Sex-ratio for total sample and the proportion<sup>of</sup> households with one person explains another 10.9 per cent and the fourth component based on the ASI and on the child/woman ratio, explains a further 8.9 per cent.

It will be remembered that, in the discussion of sex-ratio in chapter 7, it was pointed out that the presence of a number of one person households, mostly of males, contributed to a high sex-ratio in some areas, the association of these two parameters in the third component is, therefore, regarded as representing the 'Household Component'. The weakness of the fourth component designated as the 'Demographic Component' considerations such as the age structure and the limited information on fertility, are not basis enough for distinguishing population types.

Because the first three components together account for 71.6 per cent of the variation, they are selected as the basis for delimiting population areas. The link between the component identification and the delimitation of areas is achieved through the calculation of component scores for each of the 21 unit areas on each of the three components, Table 12.3.

It is quite feasible to interpret the clustering of the unit areas by inspection of the scores on each component because of the few cases and observations involved. Furthermore, the relationship of the scores on the Urban and Rural components are sufficiently complementary to make interpretation simple. But a plot of the unit areas' scores on these two

TABLE 1213

## COMPONENT SCORES FOR 21 UNIT AREAS ON FIRST 3 COMPONENTS

UNIT AREA	C O M P O N E N T S		
	Urban 1	Rural 2	Households 3
CBD 1 - TOWER HILL/CIRCULAR ROAD	0.813	0.315	0.427
CBD 2 - COMMERCIAL AREA	0.792	0.510	0.225
EAST END 1 - BOMBAY STREET	0.898	0.248	0.086
EAST END 2 - SAVAGE STREET	0.888	0.242	0.301
EAST END 3 - KENNEDY STREET	0.862	0.434	0.184
EAST END 4 - CLINE TOWN	0.765	0.410	0.414
WEST END 1 - KING TOM	0.793	0.414	0.323
WEST END 2 - CONGO TOWN	0.811	0.267	0.447
MURRAY TOWN	0.728	0.318	0.466
WILBERFORCE	0.843	0.223	0.234
LUMLEY	0.600	0.683	0.188
GODERICH	0.276	0.819	0.235
KISSY	0.738	0.624	0.097
WELLINGTON	0.553	0.667	0.374
WATERLOO RURAL (Macdonald Villages)	0.214	0.854	0.419
WATERLOO VILLAGE	0.658	0.414	0.585
HASTINGS VILLAGE	0.695	0.281	0.596
NORTH/KOYA DISTRICT	0.318	0.856	0.296
SOUTH/KOYA DISTRICT	0.352	0.887	0.199
MOUNTAIN DISTRICT	0.559	0.386	0.706
YORK DISTRICT	0.176	0.420	0.811

Source: Author's analysis

components shown on Figure 12.1 allows greater precision in interpretation than would be possible by direct score interpretation.

Since, in general, the higher the score on the urban component, the lower the score on the rural, there is a general linearity in the distribution of the unit areas on the graph. But three significant clusters still emerge.

### Urban Clusters

The cluster of unit areas to the lower right hand corner of the graph can be sub-divided into two areas with distinctive population traits.

#### 1. The Greater Freetown Area

The most outstanding feature of the grouping in the urban cluster is the inclusion of all parts of Freetown and the three unit areas adjacent to the city, namely, Murray Town, Wilberforce and Kissy. Component scores on the urban dimension are greater than 0.70 in each of these unit areas. This grouping underlines the dominant position of the metropolitan area in the economy of the Western Area, in particular and of Sierra Leone in general. The area carries the highest population density in the country and with its concentration of significant proportions of the educational, administrative and industrial employment opportunities, it has one of the highest levels of mean income in the Sierra Leone. Conversely, except for the periphery of the urban field, agricultural employment accounts for very small proportions of the working population.

#### 2. Second Zone of Urbanization

The second zone of urbanization is made up of Lumley, Wellington, Waterloo Village, Hastings Village and the Mountain district. The composition and the scores of these

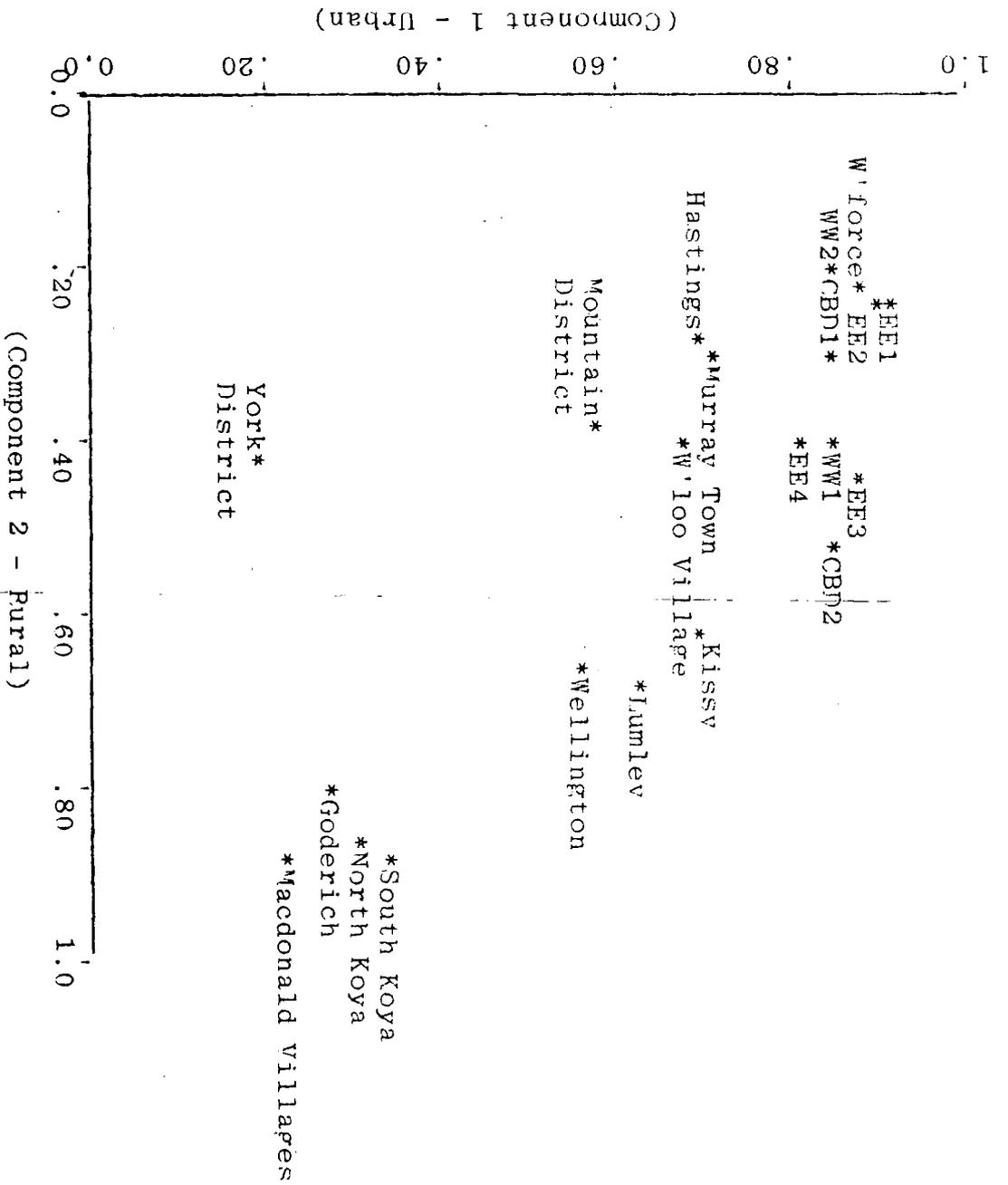


FIGURE 12.1

DISTRIBUTION OF 21 UNIT AREAS ON COMPONENTS 1 AND 2

units are instructive as to the interplay of urban and rural dimensions in distinguishing the population types. On component 1, each of these units have scores of more than 0.50 but less than 0.70. On the second component, they also have equally substantial scores representing the rural dimension. The competing claims of urban-industrial activities and rural-farming activities, especially in Wellington and Lunley show up in the two units having slightly higher scores on the rural component, than on the urban.

#### Rural Cluster

Lying to the top left hand corner of the graph is a cluster of four unit areas with high scores on the rural component and low (0.40 and less) on the urban component. The whole of Koya district, the Macdonald group of villages in Waterloo district and Goderich make up this cluster. The predominance of agriculture and allied activities in these unit areas, the accompanying low income levels are features of these units to which attention has been drawn in earlier chapters.

#### York District

York district stands apart with its very low scores on the two major components. It is, however, the unit with the highest score on the Household component. One other unit area with a significant score on the third component is the Mountain district, a district which has some similarities with York district but also has substantial differences.

York district is an area where agricultural activities are not as consolidated as in the Koya lowlands and where the other features such as a low population density, a low level of income and absence of professional occupation group make it distinctly non-urban. It is an area, where because of its adverse location vis-a-vis the Freetown urban field, the drift

of population to towns has left its mark on the household composition. In contrast, the Mountain district enjoys the advantage of its closeness to Freetown and consequently of a population structure which shows a more substantial articulation with the urban area. It, however, exhibits the effect of outmigration into the urban field.

#### Concluding Remarks

Figure 12.2 shows the four clusters identified. This map is a synthesis of the intervariation in the population characteristics discussed. It is evidence of the economic-urban component in explaining differences in the population structure. Although the analysis is similar to the regionalisation of economic development carried out independently by Forde<sup>8</sup> and Harvey,<sup>9</sup> it differs in that it provides a refinement to the general designation of the Western Areas as the metropolitan area, as such, by pointing to variations existing within the area.

The classification of areas was based on the nature of population traits as discussed in earlier chapters and provide a unified approach and some precision to the understanding of the intervariation of the different parameters. It should, therefore, be possible to monitor changes occurring in the social, economic and demographic characteristics of the population in the different areas as they occur.

With specific reference to the working hypotheses stated in chapter 1, it may be concluded that the most embracing and reliable is the effect of the distribution of economic activities on the grouping and re-grouping of population with specific traits in areas where the traits can be best exploited. The role of migration in this grouping is substantial. Purely

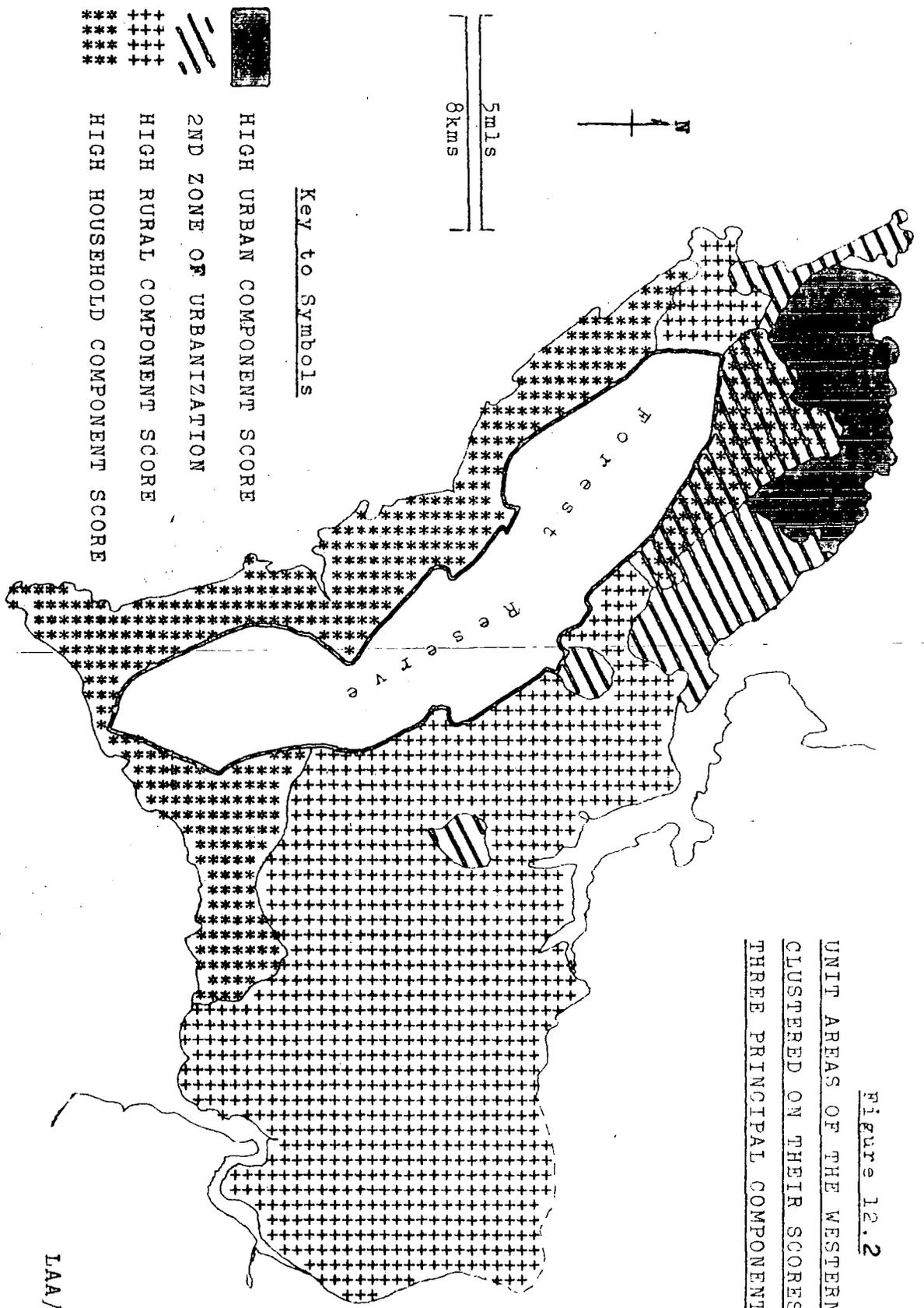


Figure 12.2  
 UNIT AREAS OF THE WESTERN AREA  
 CLUSTERED ON THEIR SCORES ON THE  
 THREE PRINCIPAL COMPONENTS - 1968

LAA/73

demographic traits such as age structure do not present a conclusive basis for distinguishing population types and areas because of the general youthfulness of the universe from which the sample population is drawn. Similarly, the cultural differences as measured by marital condition are secondary to the improvement of educational and consequently, economic quality of various groups

NOTES AND REFERENCESCHAPTER 12

1. Literacy in Arabic is excluded from formal education.
2. See Forde, E. 'Regionalization of Economic Development in Sierra Leone' in Sierra Leone Geographical Journal No. 11, 1967 pp. 43-50.  
Harvey, M.E. 'Economic Development and Migration in Sierra Leone' in Population Growth and Economic Development in Africa (eds. Omiside and Ejiogu) Heineman, 1972 pp. 167-172 and Morgan, R.P.C. 'Rainfall of West Malaysia - a preliminary regionalization using principal components analysis in Area vol. 3., 1971, pp. 222-227.
3. Ranking of values assures that the variance for each parameter is 1.0. For a brief account of other features of components analysis, See Harman, H.H. Modern Factor Analysis 2nd Ed. Revised, Chicago, 1967 pp. 136-137.
4. This is the threshold recommended for the FACTO package programme and its subroutines. For a full explanation of method see BMD Computer Programme Manual, ed. W.J. Dixon VCLA, 1964.
5. Whilst matrices in this analysis are loosely described as 'factor' 'Components' refer to the grouping of variables. The distinction between the two terms was topic of protracted argument in Davies, W.K.D. 'Varimax and the destruction of generality; a methodological note', Area, vol. 3. 1971 pp. 112-118 also in Area vol. 3 1971 pp. 254-259 and Mather P.M. Comment on 'Varimax and the destruction of generality' Area vol. 3, 1971, pp. 254-259 and again in vol. 4 1972, pp. 27-30.
6. Distances measured from center of circumscribing circle for each unit area to similar center for CBD ONE which falls on Tower Hill.
7. Harman, op. cit. p. 136.
8. Forde, op. cit. (map) p. 50.
9. Harvey, op. cit. (map) p. 169.

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This bibliography is far from exhaustive. It includes the main works referred to in the preparation of this thesis. The use to which each source has been put is indicated by the letters in brackets according to the following key:

<u>Letter</u>	<u>Application</u>
(B)	General background to population studies
(M)	General methodology
(H)	Historical material
(P)	Physical environment
(S)	Statistical methodology
(T)	Special topics - age, sex, etc.

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APPENDIX 1.1SET OF 3 QUESTIONNAIRES USED FOR THE 1968  
HOUSEHOLD SURVEY  
(Mimeograph)

Form A2	Dwelling Unit Survey	-	Rural Areas
Form B2	Demographic Survey	-	Rural Areas
Form C2	Ownership Survey	-	Rural Areas

Source: CSO., Freetown.

Note: Although these forms are specifically for the Rural Areas there are no significant changes in the urban questionnaire. This statement is particularly true of the Demographic Survey questionnaire.

CENTRAL STATISTICS OFFICE  
HOUSEHOLD SURVEY

Form A2 Dwelling Unit Survey - - RURAL Areas

Page \_\_\_\_\_ of \_\_\_\_\_

Town or Village _____ E.A.No, _____ Street Address or Location of this Structure _____ Interviewer _____ Supervisor _____ Date of Interview _____	Dwelling Unit No. _____ Exact Location _____ Number of households sharing this dwelling unit? _____ Number of dwelling units used by each of these households _____
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DESCRIBE STRUCTURE IN WHICH DWELLING UNIT IS LOCATED. (If household occupies more than one structure, use additional pages.)

DESCRIBE DWELLING UNIT IN WHICH HOUSEHOLD LIVES (If household occupies more than one dwelling unit, use additional pages for each unit.)

<p><b>A. TYPE OF STRUCTURE</b></p> <ol style="list-style-type: none"> <li>1. Detached house</li> <li>2. Row house, adjoining</li> <li>3. Flat or apartment</li> <li>Commercial building:</li> <li>4. Dwelling above</li> <li>5. Dwelling within</li> <li>6. Hut, square</li> <li>7. Hut, round</li> <li>8. Temporary shelter</li> <li>9. Other, specify _____</li> </ol> <p><b>B. HOW MANY DWELLING UNITS IN THIS STRUCTURE?</b></p> <p>_____</p> <p><b>C. OUTSIDE DIMENSIONS OF STRUCTURE</b></p> <p>_____ Ft. X _____ Ft. OR _____ Ft. diameter</p> <p><b>D. MATERIAL OF WALLS</b></p> <ol style="list-style-type: none"> <li>1. Masonry</li> <li>2. Masonry and wood</li> <li>3. Wood only</li> <li>4. Pan (iron sheeting)</li> <li>5. Mud and wattle</li> <li>6. Mud and wattle, cemented</li> <li>7. Mud only</li> <li>8. Other, specify _____</li> </ol> <p><b>E. ROOF</b></p> <ol style="list-style-type: none"> <li>1. Corrugated iron sheet</li> <li>2. Masonry, concrete</li> <li>3. Wood of other shingles</li> <li>4. Grass, leaves, etc.</li> <li>5. Other, specify _____</li> </ol> <p><b>F. FLOOR</b></p> <ol style="list-style-type: none"> <li>1. Wood</li> <li>2. Concrete or tile</li> <li>3. Earth</li> <li>4. Other, specify _____</li> </ol> <p><b>G. NUMBER OF STOREYS IN STRUCTURE INCLUDING GROUND FLOOR</b></p> <p>_____</p>	<p><b>H. USES MADE OF STRUCTURE OTHER THAN LIVING</b></p> <ol style="list-style-type: none"> <li>1. Storage of rice or other foods</li> <li>Specify _____</li> <li>2. Farm animals</li> <li>3. Poultry</li> <li>4. Manufacturing, specify _____</li> <li>5. Commercial, specify _____</li> <li>6. Other, specify _____</li> </ol> <p><b>I. AGE OF STRUCTURE</b></p> <ol style="list-style-type: none"> <li>1. Less than 5 years</li> <li>2. 6 to 10 years</li> <li>3. 11 to 25 years</li> <li>4. 25 to 50 years</li> <li>5. Over 50 years</li> </ol> <p><b>U. CONDITION OF STRUCTURE</b></p> <ol style="list-style-type: none"> <li>1. Excellent</li> <li>2. Good</li> <li>3. Fair</li> <li>4. Poor</li> </ol> <p><b>K. WAS STRUCTURE REPAIRED OR IMPROVED IN THE PAST 12 MONTHS?</b></p> <ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol> <p><b>L. IF YES, NATURE OF WORK DONE</b></p> <ol style="list-style-type: none"> <li>1. Roof</li> <li>2. Outside Walls</li> <li>3. Inside Walls</li> <li>4. Floors</li> <li>5. Plumbing</li> <li>6. Electric Wiring</li> <li>7. Additions or alterations specify _____</li> </ol>	<p><b>M. HOW MANY ROOMS ARE USED FOR LIVING SPACE?</b></p> <p>_____</p> <p><b>N. HOW MANY PERSONS ARE LIVING IN THIS DWELLING UNIT?</b></p> <p>_____</p> <p><b>O. TENURE OF OCCUPANT</b></p> <ol style="list-style-type: none"> <li>1. Owner</li> <li>2. Renter</li> <li>3. Rent free</li> <li>4. Other, specify _____</li> <li>5. Vacant</li> </ol> <p><b>P. IF OWNED</b> Monthly rental value _____</p> <p><b>IF RENTED</b> Monthly rent paid _____</p> <p><b>Q. IS ANY SPACE IN DWELLING UNIT RENTED TO PERSONS WHO ARE NOT MEMBERS OF THE PRINCIPAL HOUSEHOLD? (If yes, describe the situation in notes.)</b></p> <ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol> <p><b>R. WATER SUPPLY</b></p> <ol style="list-style-type: none"> <li>1. Tap inside dwelling</li> <li>2. Tap inside compound</li> <li>3. Public tap</li> <li>4. Neighbour's tap</li> <li>5. Well nearby</li> <li>6. River stream, or pond</li> <li>7. Other specify _____</li> </ol>	<p><b>S. TOILET FACILITIES, LOCATION</b></p> <ol style="list-style-type: none"> <li>1. Inside dwelling, private</li> <li>2. Inside dwelling, shared</li> <li>3. Outside dwelling</li> </ol> <p><b>T. TOILET FACILITIES, TYPE</b></p> <ol style="list-style-type: none"> <li>1. Flush Toilet</li> <li>2. Privy (outhouse)</li> <li>3. Pit latrine</li> <li>4. Other, specify _____</li> <li>5. None</li> </ol> <p><b>U. LIGHTING FACILITIES</b></p> <ol style="list-style-type: none"> <li>1. Electricity</li> <li>2. Pressure lamp</li> <li>3. Kerosene lamp</li> <li>4. Candles</li> <li>5. Other specify _____</li> <li>6. None</li> </ol> <p><b>V. KITCHEN FACILITIES</b></p> <ol style="list-style-type: none"> <li>1. Inside dwelling</li> <li>2. In separate building</li> <li>3. Cooking done outside</li> </ol> <p><b>W. FUEL USED FOR COOKING</b></p> <ol style="list-style-type: none"> <li>1. Wood</li> <li>2. Charcoal</li> <li>3. Kerosene</li> <li>4. Bottled gas</li> <li>5. Electricity</li> </ol> <p><b>X. REFUSE DISPOSAL</b></p> <ol style="list-style-type: none"> <li>1. Collected by community</li> <li>2. Carried to dust bin</li> <li>3. Dumped in pit</li> <li>4. Other, specify _____</li> </ol>
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NOTES: Explain all detail about this dwelling unit that might not be clearly understood.

NOTES: Explain all detail about the structure that might not be clearly understood.



HOUSEHOLD SURVEY  
Form C2--Ownership Survey--RURAL Areas

Town or Village \_\_\_\_\_

Interviewer \_\_\_\_\_ Supervisor \_\_\_\_\_

Locality Code \_\_\_\_\_ E.A. NO. \_\_\_\_\_ Household No. \_\_\_\_\_

Date of Interview \_\_\_\_\_

COMPLETE THIS FORM FOR EACH HOUSEHOLD FOUND IN THE SAMPLE DWELLING UNIT

A. THINGS OWNED BY HOUSEHOLD		NUMBER OWNED	B. FURNISHINGS AND EQUIPMENT		NUMBER OWNED	E. FRUIT BEARING TREES		NUMBER OWNED
1. Ice box			1. Chairs and stools			1. Oil Palm		
2. Refrigerator--Gas / Electric / Kerosene			2. Tables			2. Kola nut		
3. Iron--Charcoal / Electric			3. Cabinets			3. Cocoa		
4. Radio			4. Neat safes			4. Coffee		
5. Television			5. Wardrobes			5. Coconut		
6. Sewing machine			6. Beds, hammocks			6. Mango		
7. Electric Fan			7. Water jars and buckets			7. Orange or grape fruit		
8. Air Conditioner			8. Cooking pots, metal			8. Lemon or lime		
9. Bicycle			9. Cooking pots, clay			9. Banana or plantain		
10. Motor cycle			10. Pans, enamel, etc.			10. Paw Paw		
11. Motor Car			11. Dishes and plates			11. Avocado Pear		
12. Telephone			12. Knives			12. Breadfruit		
13. Gramophone			13. Other utensils			13. Other, specify _____		
14. Hoe			14. Glasses					
15. Sickle			15. Mortar and pestle					
16. Machet			16. Other, specify _____					
17. Axe								
18. Gun								
19. Cart								
20. Boat, specify kind _____								
21. Fishing equipment								
22. Agricultural equipment, specify item								
a) _____								
b) _____								
c) _____								
23. Equipment for making things, specify item								
a) _____								
b) _____								
c) _____								
24. Cooking equipment								
a. Three-stone fire								
b. Charcoal pot								
c. Kerosene stove								
d. Smokeless stove								

C. ANIMALS AND POULTRY		NUMBER OWNED
1. Chickens		
2. Ducks and other Poultry		
3. Goats		
4. Sheep		
5. Pigs		
6. Cattle		
7. Other specify _____		

D. DOES HOUSEHOLD MAKE ANY HANDICRAFT ITEMS FOR OUT USE OF SALE	
KIND OF PRODUCT	
1. Yarn or thread	
2. Woven cloth	
3. Dyed cloth	
4. Pottery	
5. Metal items	
6. Wooden items	
7. Baskets etc.	
8. Other specify _____	

F. DID ANY MEMBER OF THE HOUSEHOLD MAKE A FARM OR GARDEN THIS PAST YEAR?			
Farm?	Yes	No	No. of Acres?
Garden?	Yes	No	Large Medium Small
		KIND OF CROPS GROWN	
		AMOUNT HARVESTED	
1. Upland rice			
2. Swamp rice			
3. Cassava			
4. Okra			
5. Maize (corn)			
6. Pepper			
7. Jakatoe			
8. Groundnuts			
9. Pumpkin			
10. Benniseed			
11. Native spinach (plassas)			
12. Tomatoes			
13. Guinea corn			
14. Egg plant (garden eggs)			
15. Potatoes			
16. Beans			
17. Other, specify _____			

NOTES: Explain all details that might not be clearly understood.

A LIST OF 29 TABLES CONTAINED IN "HOUSEHOLD SURVEY OF THE  
WESTERN AREA November, 1966 - January, 1968 FINAL REPORT"  
(Mimeograph)

CONTENTSTITLE

## HIGHLIGHTS OF THE HOUSEHOLD SURVEY

TABLE

1. Average monthly expenditures and incomes of households in the Western Province by location - 1967
2. Average monthly expenditures for food purchased by households in the Western Province by location - 1967
3. Average monthly expenditures of households in the Western Province by income class - 1967.
4. Average monthly expenditures for food purchased by households in the Western Province by income class - 1967.
5. Average monthly expenditures for food purchased by households in the Western Province by household size - 1967.
6. Average monthly expenditures for food, drinks and tobacco in normal and holiday seasonal periods - Western Province by Location - 1967.
7. Consumption of selected foods by Freetown households - normal period - 1967.
8. Percentage of households reporting purchases of selected foods, average quantity purchased per week and average price paid by Freetown households making purchases in the normal period - 1967.
9. Average monthly expenditures of lower-income households of two or more persons in Freetown - 1967.
10. Comparison of 1964 and 1967 average monthly expenditures for goods and services by lower-income households in Freetown.

..... contd.

- 11,a+ b Consumer Price Index - Freetown. Comparison of original (corrected) and revised index numbers (1961 = 100).  
Revised indexes linked to original fourth quarter = 1966.
12. Consumer Price Index - Freetown. Comparison of weights, 1961 and 1967.
13. Economic status of household members by relationship to head: end of year, 1967. - western Province.
14. Percent distribution of household members in the labour force by major occupational groups, and percent looking for work in the western Province - end of year, 1966 and 1967.
15. Distribution of persons in the labour force 15 years of age and over by occupation, and percent looking for work; end of year, 1967.
16. Average monthly earnings of employed household members in the western Province - end of year 1967.
17. Percent distribution of household members in the labour force by major occupational groups and age, and percent looking for work: end of year, 1967 - Freetown, Urban and Rural areas.
18. Percent distribution of household members in the labour force by educational level attained and percent looking for work: end of year, 1967 - Western Province.
19. Percent distribution of household members in the labour force by major occupational groups, sex and educational attainment: end of year, 1967 - western Province.
20. Estimated number of persons in the civilian labour force and those looking for work; end of year, 1967 by age group and educational attainment, Freetown and urban places in the Western Province.

....contd.

21. Distribution of households and average household income by economic status of head and income level of household, end of year, 1967 - Western Province.
22. Distribution of all household members by relationship to head of household and contribution to total monthly household income - 1967
23. Percent distribution of household members currently attending school, by educational level and sex, end of 1967 - Western Province.
24. Percent distribution of household members 5 years of age or over, by educational attainment, age group and sex: end of year 1967 - Freetown, urban and rural areas.
25. Percent distribution of household members by educational attainment and sex - Western Province, comparing 1967 survey results with the 1967 Census.
26. Percent distribution of households by income class and size end of year, 1967 - Western Province.
27. Percent distribution of households in the Western Province, by household size, and income class, end of year, 1967. for Freetown, urban and rural areas.
28. Percent distribution of household members by migration status, end of year, 1967.
29. Distribution of persons in the labour force and percent looking for work, by age and migration status, Freetown, end of year, 1967.

Author's

Note: The use of 'Province' in tables and 'Area' on the cover of the Final Report. Note also the use of 1967 in tables and 1968 on the cover.

APPENDIX 2.1LIST OF MAPS CONSULTED WITH SOME COMMENTS ON CONTENTAbbreviations:

O.S.O. Ordinance Survey Office  
 W.O. War Office  
 D.O.S. Director of Overseas Survey  
 D.C.S. Director of Colonial Survey

Scale	Title and Sheet Numbers	Publisher, date or reference to source
none	No title, Coast from Iles de Los to Rio Sestro at 6° N. (Inset - The Bay of Sierra Leone)  Main map shows 3 settlements on Bullom shore Inset has 2 settlements and the House of John Thomas marked on the Freetown site  (Photocopy, courtesy of Dr.P.K. Mitchell)	Published 'J.Barbot, A description of the Coast of North and South Guinea... Churchill, London 1732
c. 1:110,000	A survey of the entrance of Sierra Leona River by T.B. Thompson.  More settlements marked than in above, especially Queen Vamacoaba's Town. Quality of execution of this map and lack of reference to colony support a date around 1787 as suggested by Dr. Mitchell	Laurie and Whittle, London 1794
c. 1:1,000,000	A contemporary map of the Sierra Leone coast (after John Mathewes, A voyage to Sierra Leone, London 1788)  Greater accuracy in the execution of the peninsula	'Afzelius' (ed. Kup) Upsaliensia 1967 p. 32
1:126,720	A general sketch of the harbour of Sierra Leona (after C.B. Wadstrom, An essay on Colonization....., London, 1794)  Subtitled 'pointing out the situation of the New Colony' this map is one of the 3 discussed fully in the text (chapter 3, pp. 46 - 49 Of this thesis)	ibid. p. 112
1:126,720	Plan of the River Sierra Leone by William Dawes (see p. 48 of this thesis for a 2/3 photocopy)	Winter- bottom, 'An Account .....' Frank Cass, 1969 p. 15
c. 1:1,000,000	A map of the Windward coast of Africa from the Rio Grande to C. Palmas  Temne/Bullom boundary in the peninsula is marked and the route of Watt/Winter-bottom journey of 1794 is marked	ibid. p.1

- 1:63,360 Sierra Leone Peninsula O.S.O. 1913  
W.O. 1937  
This map covers most of the Western Area except for parts south of Tumbu. Tasso Island is marked but left blank.
- 1:63,360 Vicinity of Freetown, 3rd ed. sheets 2 and 3 W.O. 1949  
Although covering much the same area as the last and visually close to it, this map contains a key to the size of settlements classified by number of houses and according to the lettering of place names. These settlement sizes are presumably applicable to the last map.
- 1:50,000 Freetown D.O.B. 1968  
This map contains less information on settlements than in the last two, but it is the most accurate representation of the coastline and the relief of the Western Area since it was based on aerial photographs which are identified on the map.
- 1:10,000 Freetown Peninsula Sheets 1 to 6 D.C.S. 1951  
Based on 1947 and 1949 R.A.F. aerial 1958  
photos, information includes the drawing 1961  
in of individual structures with vegetation types marked in. A distinction is made between advanced and young secondary forest. Sheet 2 provides the boundary of the city of Freetown. The six sheets cover the northern half of the peninsula
- 1:2,500 Freetown and District Director of Survey and Lands, Freetown 1959  
sheets 1 to 36  
Although covering much the same area as the last map, the 1:2,500 has houses and street names marked in, information which was useful for demarcating enumeration area and unit area boundaries.
- 1:6,250 Freetown Road Map Director of Survey and Lands, Freetown 1959, 1960  
sheets 1 to 6  
Besides street names, useful information on drainage of the Freetown site and on location of various reservoirs.

## APPENDIX 4.1

A LIST OF CENSUSES AND ESTIMATES PUBLISHED  
BETWEEN 1802 AND 1963 WITH INDICATIONS OF  
THE EXTENT TO WHICH THEY COVERED THE TOTAL  
AREA OR POPULATION WITHIN THE WESTERN AREA  
AT ANY GIVEN DATE

Date	Freetown	Existing Liberated African Villages	Native Villages within Colony	Western Area within Colony	Sierra Leone
29-3-1802	c	n.a	-	-	-
4-1811	c	-	-	-	-
3-1817	c	-	-	-	-
31-12-1818	c	c	c*	-	-
8-7-1820	c	c	c*	-	-
1-1-1822	c	c	c*	-	-
4-1826	c	c	c	-	-
20-6-1831	c	c	c	-	-
1832	c	c	c	-	-
1833	c	c	c	-	-
1834	c	c	c	-	-
1835	c	c	c	-	-
1836	c	c	c	-	-
1837	-	c	c	-	-
1838	c	c	c	-	-
1839	c	c	c	-	-
1840	c	c	c	-	-
1841	-	c	c	-	-
1842	c	c	c	-	-
1843	c	c	c	-	-
31-12-1844	c	c	c	-	-
1845	c	c	c	-	-
1846	c	c	c	-	-
1847	c	c	c	-	-
1848	c	c	c	-	-
1849	c	c	c	-	-
1850	c	c	c	-	-
1851	c	c	c	-	-
1853	e	e	e	-	-
1855	c	c	c	-	-
1858	c	c	c	-	-
1860	c	c	c	-	-
1868	c	c	c	c	-
1871	c	c	c	c*	-
3-4-1881	c	c	c	c	-
5-4-1891	c	c	c	c	-
28-4-1901	c	c	c	c	-
2-4-1911	c	c	c	c	-
24-4-1921	c	c	c	c	-
26-4-1931	c	c	c	c	-
12-1947	c	c	c	c*	-
1-4-1963	c	c	c	c	c

Source: see footnote no. 1 to chapter 4

Note to symbols: c = census; e = estimate; - = no count;  
n.a = not applicable (prior to 1807 when the arrival  
of Liberated Africans began)  
c\* = (1818, 1820, 1822) only 28 villages covered  
c\* = (1871) excluding out-stations (1947) rough  
count restricted to the colony, see U.N.  
Demographic Yearbook, 1949/50, p.73 footnote 32

## APPENDIX 6.1

AN APPLICATION OF SMITH'S SCORING FOR THE ACCURACY OF AGE REPORTING  
EXPECTED AND ACTUAL POPULATION AND SCORE INDICATIVE OF THE  
EXTENT OF ERROR BY SEX AND BY RESIDENTIAL AREA - 1968

Study Area:	Category	Sex	Expected Pop (a)	Actual Pop (b)	Score ( $\frac{b}{a} \cdot k$ )
<u>W. Area</u>	One	M	611	951	155.6
		F	573	962	167.9
		M+F	1,184	1,913	161.6
	Two	M	611	713	116.7
		F	573	598	104.4
		M+F	1,184	1,311	110.7
	Three	M	2,443	2,329	95.3
		F	2,294	2,181	95.1
		M+F	4,737	4,510	95.2
	Four	M	2,443	2,115	86.6
		F	2,294	1,993	86.9
		M+F	4,737	4,108	86.7
<u>Freetown:</u>	One	M	422	608	141.1
		F	403	607	150.6
		M+F	825	1,215	147.3
	Two	M	422	483	114.5
		F	403	390	96.8
		M+F	825	873	105.8
	Three	M	1,689	1,648	97.6
		F	1,613	1,580	97.9
		M+F	3,302	3,228	97.8
	Four	M	1,689	1,483	87.8
		F	1,613	1,455	90.2
		M+F	3,302	2,938	89.0
<u>W. Urban:</u>	One	M	148	275	185.8
		F	135	285	211.1
		M+F	283	560	197.9
	Two	M	148	170	114.9
		F	135	161	119.3
		M+F	283	331	117.0
	Three	M	592	530	89.5
		F	540	475	88.0
		M+F	1,132	1,005	88.8
	Four	M	592	506	85.5
		F	540	429	79.4
		M+F	1,132	935	82.6
<u>W. Rural:</u>	One	M	44	100	227.3
		F	39	108	276.3
		M+F	83	208	250.6
	Two	M	44	60	136.4
		F	39	47	120.5
		M+F	83	107	128.9
	Three	M	175	151	86.3
		F	158	130	82.3
		M+F	333	281	84.4
	Four	M	175	126	72.0
		F	158	110	69.6
		M+F	333	236	70.9

Source: Author's computation based on single year age data. For the explanation of categories, see Smith, T.L. Fundamentals of Population Study, Lippincott, 1960, p. 151

## APPENDIX 6.2

COMPUTATION OF AGE STRUCTURE INDEX (ASI) - 1963 POPULATION  
OF SIERRA LEONE.

Age-Class	Mid-value of Age-Class (x)	Proportion of Population at Age-Class (y)	xv	x <sup>2</sup>
0 - 4	2	17.3	34.6	4
5 - 9	7	12.9	90.3	49
10 - 14	12	6.5	78.0	144
15 - 19	17	8.9	151.3	289
20 - 24	22	8.7	191.4	484
25 - 29	27	9.5	256.5	729
30 - 34	32	7.9	252.8	1,024
35 - 39	37	6.3	233.1	1,369
40 - 44	42	5.3	222.6	1,764
45 - 49	47	3.9	183.3	2,209
50 - 54	52	3.2	166.4	2,704
55 - 59	57	1.9	108.3	3,249
60 - 64	62	2.6	161.2	3,844
65 - 99	82	5.1	418.2	6,724
Totals	498	100.0	2,548.0	24,586

To obtain the value of 'b' in the equation

$$y = a + bx$$

we substitute in the equation

$$b = \frac{\sum xv - (\sum x)(\sum y)/N}{\sum x^2 - \frac{(\sum x)^2}{N}}$$

where N is the number of age-classes

$$\text{i.e. } b = \frac{2548 - 3557.1}{24586 - 17714.5}$$

$$= \frac{-1009.1}{6871.5}$$

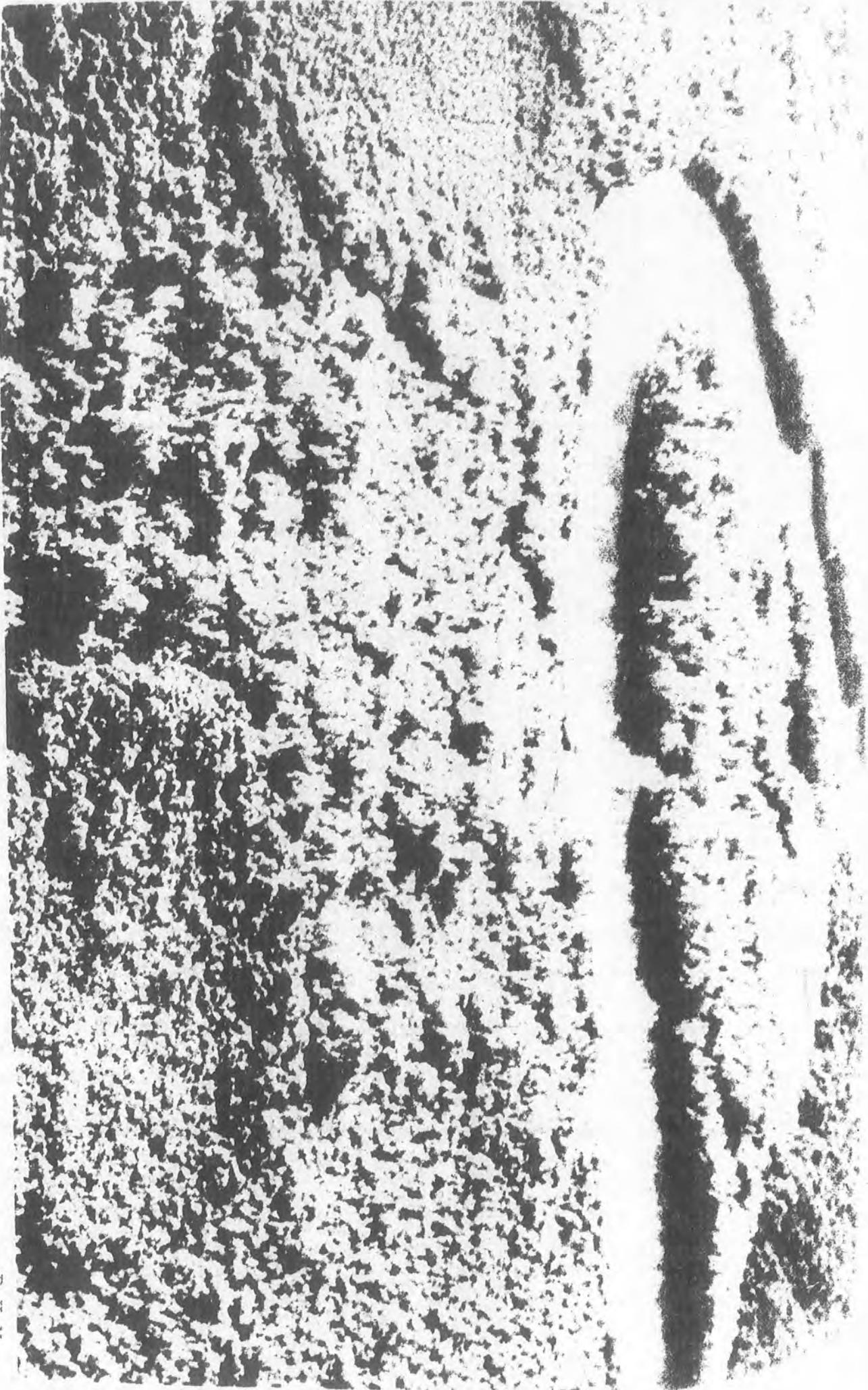
$$= -0.14685$$

Adjust by adding -.1 and ignore sign and decimal

$$\text{Age Structure Index} = \underline{\underline{24685}}$$

Note: for explanation of the index see footnote no.2 and discussion in chapter 6 of this thesis.

Source of Sierra Leone's age structure: see footnote no. 3



Appendix

Typical mangrove forest of the creeks on the side of Bunce River.

P. K. M.



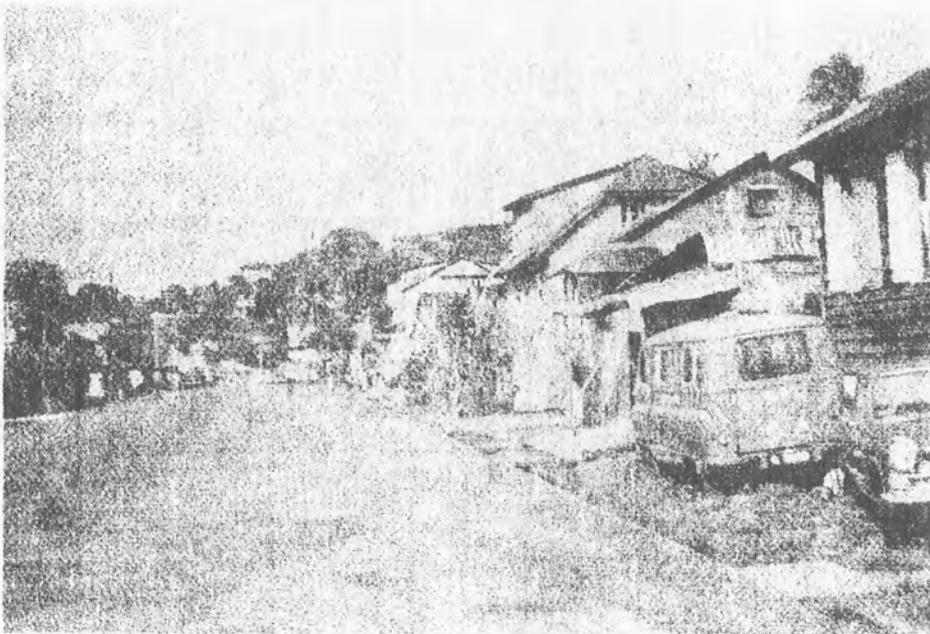
Appendix Freetown: Scenes in the city- Creole Architecture

(Humphrey)

AppendixFreetwon - Scenes in the City

(Humphrey)

Westmoreland Street - Traffic and stores  
(Cotton Tree in the background)



(Humphrey)

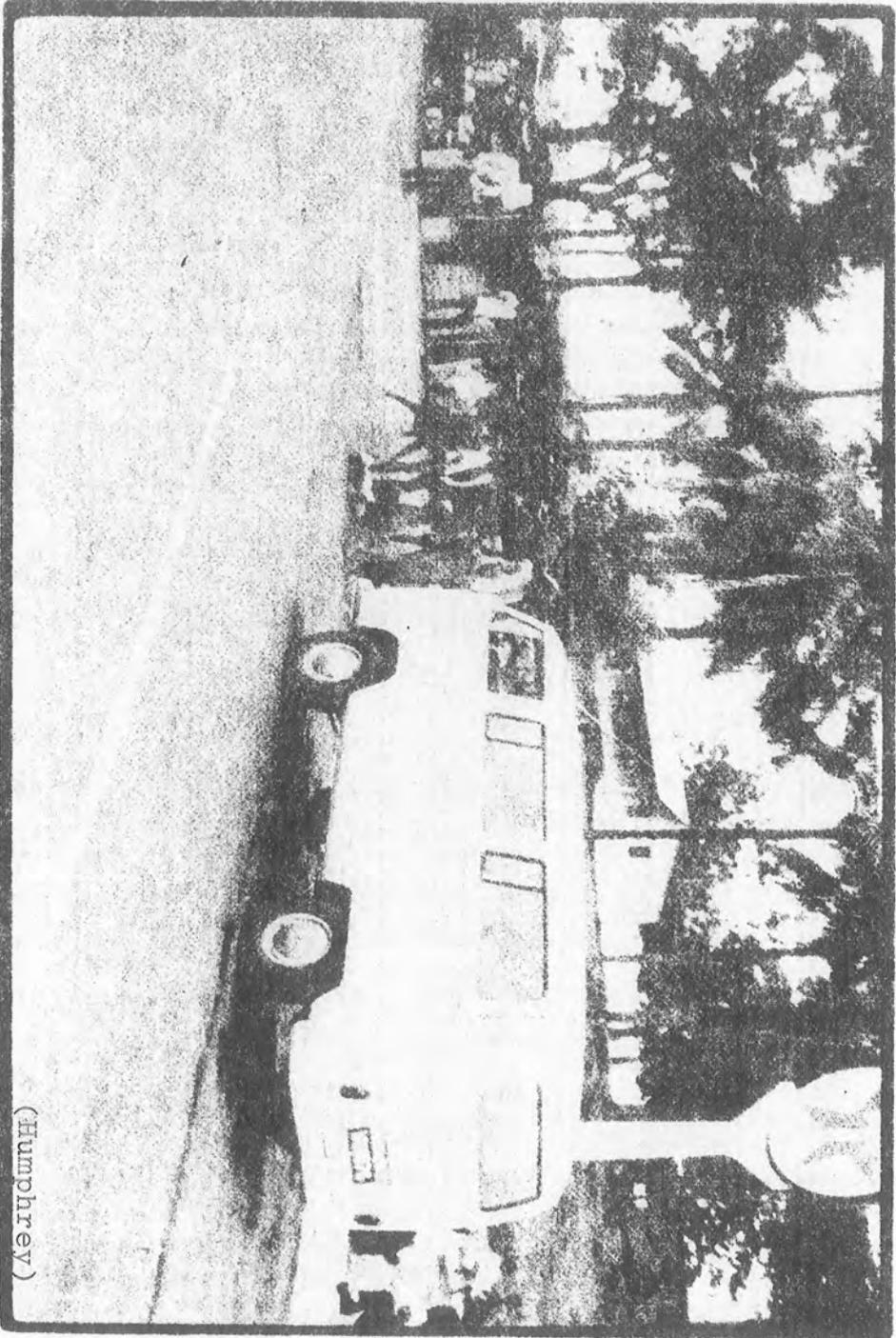
A quiet West End street



(Tobugu-Metzger)

Appendix

Fula children in front  
of a more prosperous  
type of Fula store



(Humphrey)

Appendix Waterloo Village - The market centre for the Koya Area

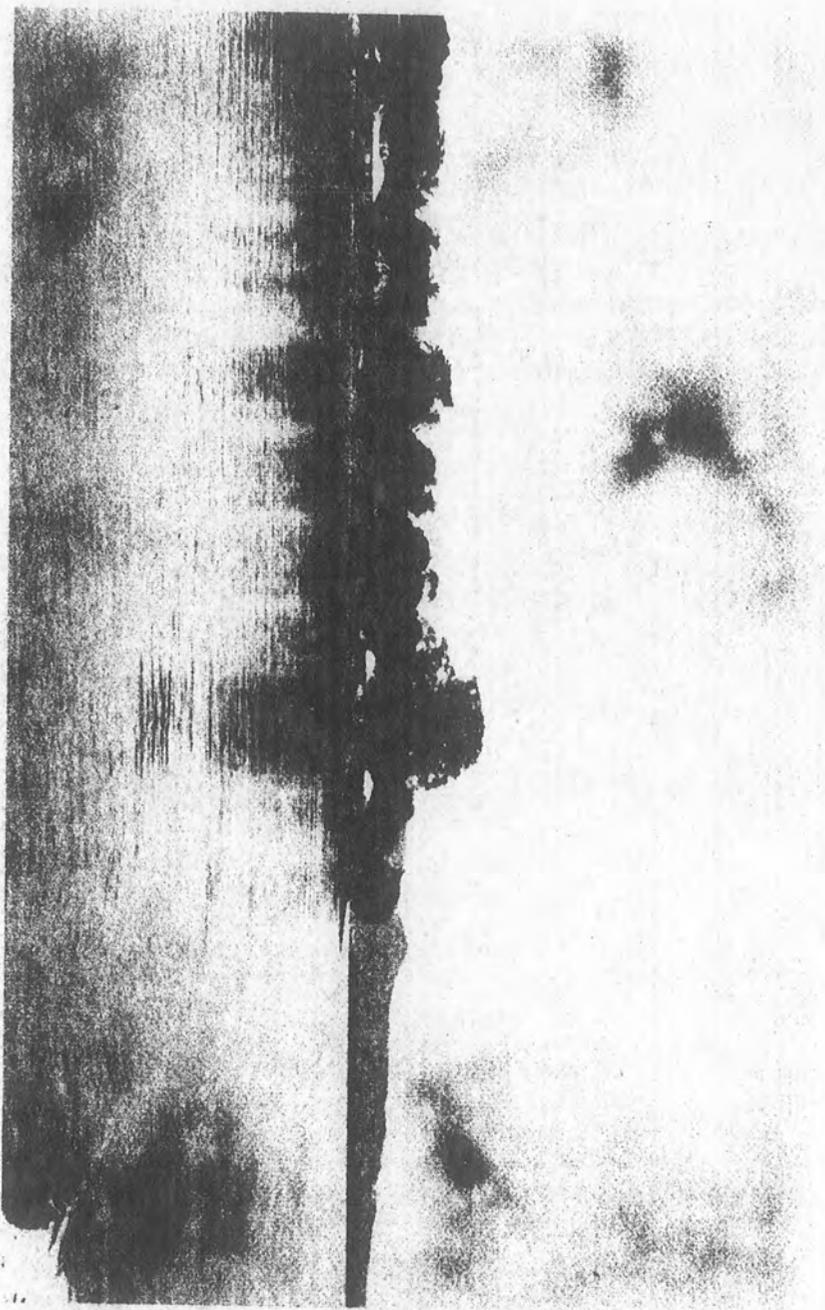


(Humphrey)



(Humphrey)

Appendix Two views of Regent in the Mountain district



P. K. M.

Appendix A view of Tasso - settlement on the north  
side of Tasso Island  
(Leicester Peak and Mount Aureol in the background)