Migration to Juba: a case study

Hill, Roger

ABSTRACT

This study represents the first stage in an examination of migration to Juba, the capital of the Southern Region of the Democratic Republic of the Sudan. Both the Region and the subject are largely unresearched and thus the work is mainly original, yet descriptive and analytical rather than hypothesis testing. Similarly the first and final sections provide necessary background material on the Sudan, the Region and the subject of migration, thereby placing the study in a relevant context.

Since 1972, when a seventeen year civil war was terminated and Juba became capital of the Southern Region, the population of the town has grown enormously, and largely as a result of in-migration. The work on this movement is broadly divided into three sections. The first of these looks at the migratory movement as a whole and examines its directions, mechanisms and temporal aspects. The movement is largely rural to urban in direction, and there is some evidence of a stepped nature and of hierarchical organisation by distance rather than town size. The bulk of in-migration has occurred since 1972, and particularly in 1978 and 1979.

The second section considers the socio-economic characteristics of the migrants and highlights the male bias, and the dominance of the 15-29 year cohort in the age structure. Economic reasons have been important in the decision making process, as have those of education and family connections.

International migration is the subject of the third section, in which the relevant migratory aspects of the civil disturbances in Sudan and Uganda are examined.

It is concluded that in-migration has been of great importance in the growth of the population of Juba and that there appear to be no reasons why it will not continue for the foreseeable future. This will raise very serious economic and infrastructural problems because the creation of employment opportunities is not keeping pace with demand nor are the existing services sufficient to cope with further increases in the population of the town.

MIGRATION TO JUBA : A CASE STUDY

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by

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PREFACE

This study is concerned with recent human migration into Juba, capital of the Southern Region of Sudan. Work was undertaken over a two year period at the University of Juba and began in August 1978, less than one year after the opening of that institution. The aims of the University are to offer practically oriented studies in an attempt to produce graduates in a variety of fields and whom, as a result of relevant University training, can further the development of the community, the Southern Region and the country as a whole.

The objectives of this work were to provide an initial description and examination of migration to Juba and, in so doing, contribute towards a more complete demographic picture of the town. Juba has grown enormously in recent years, as have many Third World cities but there would appear to be a number of factors which distinguish Juba from the others, and it is hoped that these have been identified, thereby permiting a greater understanding of the recent past and current situation.

As a result of the scanty information available on Juba and the Southern Region, the data contained in this study are largely original. Two sources have yielded the bulk of the material presented in the sections on fieldwork : the Population and Manpower Unit (PMU) of the University of Juba and personal field research.

The Population and Manpower Unit is a United Nations/International Labour Organisation assisted project (SUD/74/028). During the two year study period the PMU team comprised a project manager, two volunteer assistants (of whom the writer was one) and a group of secondary school leavers who were trained in questionnaire work and data processing and who were involved in much of the survey enumeration.

The Population and Manpower Unit was created when the University

to examining overall characteristics of the population of Sudan and in particular the tendency towards mobility. The aim here is to place the main body of the study in a regional and national context. This section is followed with a consideration of the physical environment of Juba Town and the prevailing economic and demographic climates, and this precedes the results of the fieldwork on migration.

For the purposes of this study the topic of migration is split broadly into three sections. The first is concerned with the interal migratory movement and focuses on its direction, its mechanisms and on temporal aspects. The second examines the socio-economic characteristics of the migrants involved in the movement and the last section considers the position of international migrants in Juba.

After the examination of the fieldwork results, a final part of the study places the whole within the wider context of the topic of migration, and pays some attention to work that has been done on migration in Sudan and neighbouring Kenya. This section is placed at the end of the study to emphasise the fact that the prime objectives were to measure in-migration to Juba and identify some general characteristics, rather than to test any specific hypotheses.

There are inevitably some limitations to this study. If, however, the problems involved in undertaking initial research in a developing country are accepted then these can be viewed in a positive rather than in a negative manner. The major limitations are largely concerned with the bulk of research that remains to be done. The nature of the area is such that the work that has been or is being undertaken is only scratching the surface, and a great deal more is required if the demographic situation is to be fully understood. There is, for example, a heavy urban bias in the data, as no work was done in the surrounding rural areas. Similarly, the situation in other urban settlements was not investigated.

PART ONE

BACKGROUND TO THE STUDY

INTRODUCTION

This study attempts to examine, geographically, the topic of recent human migration into Juba Town, the capital of the Southern Region of the Democratic Republic of Sudan (Figure 1.1).

Many countries, including Sudan, have experienced a long history of population movement which has been caused by both human and physical factors. Over the past few decades the predominant form of migratory movement has been in a rural to urban direction. It is essentially, although not entirely, this form of migration that is considered in this study.

A number of factors have been identified as contributing to a rural to urban population movement, factors which are well documented in case studies from many parts of the world. Many of the widely recognised and accepted factors are in evidence here but, in addition, there would appear to exist some further causes which have led to a migratory movement focusing on Juba. It is hoped that the role of the more traditional factors can be successfully identified and that the contribution of such other causes as exist can be assessed.

The Juba location was selected as the focus for this study for a number of reasons. Juba Town has only recently emerged from the disturbances of a civil war and, having been designated as a Regional capital in one of the poorest countries in the world, it seems to have experienced rapid population growth. Secondly, it is the centre of an area for which very scanty population data exist. Such results and findings as emerge should, therefore, contribute to the formation of a more informative and complete demographic picture than exists at present. This may be of assistance to development planning for the town and for the Southern Region. In addition, Juba's proximity to four international boundaries introduces an aspect of international migration.

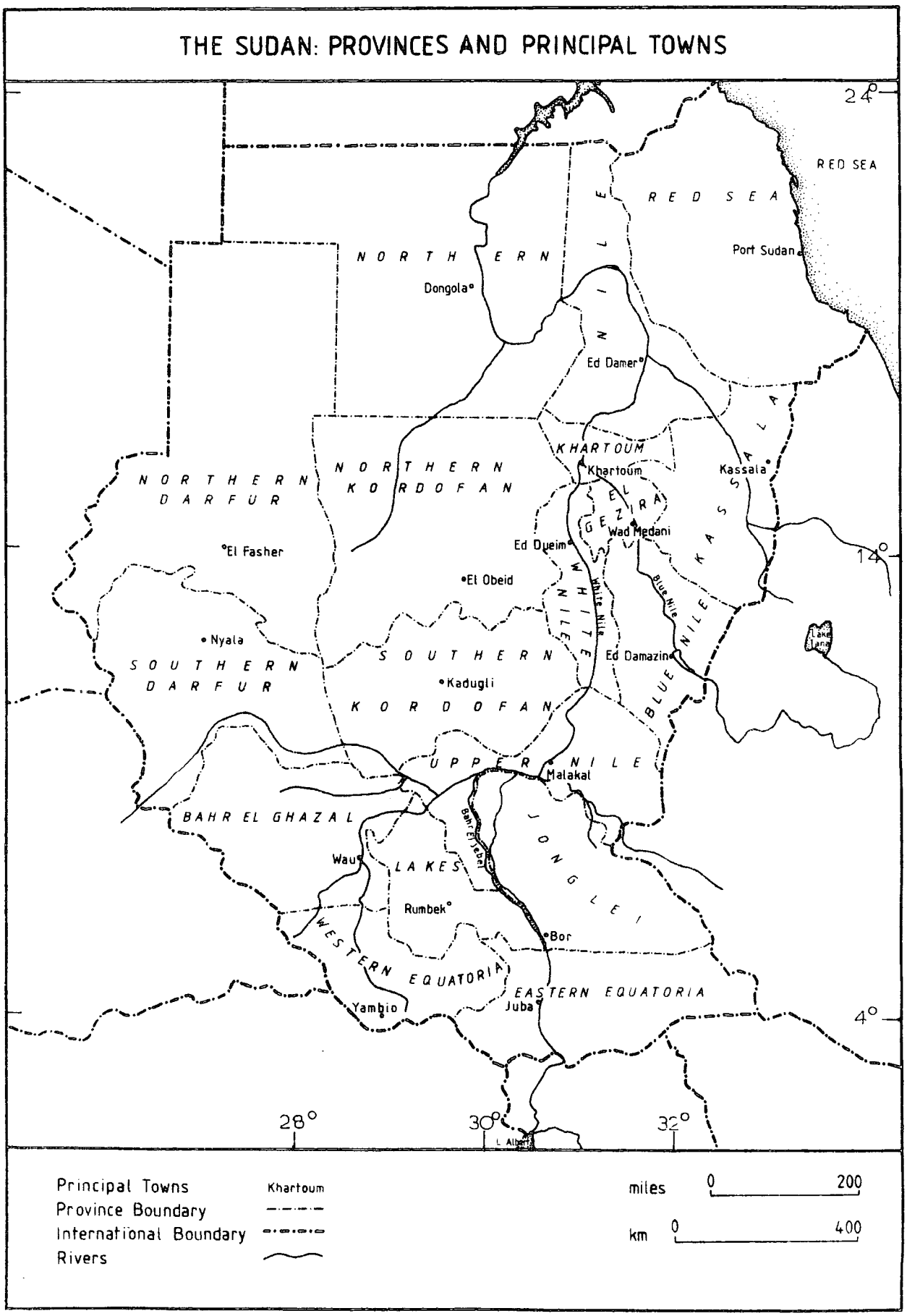
THE SUDAN: PROVINCES AND PRINCIPAL TOWNS
24°
RED SEA
RED SEA
NORTHERN
NILE
Port Sudan
Dongola
Ed Damer
KHARTOUM
Khartoum
Kassala
KASSALA
NORTHERN DARFUR
NORTHERN KORDOFAN
GEZIRA
Wad Medani
El Fasher
Ed Dueim
14°
El Obeid
WHITE NILE
BLUE NILE
Lake Jana
Nyala
SOUTHERN DARFUR
SOUTHERN KORDOFAN
Kadugli
Ed Damazin
BLUE NILE
UPPER NILE
Malakal
BAHR EL GHAZAL
Bahr El Jebel
JONGLEI
Wau
LAKES
Rumbek
Bor
WESTERN EQUATORIA
EASTERN EQUATORIA
Yambio
Juba
4°
28°
30°
32°
L Albert
Principal Towns
Khartoum
Province Boundary
International Boundary
Rivers
miles 0 200
km 0 400

FIG.1.1

Africa's longest civil wars still to the fore, the current situation in Sudan is one of delicate political stability overlying undercurrents of discontent. Economically the country is still very poor and heavily dependent on foreign aid to finance its development programme. Except for isolated pockets of modern industry, the country is predominantly agricultural with a majority of the people being engaged in subsistence activities.

1.1 Physical Geography

Sudan is a vast country, the largest in Africa , covering an area of almost two and a half million square kilometres (Figure 1.1). Lying between the latitudes of 3 and 21 degrees North the country has a length of almost two thousand kilometres whilst the east-west dimension exceeds one thousand six hundred kilometres. With its resultant huge length of boundaries, Sudan borders on eight other African states (Figure 1.2). Such an area inevitably encompasses many different physical regions with great variations in climate and vegetation.

Topographically the Sudan is not a complicated country. There are two main elements to the physical geography of the country. Firstly there is the monotony of relief that characterises much of a landscape where only five percent of the land lies above thirteen hundred metres. The second feature is the unity of the drainage pattern, dominated by the River Nile and its tributaries (Barbour 1961, p.26).

Physically Sudan can be described as a vast lowland trough, opening in the north and drained by the Nile (Fisher 1971, p.530). Much of the Nile basin is underlain by crystalline rocks of the Basement Complex, with sand and clay formations occupying most of the remaining areas (Whiteman 1971, p.5). Despite the flat nature of most of the country which is dominated by thousands of square kilometres of pediplains, inselbergs and

depositional plains, there do exist some important upland features. These include the great erosional scarp in the vicinity of the Red Sea, the volcanic uplands of the Jebel Marra region and the southern uplands bordering Uganda and Kenya.

The climate of Sudan is entirely tropical, although there are a number of distinctive climatic regions which have played a strong role in producing the variety of modes of living that are found in the country. A broad three-fold division can be recognised, comprising a desertic north, a central rainlands zone and a southern area where orographic rainfall predominates.

The climate is determined principally by the location of the Inter-Tropical Convergence Zone. Tothill (1948) named this movement north and south of the boundary between northerly and southerly winds as being the governing influence in Sudanese climate. Rainfall distribution shows a marked latitudinal regularity over the country, with annual values declining northwards from a maximum of over 2,000 millimetres in the semi-equatorial extreme south, to less than 25 millimetres in the deserts of the far north (Figure 1.3). Of equal importance is the question of yearly rainfall variability. This can reduce precipitation to negligible levels in the north of the country and by 10 to 15 per cent in the south. Over most of the country evaporation exceeds precipitation and thus precipitation effectiveness is also a crucial factor (Tom, 1975, p.42)

Temperatures are high all over the country although there is more variation, both seasonally and daily, in the north than in the south. Thus, in overall terms, the Sudanese climate is not a positive one. High temperatures and unreliable rainfall combine to make agriculture, the main meansof livelihood, a difficult practice.

The soils of Sudan are varied in both composition and in distribution.

A broad three-fold division can be recognised. In the north of the country desert soils, heavily lacking in organic matter, are dominant. In the south the term lateritic may be applied to a majority of the soils, although black cotton soils are commonly found. The third group, alluvial soils, are of especial importance to agriculture, particularly in areas such as the Gezira, where irrigation practices have maximised the properties of these fertile soils. Vegetation corresponds closely to climate, soils and topography. With progression northwards, grasses replace woodland forming a savanna and this is eventually succeeded by a desertic scrub and then true desert. Only in the extreme south of the country is a tropical vegetation type approached.

1.2 Population

The population of Sudan exhibits a number of characteristics, many of which are evident in other developing countries. Overall population numbers are low and Sudan remains sparsely populated. There are, however, considerable imbalances in the distribution of population and particularly marked rural/urban differences, with the population of the urban centres growing at very rapid rates. A large proportion of the population is still very young, life expectancy remains short and educational levels are still low.

In 1955, on the eve of independence, the first modern census of population was conducted in Sudan. The results gave an estimated total population of just over 10 millions. The major concentrations of population were in the three northern provinces of Blue Nile, Kordofan and Darfur, which contained the country's main urban centres.

Estimates from the second census, undertaken in 1973, indicated an increase in population of about 4 millions, providing a new total of some 14.8 millions. Growth rates were estimated to have been between 2.1 and 2.5 per cent per annum. Population growth throughout the country was not

TABLE 1.1 : POPULATION GROWTH BY PROVINCE

PROVINCE	POPULATION 1956	POPULATION 1973	GROWTH RATE (%PA)
DARFUR	1,328,765	2,139,615	2.7
KORDOFAN	1,761,968	2,202,345	1.3
KHARTOUM	504,923	1,145,921	4.7
BLUE NILE	2,069,646	3,740,475	3.2
KASSALA/RED SEA	941,039	1,547,475	2.8
NORTHERN	873,059	957,671	0.5
EQUATORIA	903,503	791,738	-0.7
BAHR EL GHAZAL	991,022	1,386,913	2.0
UPPER NILE	888,611	836,263	-0.4
ALL NORTH	7,479,400	11,733,432	2.7
ALL SOUTH	2,783,136	3,024,914	0.5
TOTAL	10,262,536	14,758,346	2.2

SOURCE : ILO, GROWTH, EMPLOYMENT AND EQUITY, 1976, p.303

with average growth rates in the latter of more than 7 per cent per annum, compared to 1.5 per cent in the rural areas (Table 1.2). This would seem to have been the result of a pronounced rural to urban migratory movement. Urban concentrations are, however, limited in number and only about 20 per cent of the population live in urban environments (Table 1.3). The urban hierarchy is dominated by the Three Towns of Khartoum, Khartoum North and Omdurman, which have a combined population of more than one million; this represents about 40 per cent of the total urban population.

As a result of the low levels of urbanization the urban centres that do exist and especially the Khartoum conurbation, have a political, administrative and economic weighting out of all proportion to the size of their populations. The Three Towns conurbation is a good example of a primate city. It contains some 40 per cent of the country's urban population and is ten times the size of the next largest town. It accounts for approximately 75 per cent of the nation's modern sector employment, industrial location and output (Lees and Brooks, 1977, p.74).

Sudan exhibits two further demographic characteristics that are commonly found in developing countries. Firstly, the age structure of the population is unbalanced. The 1973 census recorded some 46 per cent of the population as being below the age of 15 years and less than 9 per cent were aged over 50 years (Figure 1.5). This is in spite of continuing high rates of infant mortality. There is an overall sex ratio of 102.6 (males per 100 females) but this does not reflect the rural/urban disparities that exist, and sex ratios in the urban areas as a whole are in the order of 113.

Secondly, there is the question of education and literacy. Literacy at the time of independence was estimated to be 10 per cent, a very low level. By 1966 it was thought to have risen to 14 per cent in the population aged over 15 years, but it was a little as one per cent in females aged over 25 years.

TABLE 1.3 : POPULATION BY MODE OF LIVING AND SEX

MODE OF LIVING	MALE	%	FEMALE	%	TOTAL	%
URBAN	1,382,853	19.4	1,223,043	17.5	2,606,896	18.5
RURAL SETTLED	4,567,418	64.0	4,637,074	66.5	9,204,492	65.2
RURAL NOMADIC	834,121	11.7	795,589	11.4	1,629,710	11.5
COTTON PICKERS	353,572	4.9	319,920	4.6	673,492	4.8
TOTAL	7,137,964	100	6,975,626	100	14,113,590	100

SOURCE : D.R.S. DEPT. OF STATISTICS, MINISTRY OF PLANNING, PRELIMINARY RESULTS OF THE 1973 POPULATION CENSUS, (KHARTOUM, 1976), TABLE 9.

In 1973, 31 per cent of the population aged over 10 years were reported to be literate, although there were large differences between the sexes and also spatially, with males, the population of the urban areas and that of the northern provinces being more literate (Tables 1.4 and 1.5).

One characteristic that has only been briefly mentioned so far is that of population mobility. The population of the Sudan seems to have exhibited a high degree of mobility in the past. It has been estimated that more than one million people move every year in search of better income earning opportunities (United Nations 1964 pp.139-140). In addition, pastoral nomads, who may number another million, migrate on a seasonal basis in search of grazing and water. There appears to have been a pronounced rural to urban migratory movement whilst the modern farming schemes seem also to have received a large number of in-migrants (Ahmed, 1976, p.3). It appears that migration for seasonal employment has also been of large dimensions, with over 60 per cent of those employed in harvesting cotton being seasonal migrants (Lees & Brooks 1977, p.15).

1.3 Population Mobility

In this section the question of population mobility is more thoroughly examined as it is this characteristic that is most relevant to the study as a whole. All available evidence indicates that the population of Sudan has been and is extremely mobile, a fact which is illustrated by the distribution of the various tribal groups within the country. Some groups have been noticeably more mobile than others; for example, people from the old provinces of Darfur, Kordofan and Northern are more widely distributed amongst the other provinces than people from any of the other provinces (Democratic Republic of Sudan, 1978, p.5). A high degree of population mobility is also suggested by the changes in population density that have occurred. Between 1955/56 and 1973 densities in Khartoum province more than doubled and there were also significant increases in Blue Nile province but, over the same period,

densities in Equatoria province decreased.

The 1955/56 census revealed that, out of a total population of 10,015,000, some 5,405,000 persons were enumerated in localities other than their place of birth. Much of the migration was over short distances and only 4 per cent of the population born in Sudan had moved from their province of birth (United Nations, 1964, p.42). Intra-provincial migration had been especially high in the three southern provinces, where 71 per cent of the population had moved from their place of birth, but remained within the same province (Sudan Population Census 1955/56). This is a reflection of the large size of the provinces and thus, after the creation of the new smaller provinces in 1976, it was only to be expected that this figure (4%) would be considerably higher. Improvements in the transportation system have also tended to promote greater inter-provincial migration. Data from the 1973 census, adjusted to accommodate the changes in provincial boundaries, indicated that 1,433,346 persons (10.4%) had crossed provincial boundaries in the course of migration (D.R. of S 1978, p.30).

Inter-provincial migration, as recorded in the first census, was only of small proportions. The north-east provinces of Khartoum, Kassala and Blue Nile gained about 182,000 persons, whilst the north-western provinces (i.e. Darfur, Kordofan and Northern Province) lost just over 175,000 persons. The balance is found in the small amount of south-north migration that had occurred prior to 1956, involving a net loss of 7,000 persons by the Southern provinces. The movement out of the south of some 16,000 people was mainly by inhabitants of Bahr el Ghazal and Upper Nile provinces who moved to an adjacent northern province (70%) or to Khartoum province (30%). The counter stream of movement into the southern provinces was largely directed towards Upper Nile province, which received 85 per cent of incoming persons born in the north of the country (Mills, 1977, p.21). Khartoum province had the largest net gain through migration in proportion

TABLE 1.6 : PROVINCIAL NET MIGRATION, ABSOLUTE AND AS A PROPORTION OF SUDANESE RESIDENTS BORN IN PROVINCE

PROVINCE	NET MIGRATION			POPULATION BORN IN PROVINCE			NET MIGRATION AS A PERCENTAGE OF POPULATION BORN IN PROVINCE		
	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
RED SEA	21,463	11,120	32,583	213,292	187,187	400,479	10.1	5.9	8.1
BAHR EL GHAZAL	-16,136	- 5,382	-21,518	687,402	644,498	1,331,900	- 2.3	- 0.8	- 1.6
BLUE NILE	248,186	159,130	407,316	1,575,045	1,559,083	3,134,128	15.8	10.2	13.0
DARFUR	-188,157	-89,209	-277,366	1,142,794	1,149,555	2,292,349	-16.5	- 7.8	-12.0
EQUATORIA	6,845	2,411	9,256	819,026	330,916	658,042	2.1	0.7	1.4
KASSALA	47,112	33,311	80,423	496,731	451,345	945,076	9.7	7.5	8.6
KHARTOUM	172,980	89,858	262,838	410,331	392,277	802,605	42.2	22.9	32.7
KORDOFAN	-175,804	-128,615	-304,419	1,199,563	1,187,723	2,387,286	-14.7	-10.8	-12.8
NORTHERN	-138,114	-90,715	-228,829	568,880	572,284	1,141,164	-24.3	-15.9	-20.1
UPPER NILE	21,625	18,091	39,716	372,531	346,596	719,127	5.8	5.2	5.5
				6,982,595	6,829,565	13,812,159			

SOURCE : D.B.S. DEPARTMENT OF STATISTICS. PRELIMINARY RESULTS OF THE 1973 POPULATION CENSUS (KHARTOUM 1978) TABLE 14.

southern provinces of Equatoria and Bahr el Ghazal where ratios of 284/100 and 300/100 respectively were recorded, and lowest in Upper Nile province at 119/100. This table also demonstrates the regional variations that have occurred. Six out of the ten provinces have been net receiving areas while the other four have recorded net losses. Blue Nile Province received the largest number of in-migrants (407,316) but the proportion of migrants to native population was greatest in Khartoum Province (32.7%). The second table illustrates the selectivity by age of past migration in Sudan. The dominance of the 20 - 29 years cohort is evident, whilst the small scale migration of persons aged less than 15 years is also apparent.

A number of different types of migration are recognisable in Sudan of which rural-urban movement has perhaps been the most important. Other forms of migration include seasonal labour migration, pastoral nomadism, religiously oriented movements, labour exportation and refugee influxes.

Seasonal migration in Sudan is largely rural to rural in direction and circulatory in nature. Its overall direction has been predominantly from west to east and the destinations have been the large modern agricultural schemes . Three main factors are believed to have influenced migrants involved in rural labour migrations. Firstly there is the amount of rainfall in the districts of out-migration; secondly, the distance to be travelled and thirdly, the rates of pay in the destination areas. This type of migration appears also to have been selective, in that the largest group of migrants involved in rural labour movements have been single males, intent on maximising their incomes. Apart from these migrants there are others, both male and female, who have participated in seasonal migration for a number of years and who are considering the possibility of permanent migration and settlement, while others migrate for only one season (ILO 1976, pp. 92-93).

The principal example of this type of migration is the movement of

TABLE 1.8 : MIGRATION OF COTTON PICKERS TO BLUE NILE PROVINCE BY SEX AND PROVINCE OF ORIGIN

PROVINCE	MALE	FEMALE	TOTAL
KORDOFAN	49,519	28,027	77,546
DARFUR	57,453	32,518	89,971
KHARTOUM	16,659	9,429	26,088
KASSALA	9,197	5,206	14,403
UPPER NILE	107	61	168
NON SUDANESE	12,533	7,697	20,230

SOURCE : RAMANCHANDRAN K.V. POPULATION COUNT, AND AGE, SEX AND OTHER CHARACTERISTICS - AN EVALUATION OF THE 1973 CENSUS OF SUDAN, TABLE 42.

Religiously oriented migration is of long standing in Sudan and it includes foreigners as well as Sudanese because Sudan lies on the route from West Africa to Mecca (Birks 1978). The number of foreigners involved in the movement and resident in Sudan is largely unknown but the pilgrimage movement is dominated by males, as is the corresponding movement of Sudanese to Mecca.

Recent concern has also been expressed at the loss of Sudanese manpower to foreign markets. The 1970's saw a considerable rise in the export of skilled Sudanese personnel and by 1978 it was estimated that there were between 52,000 and 62,000 Sudanese away from home. Principal losses have been of educated manpower and particularly from academic, medical and administrative spheres. The main centres of destination appear to have been Egypt, Saudi Arabia and Libya (Birks and Sinclair, 1978, p.46). The third type of international migration, concerning refugees, is discussed in Chapter Eight.

1.4 Economy

Sudan is unquestionably a poor country, with United Nations statistics depicting it as one of the poorest twenty-five countries in the world (UNIDO,1975)Sudan exhibits the following economic characteristics:

a) per capita GDP of approximately US 290 dollars per annum

b) proportion of manufacturing in GDP of less than 10 per cent

c) illiteracy rates of over 65 per cent

d) low levels of electricity consumption per head

The economy also appears to be dualistic, a fact which is reflected in the regional disparities that exist throughout the country.

The pre-colonial economy of Sudan was dominated by a small number of activities. A majority of the population was dependent on agriculture for a living. In northern parts of the country traditional pump and flood

TABLE 1.9 : CONTRIBUTIONS BY SECTOR TO GROSS DOMESTIC PRODUCT AT CURRENT PRICES FOR SELECTED YEARS IN SUDAN

SECTOR	1955/56		1960		1964		1969/70		1971/72		1974	
	£sm.	%	£sm.	%	£sm.	%	£sm.	%	£sm.	%	£sm.	%
AGRICULTURE	173	60.9	201	57.4	202	47.9	208	40.2	241	38.1	585	38.3
MANUFACTURING AND MINING	13	4.6	17	4.9	23	5.5	53	10.3	53	8.4	143	9.5
ELECTRICITY AND WATER	12	4.2	15	4.3	16	3.8	16	3.1	17	2.7	21	1.4
CONSTRUCTION	16	5.6	22	6.3	29	6.9	23	4.4	26	4.1	65	4.3
COMMERCE	18	6.3	24	6.9	58	13.7	54	10.4	105	16.6	245	16.2
TRANSPORT	21	7.4	26	7.4	30	7.1	51	9.9	51	8.1	89	5.9
FINANCE	10	3.5	12	3.4	16	3.8	23	4.4	41	6.5	111	7.4
GOVERNMENT SERVICES	17	6.0	27	7.7	41	9.7	77	14.9	92	14.6	150	9.9
OTHER	4	1.4	6	1.7	7	1.7	12	2.3	6	0.9	99	6.4
TOTAL	284	100	350	100	422	100	517	100	632	100	1508	100

SOURCE : STATISTICAL YEARBOOK (VARIOUS)

Agricultural practices in Sudan are of three types : irrigated, rainfed and traditional. Irrigated agriculture shows a remarkable geographic concentration, limited essentially to the land lying between the Blue and White Niles. Some 90 per cent of irrigated agricultural land is found in the provinces of Kassala, Blue Nile, White Nile and Gezira and cotton is the principal crop grown in these areas.

Rainfed agriculture also exhibits a pattern of concentration and the above four provinces contain some 90 per cent of the land under this means of production. Mechanisation is widely employed, with the main crops being cotton, groundnuts and sesame. The combination of these two means of production, in terms of their location, employment opportunities and services provision, creates a serious imbalance between the areas around the capital Khartoum and the rest of the country. Traditional agriculture is found widely in central, western and southern areas, but produces only small surpluses for local markets.

Whilst agricultural employment accounts for almost 75 per cent of the labour force, industrial activity provides employment for only 3 to 4 per cent. Industrial development began in the 1920's but by 1956 it accounted for only 5 per cent of the economy's output (Imam, 1966, p.3). By 1971 state intervention and government policies had raised this contribution to 10 per cent and, in so doing, provided some 43,000 jobs (Ministry of Industry, 1970-71).

Mineral resources being, in the main, sparse and not in economically viable quantities or locations, the bulk of industrial activity is concerned with textiles and the processing of agricultural products. Although advances have been made in this sphere, there are a large number of obstacles to further industrial development. There is a lack of a large internal market and purchasing power; inefficient methods of production are widespread and there is an overdependence on cotton. But as with agricultural development, perhaps the greatest single handicap to modernisation and growth in

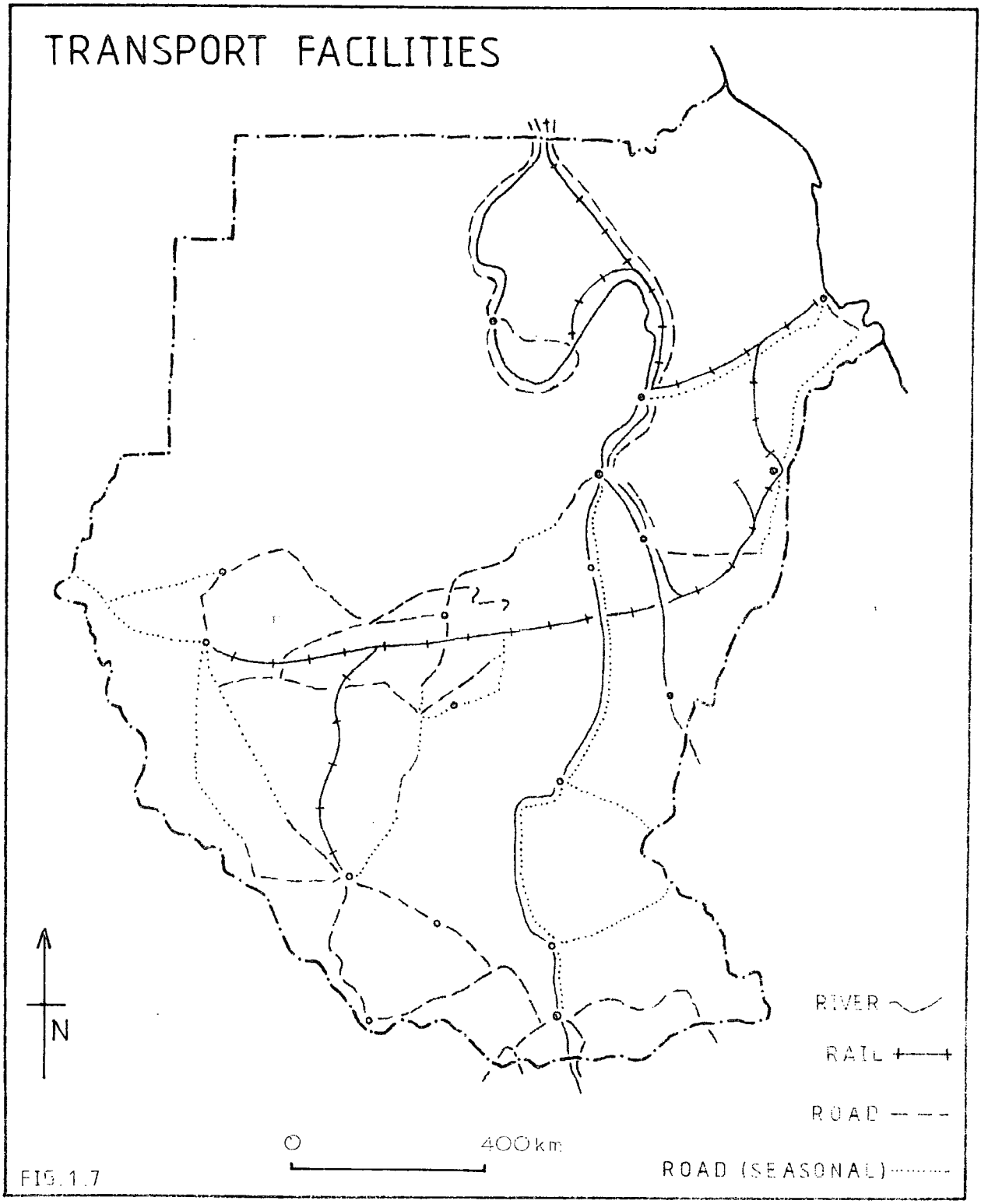
TRANSPORT FACILITIES
N
RIVER
RAIL
ROAD
ROAD (SEASONAL)
0
400km

FIG. 1.7

1946 marked a turning point for the southern part of the country. The policy of separation which had been followed until this time, despite the consideration of other alternatives, such as unification with parts of East Africa, had retarded the economic and social development of Southern Sudan. In 1946, however, it was decided by the British that geographic and economic factors combined to unify rather than divide the country. To this end a policy of Sudanisation, in effect Arabicisation, was adopted and followed.

A conference was held in Juba in 1947 at which northern and southern leaders met (Wai, 1973, Appendix II). Here the southern leaders acknowledged the need for political unity and recognised the backwardness of the region, both socially and economically. They also registered their distrust of northern intentions. Five years later, in spite of assurances of southern involvement in government policy, political spokesmen from the south were omitted from discussions on self-government held in Khartoum. In the years before independence southern leaders became increasingly dissatisfied with political developments and the policy of Sudanisation that was being followed. A revolt of southern troops in 1955 marked the beginnings of much greater internal struggles. The causes of the revolt lay in dissatisfaction with the actions taken by the political parties in the north and their preoccupation with inter-party problems rather than with the development of the country as a whole (Mahgoub, 1974, p.175).

The political representatives from the south, by no means united amongst themselves, agreed to independence in 1956, given the conditions of representation in the new parliament and of negotiations concerned with federalism. Two years of civilian rule were ended by a military takeover in 1958, marking the arrival of northern oppression in the south. Southern intellectuals were alienated and fled, missionaries were expelled and thousands of people sought safety in the bush and in neighbouring countries.

CHAPTER TWO

THE SOUTHERN REGION

The six provinces[1] that constitute the Southern Region of Sudan (Figure 2.1) cover an area of 650,000 square kilometres, approximately one third of the total area of the country. The Southern Region is larger than many independent African states, such as neighbouring Uganda and Central African Republic, and in one sense at least it can be viewed as being amongst the latest African territories to gain independence.

The Addis Ababa Agreement of 1972, which provided for regional autonomy and a large degree of self government in the South can be considered as the base point for development in the Region and it is from this date that progress is best measured. The government formed in 1972 was faced with a vast legacy of problems which were essentially the result of colonial mismanagement and the ravages of civil war.

Economically the Region was in ruins. The costs of staging guerrilla style resistance over a period of 17 years had been enormous and had more than seriously depleted the meagre resources of the Region. Subsistence agriculture was the only means of existence for the vast majority of the population as employment opportunities in the modern sector were extremely limited.

The sphere of education had also been affected on a similar scale. Schools had been destroyed, the number of pupils had greatly declined and there were less than sufficient teachers, with any sort of qualification, to teach in the schools that remained open (Mills and Garvey-Williams, 1978, p.15). Public services and especially health facilities were at a minimum.

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1. Until 1973 there were only 3 provinces : Bahr el Ghazal, Upper Nile and Equatoria. These were then sub-divided into Bahr el Ghazal and Lakes; Upper Nile and Jonglei; Eastern and Western Equatoria.

Infrastructure, particularly in the form of transport and communications, had been almost totally destroyed. Many roads were impassable, even in the dry season, and in the wet season the transport problem was made worse by the fact that many bridges and culverts were no longer operational. River transport had also been affected, the channels through the Sudd having become blocked and choked with vegetation after years of non-use and neglect.

Even by African standards the Southern Region is sparsely populated and densities in the South are lower than those found in much of the rest of Sudan, being on average less than 5 persons per square kilometre (Mills and Garvey Williams, 1978, p.29). Further, the area contains only a few urban centres (see Figures 2.1 and 2.4). The population of the Southern Region is composed of a large number of different tribal and ethnic groups, a situation that has resulted in considerable political rivalry, but in 1972 the foremost demographic problem was probably concerned with population distribution. The civil disturbances had had a profound effect; large numbers of people had fled to the bush, sought refuge in the towns or had left the country altogether. The repatriation and resettlement of these people was, in 1972, a problem that urgently needed to be solved.

The problems of the Region in 1972 were many and although some of them have been resolved and there have been significant developments in a few spheres, many of the same problems still hinder further progress. The refugees have been resettled, although in 1979 the problem in many ways repeated itself with an influx from Uganda. The economy of the Region has advanced a little but remains very dependent on assistance from the North and on external aid; the latter, unfortunately, seems merely to maintain the status quo rather than furthering the development of the Region.

Subsistence activities are still the norm amongst a majority of the population although cash crop farming on a limited scale does take place. Non-agricultural employment opportunities have improved, especially in the

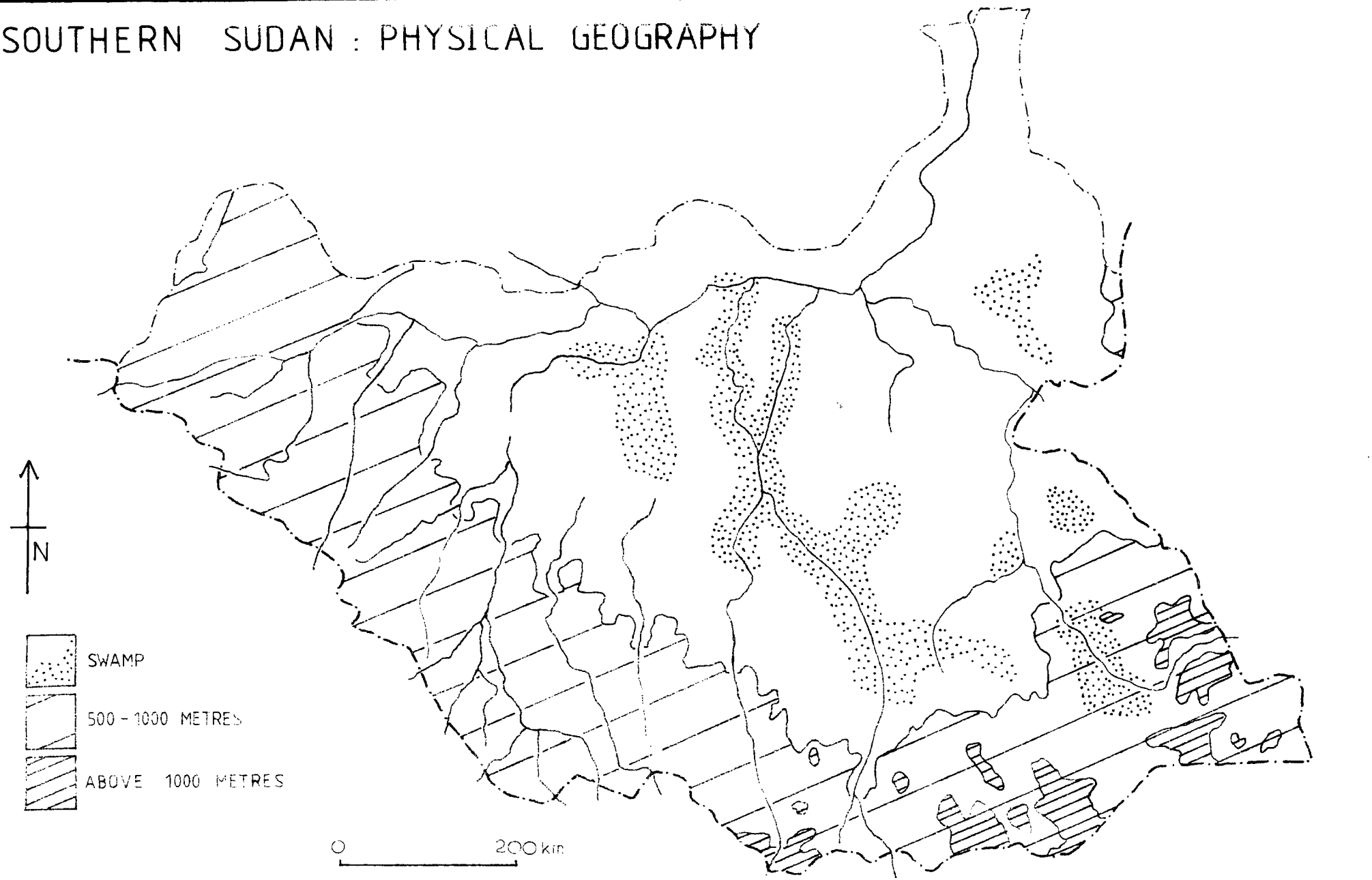

SOUTHERN SUDAN : PHYSICAL GEOGRAPHY
N
SWAMP
500 - 1000 METRES
ABOVE 1000 METRES
0
200 km

FIG. 2.2

Animal husbandry is predominant in the flood zone where seasonal nomadism, in search of pasture for cattle, is a long established practice. In the areas of better soils, crop production, often under a system of shifting cultivation, is more widely found. The principal crops grown are durra (sorghum), maize, sesame, groundnuts and cassava. There is little surplus production and with local market prices two or three times greater than current export prices there appears to be little scope, at present, for development beyond the internal market.

There is no lack of cultivable land or room for expansion but the market factors mentioned above, together with the limited methods of hand cultivation, dependent on family labour and primitive tools, hinder progress. In a survey in Yei River district, one of the more prosperous agricultural areas in the South, farmers named labour supply and capital accumulation amongst their more serious problems (Duku, 1980). In addition, there is the "sufficient requirement" mentality, common in subsistence economies, in which there is little incentive or apparent reason to produce more than for immediate needs. The development of a cash economy in a traditional society is always slow in coming but in Southern Sudan it is even slower than normal, as a result of the above factors combined with the unsatisfactory transport and market facilities.

Very little geological surveying has been undertaken in the Southern Region and thus information on mineral resources is scanty. Preliminary results, however, indicate that mineral resources are not likely to be so plentiful and viable as to allow their use as a foundation for development. The one possibility is that of oil, which has been discovered in the Bentiu area in the north-west of the Region, but the financial value of this resource has yet to be assessed.

Industrially, the Southern Region is also very limited. Apart from traditional handicrafts there are only a few industries established

TABLE 2.1 : ECONOMICALLY ACTIVE POPULATION BY ECONOMIC SECTOR 1955/56 AND 1973

SECTOR	1955/56 %	1973 No.	1973 %
AGRICULTURE, HUNTING, FORESTRY, FISHING	93.8	625,400	73.3
MINING, QUARRYING		-	-
MANUFACTURING	1.3	7,700	0.9
ELECTRICITY, GAS, WATER		1,700	0.2
TRADE, HOTELS, ETC	4.0	15,300	1.8
TRANSPORT		5,100	0.6
FINANCE, REAL ESTATE		-	-
SERVICES		84,300	9.9
CONSTRUCTION	INCLUDED IN MANUFACT-URING	9,400	1.1
NOT ADEQUATELY DEFINED	0.9	103,900	12.2
TOTAL	100	852,800	100

SOURCE : MILLS L.R., POPULATION AND MANPOWER IN THE SOUTHERN SUDAN, AND AFRICA YEAR BOOK.

and occupying an area more extensive than that of any other tribe in the Region. Their language is second only to Arabic in terms of the numbers who speak it, although there are great dialectical differences within the Dinka tongue. Cattle for all Nilotics are very important, their whole life style being geared to provide the best for their animals. A further characteristic of the Nilotic peoples is their conservatism and resistance to change, one that has separated them from many of the other tribes in the Region (Deng, 1973, pp 85-100).

The Nilo-Hamites or Para-Nilotics, a second group, are also cattle keepers. The major sub-groups in the Southern Sudan are the Murle, Didinga, Kakwa, Boya and Latuka tribes. General characteristics here are a lack of strong tribal organisation and settlement by dispersed hamlets. In the extreme south-west of the Region are found the Sudanic tribes, comprising the Zande, Moru-Madi and Bonga-Baka peoples. The main group, the Zande, are themselves a collection of smaller sub-groups.

Although the various tribes of the Southern Region were to some extent united in the struggles against the North in the 1960's, there are important differences between them and tribalism is still a force to be reckoned with in the interal politics of the South. Thus, some of the qualitative aspects of the population may play important roles in determining the future of the area.

Population statistics for the Region are far from complete but it is possible to make some generalisations concerning the quantitative aspects. The Southern Region is characterised by low overall population numbers and a sparse distribution. The 1955/56 census recorded a population of 2.78 millions for the southern provinces. Growth rates were estimated to be in the order of 3 per cent per annum and thus the expected population for 1972 should have been close to 4 millions, but the estimate of population in the 1973 census was only 2.96 millions (Mills, 1977,pp.8-9).

and overall life expectancy remaining low, growth rates in, and the total population of the Region continue to be small.

With a population of not more than 4 millions spread over an area of more than 650,000 square kilometres, population densities are low. Average population densities are shown in Figure 2.3. In 1973 rural densities reached a peak in Gogrial district with over 20 persons per square kilometre, but fell to less than 2 persons per unit in the west. A Regional average was in the order of 5 persons per square milometre (Garvey-Williams and Mills 1976, p.15).

There are very few large towns and nucleated settlements in the Region. Juba, the provincial capital, numbers perhaps 100,000, whilst the other provincial capitals Bor, Wau, Malakal, Rumbek and Yambio are smaller still. In the 1973 census only 5 per cent of the population was recorded as living in settlements of more than 20,000 and thus earning a classification as urban. Even if the inhabitants of semi-urban settlements are considered, where semi-urban means more than 4,000 persons, only 10 per cent of the population of the Region are not rural inhabitants (Mills, 1977, p.11). The distribution of the population resident in urban and semi-urban settlements is shown in Table 2.3 and Figure 2.4.

The population of the Southern Region also exhibits a further characteristic that is common in developing countries: that of an unbalanced demographic structure, in which there are also regional variations. In 1973 some 49 per cent of the population were below the age of 15 years, although only 40 per cent of the population of Equatoria Province fell into this category. This province on the other hand, had the highest proportion of people over the age of 50 years (Regional Ministry of Finance, 1977, p.21). The overall sex ratio of 103 males to every 100 females appears to be reasonably balanced but this average figure conceals large

TABLE 2.3 : URBAN AND SEMI-URBAN POPULATIONS IN THE SOUTHERN REGION (1973)

PROVINCE/TOWN	POPULATION	% PROV. POP.
BAHR EL GHAZAL		
WAU	53,402	
RUMBEK	18,101	
AWEIL	17,835	
YIROL	13,329	
RAGA	8,874	
TONJ	8,470	
	120,011	9.0
EQUATORIA		
TORIT	14,745	
JUBA	56,723	
NZARA	17,230	
YEI	11,696	
MARIDI	9,618	
TAMBURA	8,719	
YAMBIO	7,024	
KAPOETA	5,325	
SOURCE YOBU	4,222	
	135,302	18.7
UPPER NILE		
MALAKAL	37,147	4.8
SOUTHERN REGION	292,460	9.8

SOURCE : MILLS, L.R. POPULATION AND MANPOWER IN THE SOUTHERN REGION, p.12.

regional variations. The figures in fact ranged from 123/100 in Wau to 83/100 in Raga. The most crucial imbalance in the sex ratio came in the 15 to 50 year cohort where, in all provinces, females outnumbered males (Figure 2.5 and Table 2.4).

The levels of formal education in the Region, in terms of enrolment, are very low. It has been estimated that less than 10 per cent of the total active population have attended any form of schooling. The Equatoria provinces in 1973 are recorded as having 26 per cent of their population having received some form of schooling. This figure can be compared to that of 3 per cent for Bahr el Ghazal (Regional Ministry of Finance, 1977, p.22). The most recent figures for education indicate that about 170,000 people are currently enrolled at schools in the Region: of these, about 140,000 are primary school pupils, 23,400 are at junior secondary school with the remaining 6,600 at senior secondary school. There are however, large spatial disparities. Eastern Equatoria has by far the largest number of pupils, some 42 per cent of the total, while Jonglei and Lakes provinces have less than 10 per cent each (Kirkham, 1980). There are, unfortunately, no more recent statistics on the total population that has received education.

Finally, in this brief look at the characteristics of the population of Southern Sudan, it is necessary to consider mobility. In common with the population of the rest of Sudan, that of the Southern Region exhibits a characteristic of general mobility. In 1955/56 the census showed that more than 70 per cent of the population had moved away from their place of birth. The census further indicated that there had been a net loss of about 9,000 persons to the northern provinces. By 1973 the migration pattern had changed considerably, involving far more people and a reversal in direction. The Region had experienced a net migratory gain of almost 30,000 persons, although there had been slightly increased levels of

TABLE 2.4 : POPULATION BY LOCAL COUNCILS AND SEX RATIOS (1973)

LOCAL COUNCIL	TOTAL POPULATION	URBAN SEX RATIO	RURAL SEX RATIO
JUBA TOWN	59,559	119.3	-
JUBA RURAL	112,842	-	91.7
TORIT	111,064	110.3	93.1
KAPOETA	105,765	116.9	91.2
YEI RURAL	116,529	106.9	95.0
TANBURA	65,659	87.5	94.2
MARIDI	89,210	104.1	89.1
YAMBIO	95,122	101,7	93.9
RAGA RURAL	27,027	83.7	89.9
AWEIL RURAL	418,966	112.6	100.9
GOGRIAL	237,228	-	96.5
WAU	135,511	123.4	104.1
RUMBEK	274,851	118.5	117.5
YIROL RURAL	126,876	93.3	110.4
THEIT (TONJ)	176,454	120.1	102.1
MALAKAL	39,003	115.9	125.2
SHILLUK	92,745	-	102.3
RENK RURAL	92,816	-	115.6
SOBAT	26,497	-	89.2
BENTIU	174,621	-	110.3
EL NASIR	97,252	-	111.1
BOR	127,888	-	101.6
PIBOR	31,066	-	123.8
AKOBO RURAL	42,600	-	99.5
ZARAF	98,272	-	117.5
SOUTHERN REGION	2,975,423	111.9	102.4

SOURCE : DEMOCRATIC REPUBLIC OF THE SUDAN SOUTHERN REGION, THE SIX YEAR PLAN OF ECONOMIC AND SOCIAL DEVELOPMENT 1977/78-1982/83, JUBA, p.21.

TABLE 2.5 : URBAN GROWTH IN JUBA, MALAKAL AND WAU

TOWN	POPULATION			AVERAGE ANNUAL GROWTH RATE		ESTIMATED ANNUAL NET MIGRATION RATE	
	1955/56	1964/66	1973	1955/56 — 1964/66	1964/66 — 1973	1955/56 — 1964/66	1964/66 — 1973
JUBA	10,660	19,763	56,737	7.1	12.4	4.7	10.0
MALAKAL	9,620	17,947	37,780	7.1	8.3	4.7	5.9
WAU	8,009	14,848	54,169	7.1	15.0	4.7	12.6

SOURCE : OSMAN EL HASSAN M. NUR, URBAN GROWTH AND URBANWARD MIGRATION IN THE SUDAN. FIRST NATIONAL POPULATION CONFERENCE (KHARTOUM) 1974.

PART TWO

METHODOLOGY

CHAPTER THREE

RESEARCH METHODOLOGY

"Generally speaking, the data constraints were so severe as to limit the sophistication of the methodology..... the methodology employed was most often the simplest possible." (ILO, 1979, p.10)

The field work for this study was conducted over a two year period from August 1978 to July 1980. It is from the data collected during that period that the principal results and findings of this work have been extracted. The primary data sources have been augmented with information gathered from secondary literature, which has been used to provide a background to the study and to enable comparisons to be made between the situation in Juba and ones elsewhere in north and east Africa.

3.1 The Design of the Field Work

Little research of any description has been undertaken in this area of Sudan. Official records and statistics are scarce, not over reliable and often only exist for the most recent years. This paucity of information necessitated the development of a lengthy strategy for data collection. The various stages of this strategy are presented here in sufficient detail to afford an appreciation of the work that was necessary, even before data collection could begin. Investigation by means of a questionnaire based sample survey was decided upon, as a result of temporal and financial pressures,and because of the accepted advantages of such a method of enquiry. Prior to the collection of data on the migratory movement to Juba, the execution of a sample survey required an estimate of the size of the population of the town because even this basic information did not exist.

Estimating the Population of Juba

Whilst no reliable official statistics were available on this subject,

as follows:

Tukls	:	3.58 persons
Square buildings	:	5.29 persons
Average		4.45 persons

Using the figures provided by the dwelling count and the estimation of occupancy rates, a figure of 81,171 emerged as a provisional total for the population of Juba. However, this estimated total related to building numbers for January 1977 and therefore required updating. Building figures since that time were obtained from the Juba Town Council and the Eastern Equatoria Lands Office, and added to the photographed totals. A revised estimate of 85,000 was then produced for 1979. Even so, this figure may still have been an underestimation of the true population of the town, because it is believed that a certain amount of technically illegal construction (i.e. not officially registered) had taken place. In 1980 a second estimate of the population of Juba was undertaken and employed slightly different methods. The results, which are shown in Appendix B, illustrate the amount of building that had occurred since 1977.

Allocation of the Sample

Using the information from the dwelling count and the estimation of occupancy rates a density map for the urban area of Juba was constructed, and is reproduced in Figure 3.1. Wide differences in population densities were noted and six broad density strata were identified. The division of the estimated population between the strata appeared as follows:

Stratum	1	:	21 per cent
"	2	:	15 "
"	3	:	14 "
"	4	:	13 "
"	5	:	10 "
"	6	:	27 "

It was observed that several factors, and in particular building structure and the type of services provided, tended to be similar within each stratum and to be dissimilar between the strata. On the basis of the information on population density it was decided to employ a stratified random sample with proportionate allocation of the sample by stratum, to determine the buildings to be selected and interviewed.

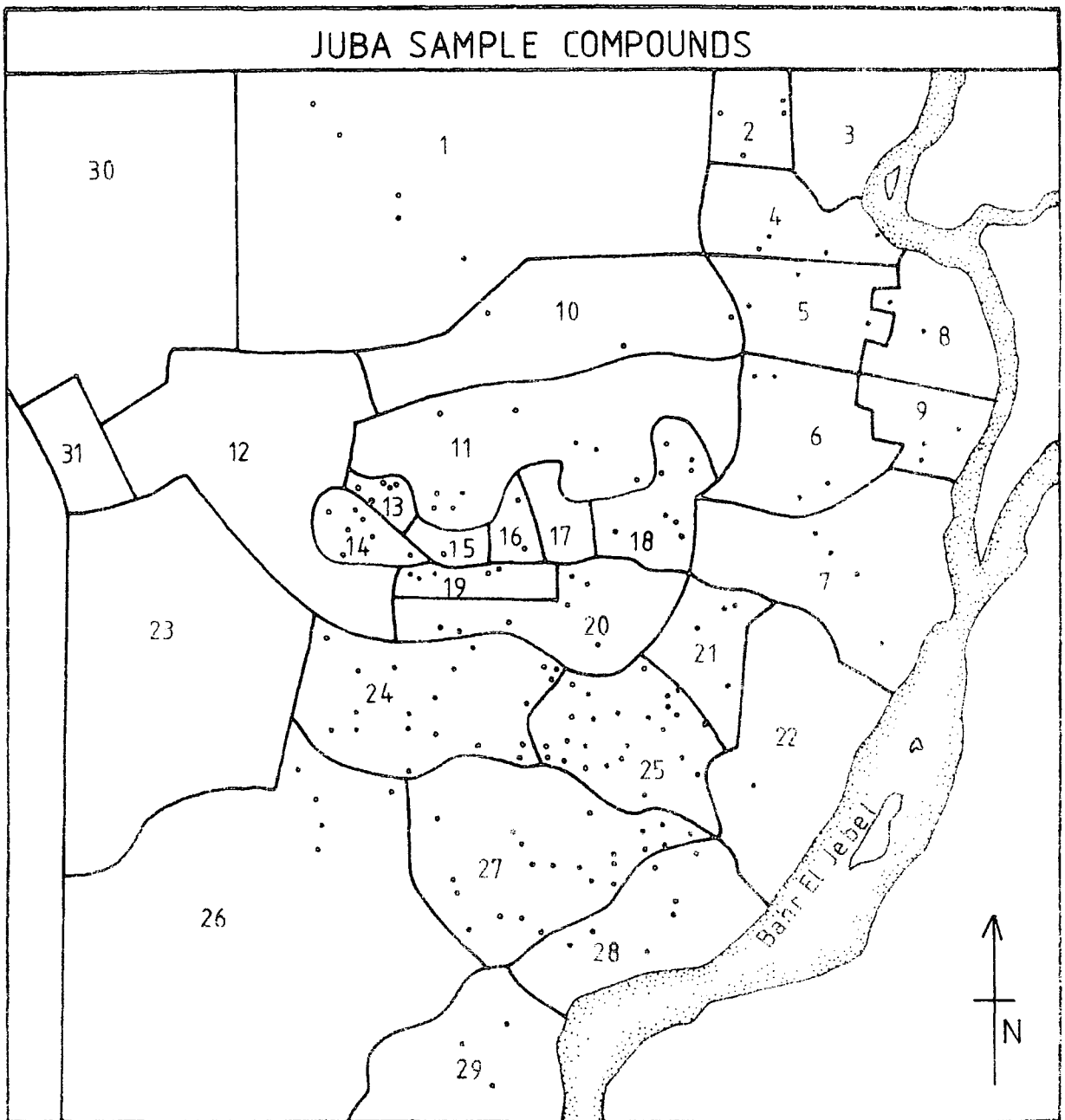
The compound was chosen as the unit for questioning, in preference to individual buildings because it represented more completely the full household or extended family. In addition, the compound was a more readily identifiable unit on the ground, normally being surrounded by a fence or standing on a recognisable piece of ground, separate from its neighbours. An earlier survey in 1977 had suggested an average of eight residents per compound and this would imply an approximate total of 10,000 compounds within the town. A figure of 200 compounds was then selected to provide a 2 per cent sample and these were allocated to the strata in proportion to the percentage of population found within each.

The following method was employed to enact the distribution of the sample. The sample for a given stratum was determined by the formula:

$$nh = {}^{Nh}/_{N} \quad .200 \quad ,$$

where N is the estimated total number of compounds in Juba; where Nh and nh respectively, are the total number of compounds in, and the required number of sample compounds to be selected from the h^{th} stratum In this way the six strata were allocated the following number of compounds respectively 42, 31, 28, 26, 19, 54.

The next stage was the allocation of the sample grid squares within each stratum. This was done independently for each, with the squares being numbered serially in a serpentine fashion, from 1 to Nh, the stratum size, and then chosen on a systematically random basis. A sampling fraction for each stratum was determined by dividing the total number of grid squares



1. Airport
2. Beteri
3. Nyaying
4. Ghabat
5. Hay Jallaba
6. Officials Qtrs
7. MTC/CMS
8. Juba Town
9. Juba Town
10. Ministers
11. Officials Qtrs
12. University
13. Zindiya
14. Bulluk
15. Bulluk
16. Game Reserve
17. Commercial
18. Temergia
19. Thowra
20. Nimra Talata
21. Hay Malakal
22. Girls' Senior
23. Hila Saha
24. Atlabara
25. Malakiya
26. Military Area
27. Kator
28. Kasaba
29. Logogo
30. Nimra Wahid
31. Munuki

FIG. 3.2

extracted, a topic that is discussed, together with the other problems encountered in the field work, later in this section.

The information extracted from the questionnaires has been presented in Chapters Six, Seven and Eight in an essentially non-mathematical manner with only a few elementary statistical tests employed by way of analysis. The adoption of this approach is felt to be a realistic reflection of the quality of the data available.

3.3 Additional Sources of Field Information

The bulk of the data presented in this study was obtained from the sample survey outlined above, but other sources were also used by way of supplementation. Note has already been made of the complementary sample surveys that were conducted to complete and update figures gained in the initial programme. These were implemented with the help of Juba University students, as part of a practical assignment in a course of social survey techniques. Information on daily migration into Juba Town was collected over a period of time through observation at the strategic access points to the urban area.

Data on the historical background and development of Juba was gathered from a variety of sources. Informal interviews were held, and information of a more official nature, such as was available, was found in records held in the Juba Town archives, at the Eastern Equatoria Provincial Headquarters, the Regional Ministry of Information and Culture, Juba Town and Rural Councils, and in the Departments of Housing and Health.

3.4 Secondary Sources

The results of the field work have been supplemented by drawing on secondary sources of literature, both in Sudan and England. These provided background information and facilitated comparisons between the situation

notably in the form of climatic conditions. As much of the field work was carried out on foot, the high temperatures proved exhausting, particularly in the dry season when levels are frequently over 100 degrees Fahrenheit for much of the day. This imposed a severe limit on the amount of interviewing that could be carried out on any given day. Conversely, in the rainy season, tropical storms and the subsequent transformation of the ground surface into mud frequently hindered attempts at conducting field work.

Data Problems

Turning now from a consideration of the general limitations to the more specific ones concerned with the field work itself, the first problem encountered was the almost total lack of base data. Local records and statistics are maintained but in most cases they are incomplete and cover only the last few years. As illustrated earlier, this problem necessitated the initial determination of a lengthy strategy and subsequently a most laboured methodology in order to obtain even the most basic information that was required.

The questionnaire used to collect information on a sample population of Juba was designed to reduce ambiguities as much as possible. Despite this and the overall simplicity of the questionnaire, problems were encountered when working with it in the field. One major obstacle, for example, lay in the difficulties of translation of the question from English into local dialects or the lingua franca 'Juba Arabic'. Rarely, if ever, was English used to conduct an interview. Thus in this problem of language much depended on enumerator efficiency. Financial constraints permitted the employment of only a small group of secondary school leavers to help in interviewing and data collection. Although the standards of the enumerators improved as the sample survey progressed,

individuals and representatives from various government bodies and foreign agencies was undertaken. Whilst some valuable information emerged from these interviews, they proved to be an extremely time consuming means of data collection.

Most of the limits and constraints considered above are an accepted part of life and working conditions in Juba as in many developing areas and, as such, apply to activities on a much wider front. Finally, however, an additional qualification, rather than constraint, must be mentioned. This concerns the accuracy and reliability of the whole sample survey from its initial conception, through data collection to data processing and analysis. While mention has already been made of the problem of occurrence of errors in the field and in processing, it should also be remembered that in the construction of the sample some bias was inevitably introduced. Although this is not uncommon in similar fields of investigation, it warrants mention with reference to this study. In this case the bias has occurred, it is felt, because of the subjective interpretation of certain factors, such as building type classification, but this is not to say that it greatly affects the conclusions reached. Whilst issuing this final proviso, it is however, felt that the sample was as accurately and randomly constructed as possible in the prevailing conditions and in the time available. It is felt that the results are as reliable as could be obtained and that the findings and implications will be of use in future planning for the development of Juba Town and, in a wider context, the Southern Region. They unquestionably add to the currently incomplete knowledge of the responsible authorities in this area, who have for this reason welcomed this work and whose gratification is, in one sense, the greatest justification for it.

PART THREE

JUBA TOWN

CHAPTER FOUR

THE JUBA URBAN ENVIRONMENT

Juba Town is located between 4 and 5 degrees North of the equator on the White Nile, just over 200 kilometres north of the Ugandan border and some 1,200 kilometres south of the country's capital, Khartoum. The town is situated on the west bank of the river, on predominantly rocky ground which is raised slightly above the flood plain, at some 450 metres above sea level. It is the functional centre of the Region and also of Eastern Equatoria Province being both the seat of Regional Government and the Provincial Headquarters. As such, the town contains numerous government buildings in which are run an almost parallel set of ministries to those in Khartoum.

Juba was selected as the location for this study for a variety of reasons. As mentioned briefly in Chapter Two, the town seems to have experienced rapid growth in the past few years, a state of affairs which warrants investigation. It is thought that much of this growth has been the result of a pronounced urban-ward migration, initiated by a combination of various factors. Juba has only recently emerged from the disturbances of a civil war which had a profound influence on population distribution in the Region. Almost immediately after the ceasefire, the town became the capital of the Southern Region. In addition, a further demographic factor is in evidence. This comprises international migration which has resulted from Juba's proximity to international boundaries and the unsettled political atmosphere in some of the neighbouring countries.

If further justification were required in the selection of Juba for study there is the fact that Juba is the centre of an area for which very scant population data exist. Indeed, for the town itself, current demographic data are extremely limited.

provincial capital was at Mongalla and the district governed from Rejaf included the area of what is now Juba Town. In the early years of the twentieth century the land now occupied by and surrounding the town was dotted with small villages inhabited by the Bari tribe. The town is in fact named after one of these villages; the name Juba itself refers to a rock, so called after a person, which is located not far from the present centre of the town.

It was not until 1929 that the town of Juba was officially created. In that year the administrative functions of both the province and district were transferred from their original sites at Mongalla and Rejaf to Juba. From a physical point of view, Juba presented a far more suitable site. The area around Mongalla was swampy and frequently flooded, whilst the Juba site offered higher ground and ample building material. Initial surveying of the site commenced in 1927 and the first buildings to be constructed were government offices, administrators' living quarters and transport offices (Figure 4.1).

The early building undertaken by the colonial administration was on higher rocky ground, while the area to which native lodgings were confined was the low lying site of the present airport. This area, then known as Burusoki, was cleared in 1934 to make way for the construction of the airport and the native lodging area was transferred to the Malakia site, which now forms a central part of the fourth class residential area. From the outset the rate and location of new building was closely monitored by the administration with the area being laid out in blocks on a grid pattern.

Despite attempts to control in-migration to Juba, which included the physical removal of unemployed persons from the town at the beginning of the rainy season, some population growth, in excess of natural increase, did occur and by the end of the 1930's extension of the native lodging

area was necessary. The areas next occupied were the ones now known as Kosti, Nimra Talata, Malakal and Hilla Jallaba (Figure 4.1). In spite of these apparent increases, the population of the town even in 1940 was estimated to be only 1,625, compared with perhaps 1,000 in 1930 (Table 4.1). Early growth of the town was thus in no way startling or alarming and it appears that after an initial and minor boost to growth, following the transfer of administrative functions, Juba experienced a period of relative stagnation.

The first market in Juba was located on the site of what is now Juba Football Stadium. It seems to have consisted of a few stalls selling items such as cloth, oil, durra, salt and paraffin. Little, if any, fresh food appeared in the market as the Bari (the original inhabitants of the area) sold fruit and vegetables on a door-to-door basis. In the mid-1930's the market site was seriously damaged by flooding and was abandoned. It was re-established nearer the town centre, with stalls available for rent from the Town Council. The increases in population in the Malakia area later led to a second market being established there, although here the traders bought the plots on which to build their own stalls. The only significant industrial development of this period was the establishment of the Haggar Tobacco Company. This illustrates the aims of the policy enforced by the British, in which Greek and Cypriot entrepreneurs were encouraged and Northern Sudanese largely excluded.

The provision of educational facilities in the town was not quick in coming and only four schools were opened before 1956. The first school in Juba, the Nugent School, had been established prior to the transfer of administrative functions to the town. Originally located at Mongalla, this school was moved to Juba in 1919/20 after the predominantly Muslim community refused to send their children to a Christian establishment. In 1929 the school was again transferred, this time to Loka, and was

replaced in Juba by the Juba Training Centre which aimed at producing clerks, book-keepers and junior officials from Loka school leavers. This aim was a further reflection of British policy, whereby Southern Sudanese were permitted to hold only very junior and minor posts in the administration. Three other schools, all of primary level, were also built in the 1930's, two of which were church run and the third being of Moslem and Arabic orientation.

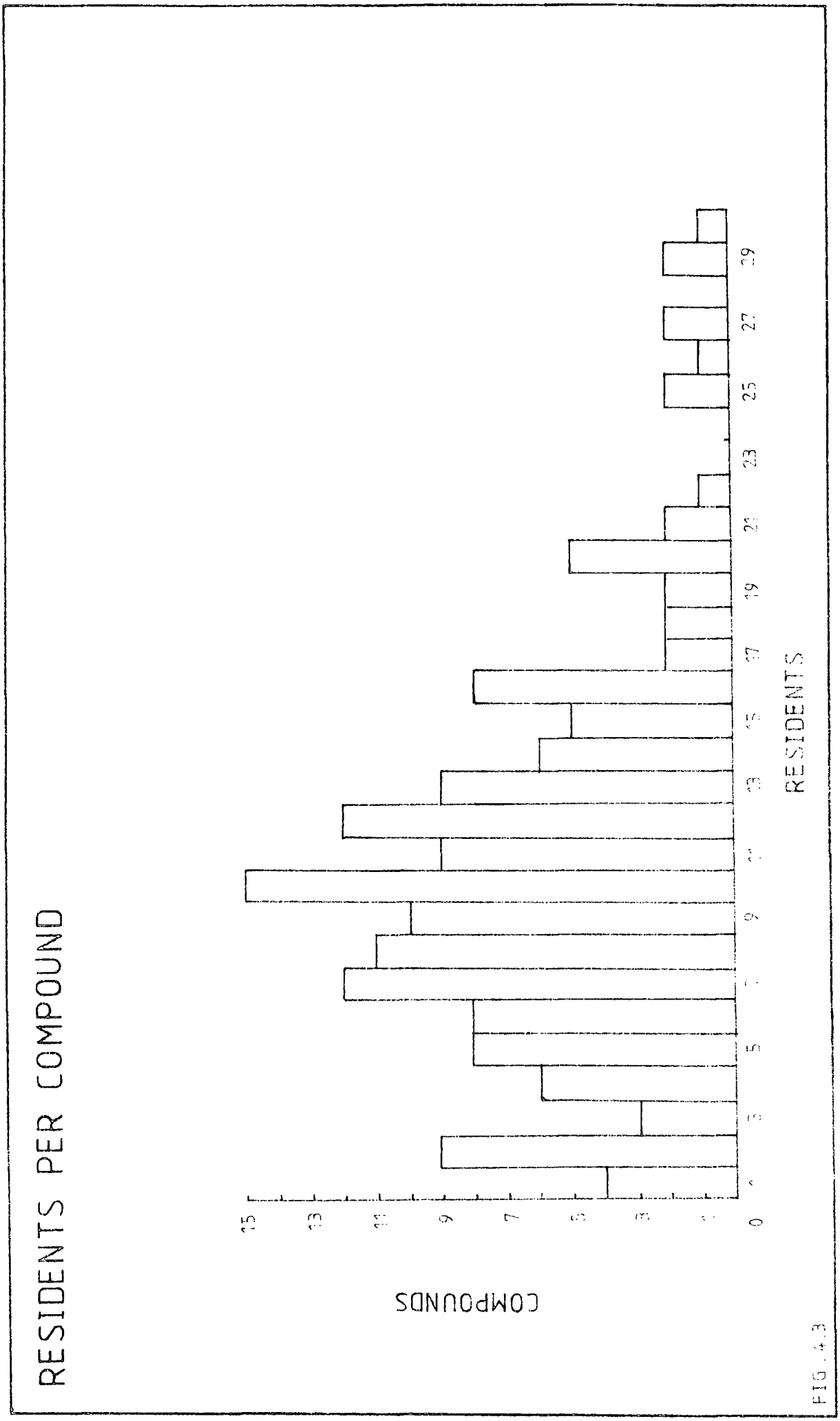
The small amount of construction that took place in the town in the 1930's and 1940's indicates that after a minor and initial boom the growth of Juba was carefully controlled and that little further development was allowed. Substantial changes and additional growth next occurred in the mid- to late 1940's, influenced by two factors. In 1946 British policy concerning the South was completely reversed and a programme of integration and Arabicisation pursued and encouraged. This meant that Northern Sudanese, mainly traders, were free to migrate to Juba. Secondly, in 1947 Juba was the venue for a Round Table Conference, a meeting at which Northern and Southern representatives met and aired their views concerning the future of the South and its relationship with the North of the country (Wai, 1973, pp.16-17 and Appendix II). These two items seem to have initiated a period of growth in the town for by the time of the first census in 1955/56 the population of Juba had increased to 10,660, quite a substantial increase from the estimate of 1,625 in 1940. Interim estimates of the town's population of 4,135 in 1945 and 8,165 in 1949 illustrate the extent of the minor boom discussed above. In Figure 4.2 the early growth of the town is portrayed together with the more recent population expansion.

Surprisingly, the coming of independence seems to have heralded another period of little or no growth. It is thought that this was because of the unsettled nature of relations between southern and northern parts of the country and the beginning of the civil disturbances. In contrast to this,

however, the Aboud regime from 1959 to 1964 brought considerable physical expansion to the town. Numerous schools and other administrative buildings were constructed, together with barracks for the Armed Forces. The abandonment of earlier attempts to control in-migration to the town seems to have resulted in marked population increases as evidenced by the need to expand the native lodging areas. The areas known as Atlabara and Kator were opened in this period.

The end of the Aboud regime brought dramatic, if short lived, changes to Juba. By 1964, the population of the town was estimated to be in the region of 19,000 yet by mid-1965 this figure may have fallen as low as 5,000. The burning of Juba in July 1965 marked the height of the civil war in its effects on Juba. Vast numbers of people fled from the town and also from other urban centres in the Region, either to the bush or to neighbouring countries. Only with the granting of an amnesty in 1967 and again in 1969 and with the signing of the peace agreement in 1972, did people return to the towns.

In the case of Juba, the return of those who fled marked the beginnings of a period of heavy in-migration, a period which, as of 1980, shows no sign of ending. This period has witnessed great physical expansion within the town, the construction of government buildings and the opening of new housing areas, together with very significant increases in the population. By 1973 the population of Juba was estimated to be almost 57,000 while the most recent data indicate that as many as 100,000 people may now be resident. Juba is now a sprawling settlement and can be considered urban at least in the sense of numbers and physical size. There are, however, many qualities and characteristics of Juba that are not urban and, similarly, the town lacks many of the attributes that would normally be associated with an urban settlement, even in an African context. The town currently extends over a roughly circular area of approximately 16 square kilometres but one which is


RESIDENTS PER COMPOUND
COMPOUNDS
RESIDENTS
0
1
3
5
7
9
11
13
15
17
19
21
23
25
27
29
FIG. 4.3

essential services to keep pace with this expansion. The supply of electricity and water is both spatially limited and functionally erratic. These two facilities are provided through systems that were designed to cater for a population less than one quarter of the present total. Only 14 per cent of the compounds visited were connected to the mains electricity supply with the other 86 per cent totally reliant on other means of power for lighting and cooking. Nor is the electricity supply evenly distributed through the town and the buildings that were receiving electricity were mostly located in first and second class areas or near the town centre. Nearly 75 per cent of the compounds receiving electricity paid less than £S 10 per month for the provision of this facility, a relatively low price given that occupants of buildings in first and second class areas are likely to be in the higher paid ranks of employment (Table 4.2). It is reported that a new mains electricity network is to be introduced to supply the whole town but work on this project has yet to commence.

Water distribution is similarly limited and selective, meaning that a large majority of the population have to obtain water from sources outside their homes, and further illustrating the difficulties that a majority of Juba residents face. It is ironic in a way, to talk of water shortages in Juba when the town is sited on the banks of the Nile, yet they do exist and particularly in the dry season months. While 15 per cent of the sample compounds received piped water from the mains supply, five out of every six compounds obtained their water through a variety of other means. (Table 4.3). The principal method appears to have been public taps or stand pipes which are connected to the mains supply and located at various points within the urban area (44%). Occupants of other compounds collected water direct from the river or had it delivered by man or donkey. The costs of obtaining water are shown in Table 4.4, in which the most obvious statistic is that 73 per cent of compounds were recorded as paying less than £S 15 per month for water. However, only one compound in six apparently

TABLE 4.4 : JUBA SAMPLE POPULATION : WATER CONSUMPTION AND EXPENDITURE

(A) MONTHLY EXPENDITURE PER COMPOUND

MONTHLY EXPENDITURE (£S)	NO. OF COMPOUNDS	%
0 - 4.99	115	72.8
5 - 9.99	18	11.4
10 - 14.99	9	5.7
15 - 19.99	6	3.8
20 - 24.99	2	1.3
25 - 29.99	1	0.6
30 AND OVER	7	4.4
TOTAL	158	100

(B) MONTHLY CONSUMPTION PER COMPOUND

MONTHLY CONSUMPTION (GALLONS)	NO. OF COMPOUNDS	%
0 - 499	42	28.2
500 - 999	56	37.6
1,000 - 1,499	28	18.8
1,500 - 1,999	6	4.0
2,000 - 2,499	7	4.7
2,500 - 2,999	7	4.7
3,000 AND ABOVE	3	2.0
NO REPLY	9	-
TOTAL	158	100

Standards of public health are not aided by dietary types and levels of nutritional intake. It would be wrong to say that there is insufficient food in Juba, but it is true to state that food shortages do exist. This is primarily the result of the problems of supply and distribution of basic foodstuffs and the ensuing high costs. The diet of the majority of people is very limited and heavily dependent on staples such as durra, maize and cassava. Adequate foodstuffs to improve the standard diet to a balanced level do exist, but these higher quality foods are mostly too expensive for the majority of people. The prices of foodstuffs in Juba represent a realistic estimate of the cost of living, and between 1978 and 1980 the average annual cost of food rose by 20 to 25 per cent, a far greater increase than occurred in wage levels.

Any prices or price rises however are only relative to contemporary wage levels and it is perhaps in this respect that conditions in Juba are better illustrated. Unfortunately data on this subject are less available than information on the physical and infrastructural conditions prevalent in the town, and to some extent less reliable. The survey indicated that a majority (66 per cent) of those employed earned less than £S 50 per month and that the most common wage levels were between £S 30 and £S 40 per month (Figure 4.4). This is in return for a situation in which over 80 per cent of the employed labour force work more than 40 hours per week. The low levels of income, despite a supposed minimum wage of £S 28 per month emphasize the extreme difficulties that many households face in maintaining a bare existence. At the other end of the scale it was interesting to note that 3 per cent of males earned more than £S 200 per month, which is regarded as 'super scale' in terms of government salaries.

The final comments in this section are concerned with the economic base of Juba. The remarks are brief and at times vague as no official data

are available on this subject and they rely heavily on the small amount of information drawn from the sample survey and on impressions gained over two years of personal observation.

Without doubt the economic base of Juba is very small. An indication of this is suggested by the number of persons, and males in particular, that are thought to be employed, in comparison with the total population. The sample indicated that 69 per cent of males were over the age of 15 years and that some 54 per cent of these were employed (93% were employees). Thus almost half of the potential male manpower resident in Juba may be unemployed, thereby indicating the lack of income earning opportunities. This figure is considerably higher than that calculated in 1973 (Mills, 1977, p.62).

The economic base of the town, apart from being small, is also extremely narrow. The employed persons enumerated in the sample were asked to name the type of enterprise at which they were working (Table 4.5). The most noticeable fact in these figures is the vast proportion of the labour force that was employed by a government body, the public sector, whilst private business accounted for less than 15 per cent. The lack of manufacturing industry in the Region is mirrored in Juba Town.

Public sector activities cover a fairly wide range of employment types, a reflection of the degree of nationalisation that exists in the country. A large proportion of government employees are employed directly by the Regional Government, working in various ministries and departments, and forming the civil service. But the Government also controls, for example, a number of trading companies and workshops, as well as financing a relatively large amount of construction work. All persons employed in these types of activities are included in the total for the public sector employment.

The results provided in Table 4.5 omit, however, a large number of employees and self-employed persons who are engaged in what can be considered as informal sector activities, including occupations such as tailoring, blacksmithing, market sales and minor retailers. An extensive study of this subject was undertaken during 1979 and 1980, and preliminary results would seem to indicate that informal sector employment could account for as much as 25 per cent of total employment (Jenkins, 1981). If such a figure is correct, it widens the employment base of the town, but at the same time it stresses the very small scale of most activities and the total lack of even light industrial employment opportunities.

Juba Town was created as an administrative centre to serve the colonial government, and thus its origins were essentially non-economic. Fifty years later Juba effectively serves the same purpose and functions almost entirely as an administrative unit, with little or no economic base visible to justify its recent growth.

PART FOUR

POPULATION AND MIGRATION

CHAPTER FIVE

SOME CHARACTERISTICS OF THE POPULATION OF JUBA

This and the following three chapters are concerned with population and migration. The first of these considers some characteristics of the population of Juba.

5.1 Sex, Age and Marital Status

Of the persons interviewed, 1,004 (59%) were males and 702 (41%) females, thus demonstrating a heavy male bias in the population of Juba, with a sex ratio of 143/100. This figure is much higher than the average recorded in the Region in the 1973 census where males exceeded females at the much smaller ratio of 103/100. It is, in fact, higher than any value recorded for the Region in that census when the maximum found was 123/100 in Wau (Regional Ministry of Finance, 1977, p.19). The existence of this heavy male bias could suggest the presence of a large in-migrant population if support is given to the idea that migration is selective and favours the male sex.

On the presumption that a sizeable in-migrant population could be present, an examination of the age characteristics of the sample population would also tend to support the evidence of past migration studies in which it has been widely stated that it is the younger members of the community, rather than the older ones, who exhibit a greater propensity to migrate. In Juba it is estimated that 64 per cent of the population is aged between 15 and 50 years, the age group in which the members can be regarded as economically active. Conversely however only 34 per cent of the population are thought to be under the age of 15 years, a value which is much lower than that given for the whole Region in 1973 when it was estimated that as much as 45 per cent of the population was contained in the 0 to 14 year age group (Regional Ministry

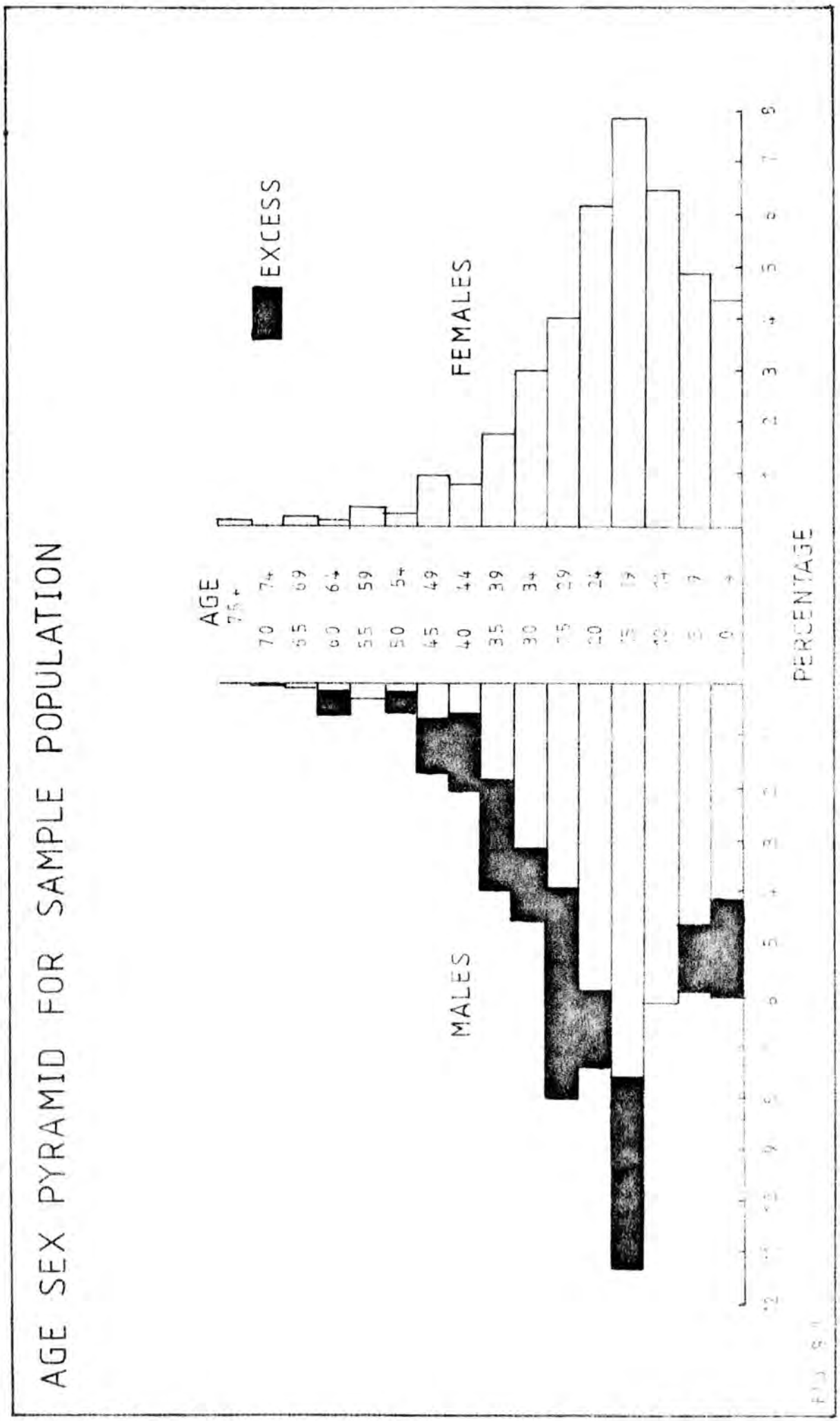

AGE SEX PYRAMID FOR SAMPLE POPULATION
EXCESS
FEMALES
MALES
AGE
75+
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
PERCENTAGE

TABLE 5.1 : JUBA SAMPLE POPULATION : PERCENTAGE DISTRIBUTION BY TRIBE

TRIBE	MALE	FEMALE	TOTAL	TRIBE	MALE	FEMALE	TOTAL
ABUKAYA	2.2	3.1	2.6	LUGBWARA	0.5	0.9	0.6
ACHOLI	5.5	5.1	5.3	LULUBO	0.1	0.1	0.1
BAKA	-	1.0	0.4	MADI	2.8	5.3	3.8
BALANDA	1.4	0.7	1.1	MAKARAKA	0.1	0.4	0.2
BARI	13.3	16.5	14.6	MONDARI	0.4	0.9	0.6
DIDINGA	0.8	0.6	0.7	MORU	9.1	10.3	9.6
DINKA	14.6	5.8	11.0	MONDU	2.5	1.6	2.1
DONGOLAWI	0.3	0.4	0.4	NDOGO	1.1	1.1	1.1
FUR	0.4	0.9	0.6	NUBA	0.2	-	0.1
HAMURANI	0.8	0.3	0.6	NUER	1.9	1.3	1.6
KAKWA	6.2	7.4	6.7	NYANGWARA	0.6	1.9	1.1
KALIKO	0.5	1.0	0.7	POJULU	6.7	8.5	7.4
KARESH	0.5	0.4	0.5	SALAMI	0.2	0.6	0.4
KUKU	6.9	3.7	5.5	SHILLUK	1.1	1.1	1.1
LANGO	0.7	0.7	0.7	TOPOSA	0.8	1.0	0.9
LATUKO	4.0	4.6	4.2	YULU	1.0	1.0	1.0
LOKORONG	2.3	3.7	2.8	ZANDE	3.3	4.3	3.9
LOKOYA	2.2	2.4	2.3	OTHERS	4.9	1.6	3.5
				TOTAL	100	100	100
					1004	702	1706

the Region (Kirkham, 1980).

Nevertheless the sample estimate for Juba does seem high, too high perhaps for explanation solely in terms of the large number of schools in the town. It is possible that Juba's functional status as both Regional and Provincial capital, where administrative requirements demand educated manpower, may partly account for the apparently large proportion of at least semi-educated people within the town. The estimate may have also been inflated because of the timing of the survey in that much of the data collection took place in the dry season months which coincide with school holidays. Further, during 1979 a large number of schools in the Region were closed. It is possible, therefore, that school students from institutions outside Juba may have been resident in the town and became incorporated in the sample. There remains the possibility that false answers may have been supplied, given the prestige of an education.

Virtually no child attends schools before the age of six years and of those children aged between 6 and 10 years almost 50 per cent were not at school, while only a very small proportion of the other 50 per cent had passed beyond the level of Primary 3. The survey results indicated that over 75 per cent of the members of the 11 to 15 year group were attending school with a majority at levels between primary 3 and second year of junior secondary. It appeared that 5 per cent, principally females, had already terminated their education. The number of people in this category rose to over 25 per cent for the population in the 16 to 20 age group and the data also indicate that a majority did not achieve an educational level beyond third year junior secondary. A majority of those persons currently at school within this age group were at levels above primary school but not beyond the second year of secondary school.

schooling or studying was the reason for their not being employed (Table 5.3). An important reason in explaining real unemployment in females was the claim that many were prevented from seeking employment because of their role as a housewife or because their husbands prohibited them from taking a job.

Females who, according to the survey, were employed were fairly evenly divided between three groups of occupation type. These were professional, technical and related workers (32%), clerical and related workers (35%) and service workers (22%). The remaining 11 per cent could be grouped as production workers, being in fact beer brewers. As mentioned however, the survey results on female employment are probably not over reliable and perhaps the largest group could have been women engaged in informal sector activities that were not declared.

When the employment types of males were considered the importance of the public sector and tertiary forms of employment were emphasized. Males working in primary sector activities such as agriculture, forestry and animal husbandry amounted to less than five per cent of all employed males (Table 5.4). The level of employment in the secondary sector was higher than might have been expected given the narrow economic base of the town. Production and related workers, transport, equipment operators and labourers were the employment categories of almost 30 per cent of all employed males; half of them were in transport occupations and thus a more realistic rate of employment in the secondary sector in Juba was in the region of 15 to 20 per cent.

Although public sector and tertiary sector employment levels were high, only a small proportion of those persons employed in these sectors could be classified as professional or administrative. Administrative and managerial workers formed only four per cent of the active labour

TABLE 5.4 : JUBA POPULATION : PERCENTAGE DISTRIBUTION OF OCCUPATION TYPES AMONGST EMPLOYED PERSONS

OCCUPATION BY ISCO GROUP .	MALE	FEMALE	TOTAL
PROFESSIONAL, TECHNICAL AND RELATED WORKERS	9.7	21.7	12.2
ADMINISTRATIVE AND MANAGERIAL WORKERS	4.0	-	3.5
CLERICAL AND RELATED WORKERS	16.0	35.1	18.0
SALES WORKERS	6.0	-	5.1
SERVICE WORKERS	20.1	22.3	20.8
AGRICULTURAL, ANIMAL HUSBANDRY, FORESTRY, FISHING, HUNTING	4.3	-	3.7
PRODUCTION, TRANSPORT, EQUIPMENT OPERATORS, LABOURERS	28.5	11.0	26.6
ARMED FORCES	11.4	-	10.1
TOTAL	100	100	100
			388 No.

CHAPTER SIX

RECENT MIGRATION TO JUBA TOWN : THE MIGRATORY MOVEMENT

In-migration has been of unqestionable importance in the expansion and growth of Juba. In no way is it possible to account for the growth that has occurred in terms of natural increase alone. Indeed, official estimates indicate that the proportion of growth attributable to natural increase has been substantially less than that for in-migration. Between 1955/56, the date of the first census in Sudan, and 1964/66, when a household survey in the major towns of the country was undertaken, the population of Juba is recorded to have risen from 10,660 to 19,763, a rate of increase of 7.1 per cent per annum. Records from the Department of Statistics in Khartoum indicate that the in-migration rate was 4.7 per cent per annum thereby accounting for some 66 per cent of the total growth for that period. Similarly, between 1964/66 and 1973, the date of the second census, the population is estimated to have increased at a rate of 12.4 per cent per annum, to a total of 56,737. Natural increase is thought to have accounted for only 20 per cent of this growth, with the remainder apparently resulting from in-migration (Nur, 1974).

All available evidence would suggest that there has a sizeable in-migration to Juba in the past few years. The data that follows attempts to substantiate this belief and to provide some basic information on the nature of this migration. There is first a discussion of the migratory movement as a whole and this is followed by a separate analysis of daily migration.

Mention has already been made of the official estimates of the proportions of growth due to in-migration and natural increase. The former were large and the data gathered for this study would appear to

TABLE 6.1 : JUBA SAMPLE POPULATION : PERCENTAGE OF POPULATION BORN IN JUBA OR ELSEWHERE

	PLACE OF BIRTH	MALE	FEMALE	TOTAL
BELOW 12 YEARS	JUBA	78.7	71.1	75.3
	ELSEWHERE	21.3	28.9	24.7
		225 No.	180 No.	405 No.
	TOTAL	100.0	100.0	100.0
12 YEARS AND ABOVE	JUBA	16.9	23.0	19.4
	ELSEWHERE	83.1	77.0	80.6
		779 No	552 No	1301 No
	TOTAL	100.0	100.0	100.0
TOTAL POPUL-ATION	JUBA	30.8	35.3	32.6
	ELSEWHERE	69.2	64.7	67.4
		1004	702	1706
	TOTAL	100.0	100.0	100.0

reported that they had been born in urban localities such as Bor, Kapoeta, Wau, Torit and Yei. Although an equal proportion of males and females had originated in rural localities the migrant population from a number of urban localities exhibits a male bias. Males born in Bor, for example, constituted 6.6 per cent, compared to 1.6 per cent for females of their respective totals. Likewise, males born in Wau proportionately exceeded females from that town. The situation was reversed however, for the Eastern Equatoria towns of Torit and Yei where female migrants numbered proportionately more than males. This may be some indication of a situation where female propensity to migrate is increased if the distances involved are relatively short.

The analysis of place of birth by district seemed to highlight the position of the urban localities (Table 6.3). Some 70 per cent of migrants to Juba were born in districts containing a relatively large sized urban or semi-urban settlement although not all such districts conformed to this trend. Yambio, Rumbek and Malakal districts were the places of birth for relatively small numbers of migrants yet these three districts all contain a provincial capital. In an examination of place of birth by province (Table 6.4) the importance of Eastern Equatoria, particularly amongst females, is immediately obvious although this importance may have declined since 1973. In that year it was estimated that only 26 per cent of Juba's population had been born outside Eastern Equatoria but the present study indicates that this proportion could have risen to 33 per cent, suggesting that there has been a slight increase in inter-provincial migration. For people aged less than 12 years, this province accounted for 25 per cent of those born outside Juba. This dominance in the spatial origins of in-migrants continues in the older age groups and almost half of those persons not born in Juba were from elsewhere in Eastern Equatoria. Western Equatoria and Jonglei provinces

TABLE 6.4 : JUBA SAMPLE POPULATION : PLACE OF BIRTH BY PROVINCE OF TOTAL POPULATION (PERCENTAGE DISTRIBUTION)

PROVINCE OF BIRTH	MALE	FEMALE	TOTAL
KHARTOUM	3.6	2.2	3.0
WHITE NILE	0.3	0.2	0.3
BLUE NILE	0.3	-	0.2
NORTHERN	0.3	0.2	0.3
KASSALA	0.1	-	0.1
RED SEA	-	0.2	0.1
KORDOFAN	0.9	0.9	0.9
NORTHERN DARFUR	-	0.2	0.1
SOUTHERN DARFUR	0.3	-	0.2
EASTERN EQUATORIA	46.6	57.7	51.0
WESTERN EQUATORIA	12.8	13.9	13.2
JONGLEI	13.5	5.1	10.2
UPPER NILE	3.9	1.8	3.0
BAHR EL GHAZAL	7.5	3.5	5.9
LAKES	1.4	2.0	1.7
ETHIOPIA	-	0.2	0.1
TANZANIA	-	0.2	0.1
UGANDA	7.2	9.9	8.3
ZAIRE	1.3	1.8	1.5
TOTAL	100	100	100
			1706 No

MIGRATION TO JUBA FROM DISTRICT OF BIRTH

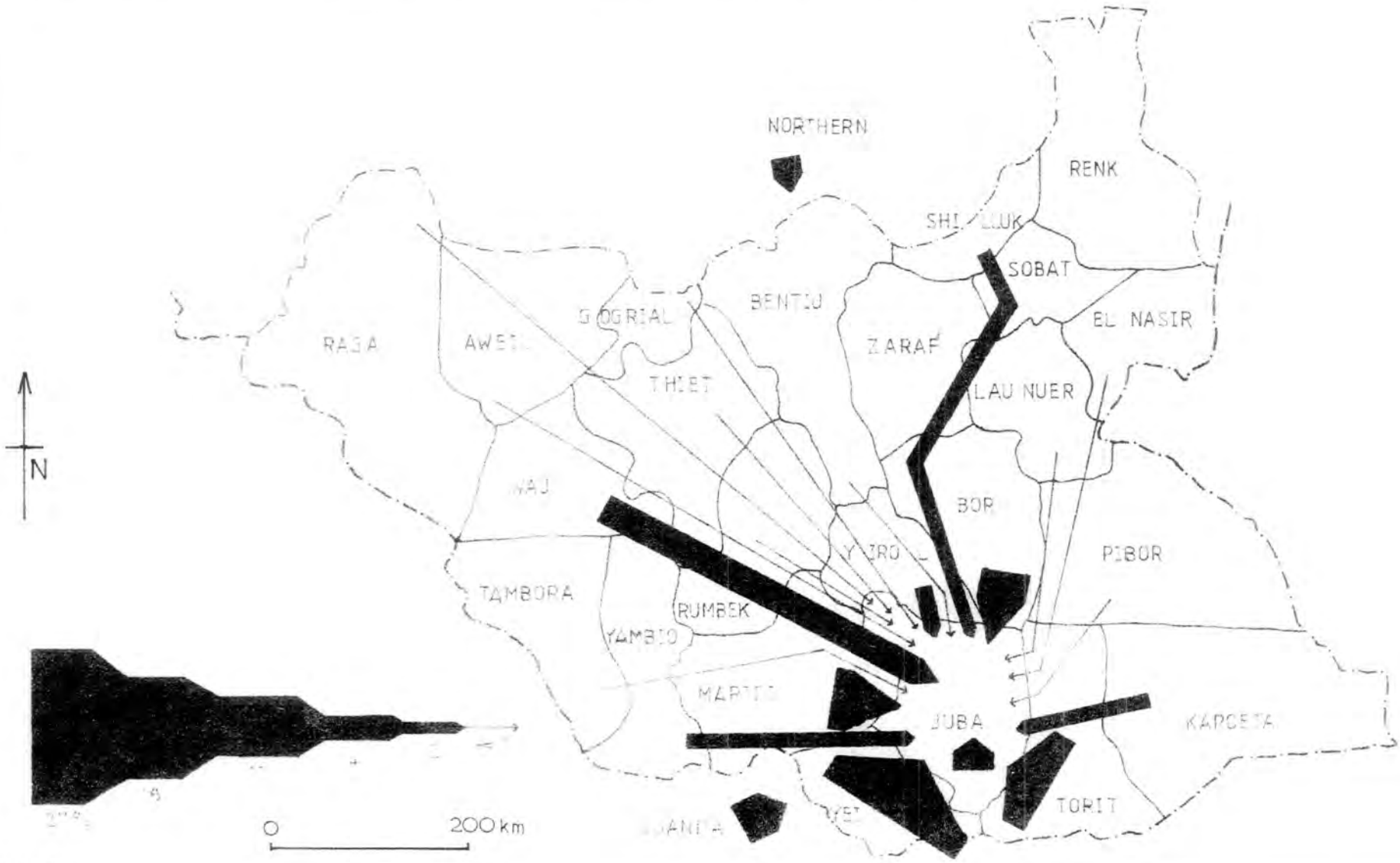
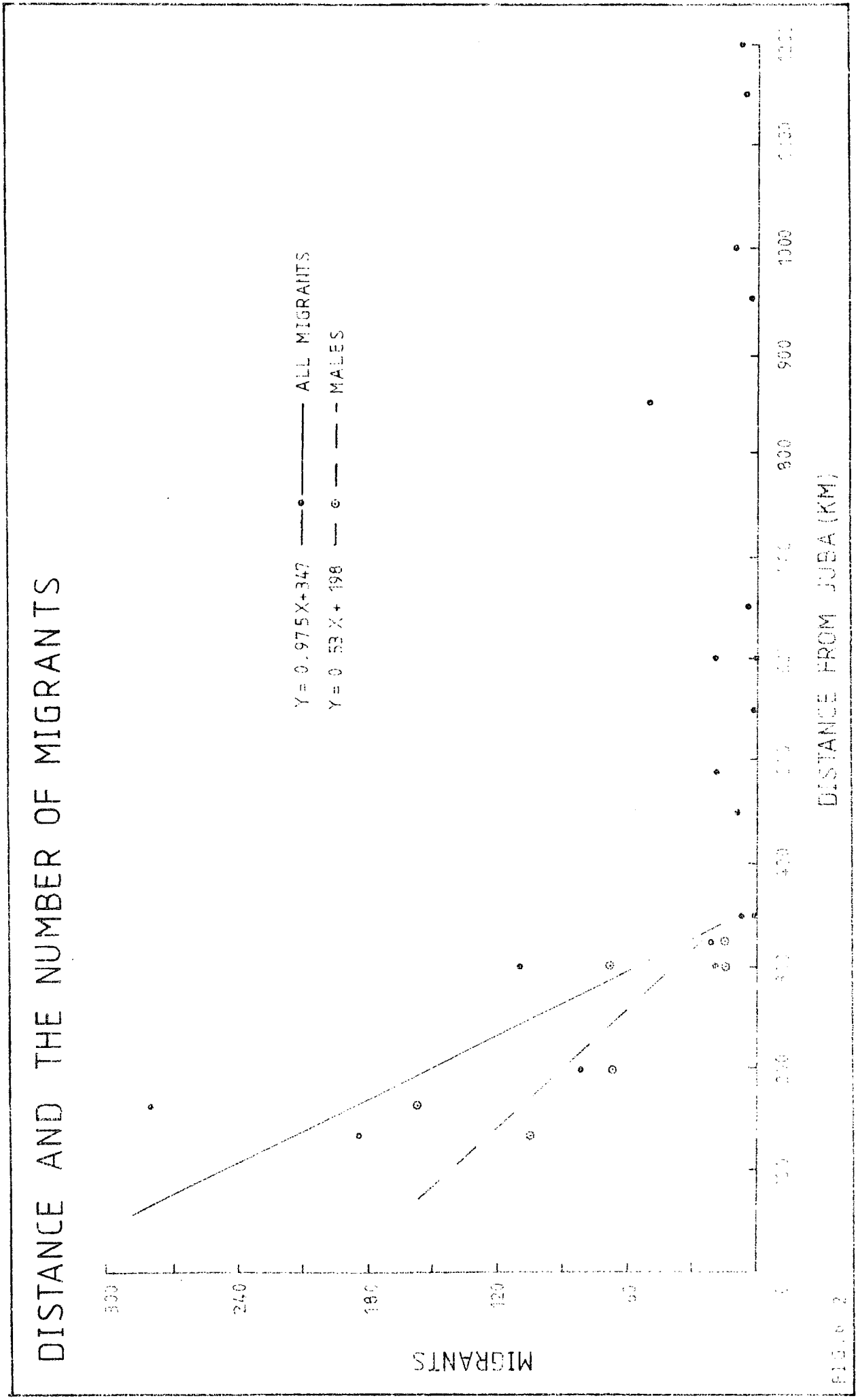


FIG. 8.4


DISTANCE AND THE NUMBER OF MIGRANTS
Y = 0.975X+347 —●— ALL MIGRANTS
Y = 0.53X + 198 —⊙— - MALES
MIGRANTS
DISTANCE FROM JUBA (KM)
300
240
180
120
60
300
900
1000

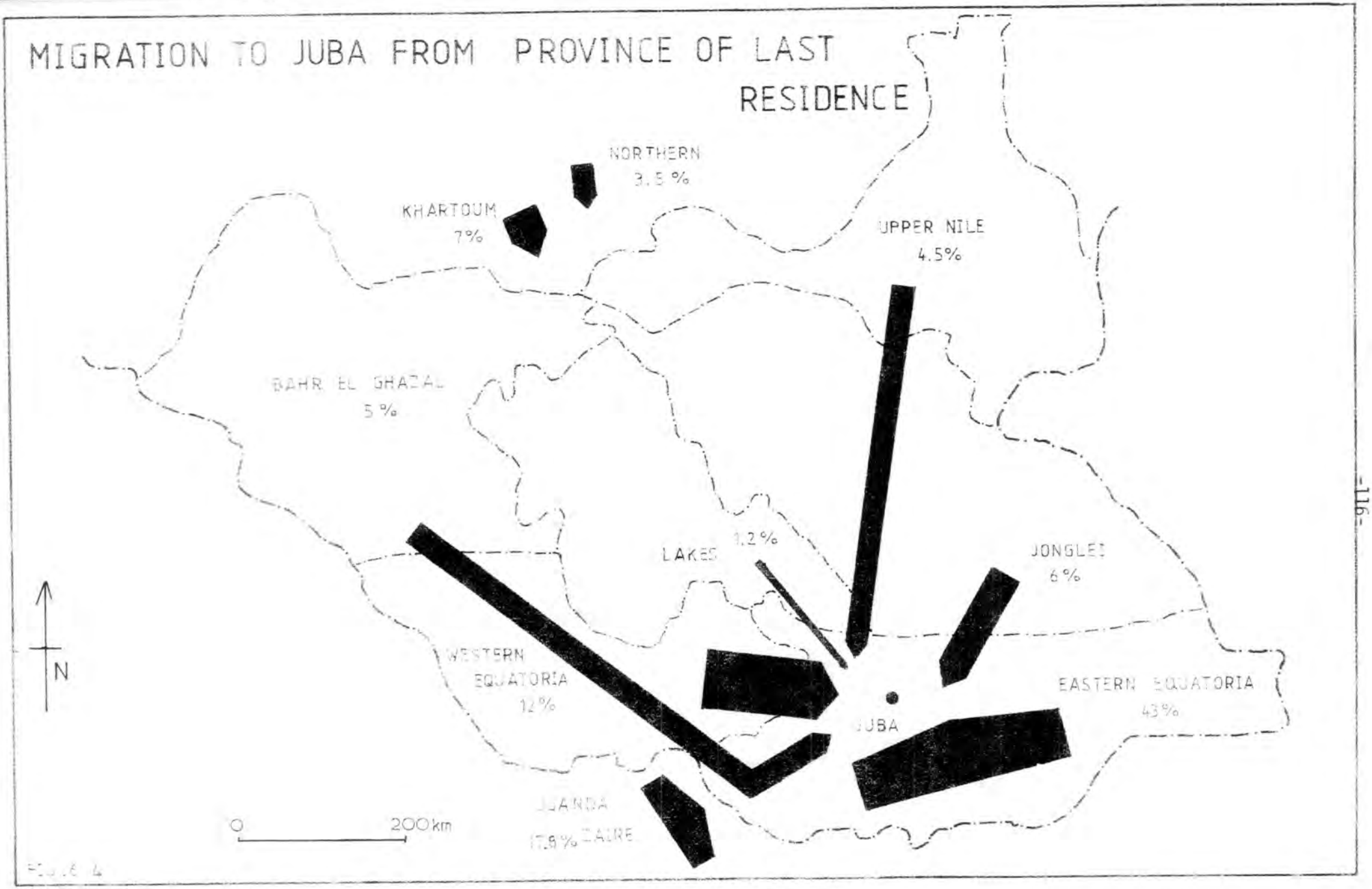

MIGRATION TO JUBA FROM PROVINCE OF LAST RESIDENCE
NORTHERN
3.5 %
KHARTOUM
7%
UPPER NILE
4.5%
BAHR EL GHAZAL
5 %
LAKES
1.2 %
JONGLEI
6 %
WESTERN
EQUATORIA
12%
EASTERN EQUATORIA
43%
JUBA
N
0
200km
UGANDA
17.6 % ZAIRE

FIG. 6.4

In terms of province of last residence, the changes were no greater than for locality and district, and the percentage of migrants coming from each province was much the same as it had been for place of birth with the exception of Eastern Equatoria. Here the number of migrants was considerably fewer than the total born in the province and now resident in Juba. This decrease was countered by the larger number of migrants who were last resident either in the northern provinces and particularly Khartoum province, or in Uganda. The mathematical methods employed earlier for place of birth were repeated but no significant alterations to the relationship between distance and the number of migrants emerged.

6.2 The Mechanisms of the Migratory Movement

In spite of the similarities in overall terms for the spatial variables place of birth and last residence, there were differences which suggested the possibility that the migratory movement might not be a simple or single process. This can be interpreted as indicating movements consisting of a series of stages or steps. It proved impractical in terms of time and labour constraints to fully analyse this question. It was not attempted to trace the moves of every individual migrant in order to built up a complete picture of the number and location of the migratory steps taken in coming to Juba, but it did prove possible to extract some information on this subject. The findings, which are presented below, seem to indicate that a significant number of migrants did not move directly from their place of birth to Juba but took instead a number of steps to accomplish this.

Respondents were requested to supply information in chronological order on all the places in which they had resided for more than six months and beginning with their place of birth. From this data it was possible to calculate the number of migratory steps taken by in-migrants coming

DISTRIBUTION OF MIGRATORY STEPS

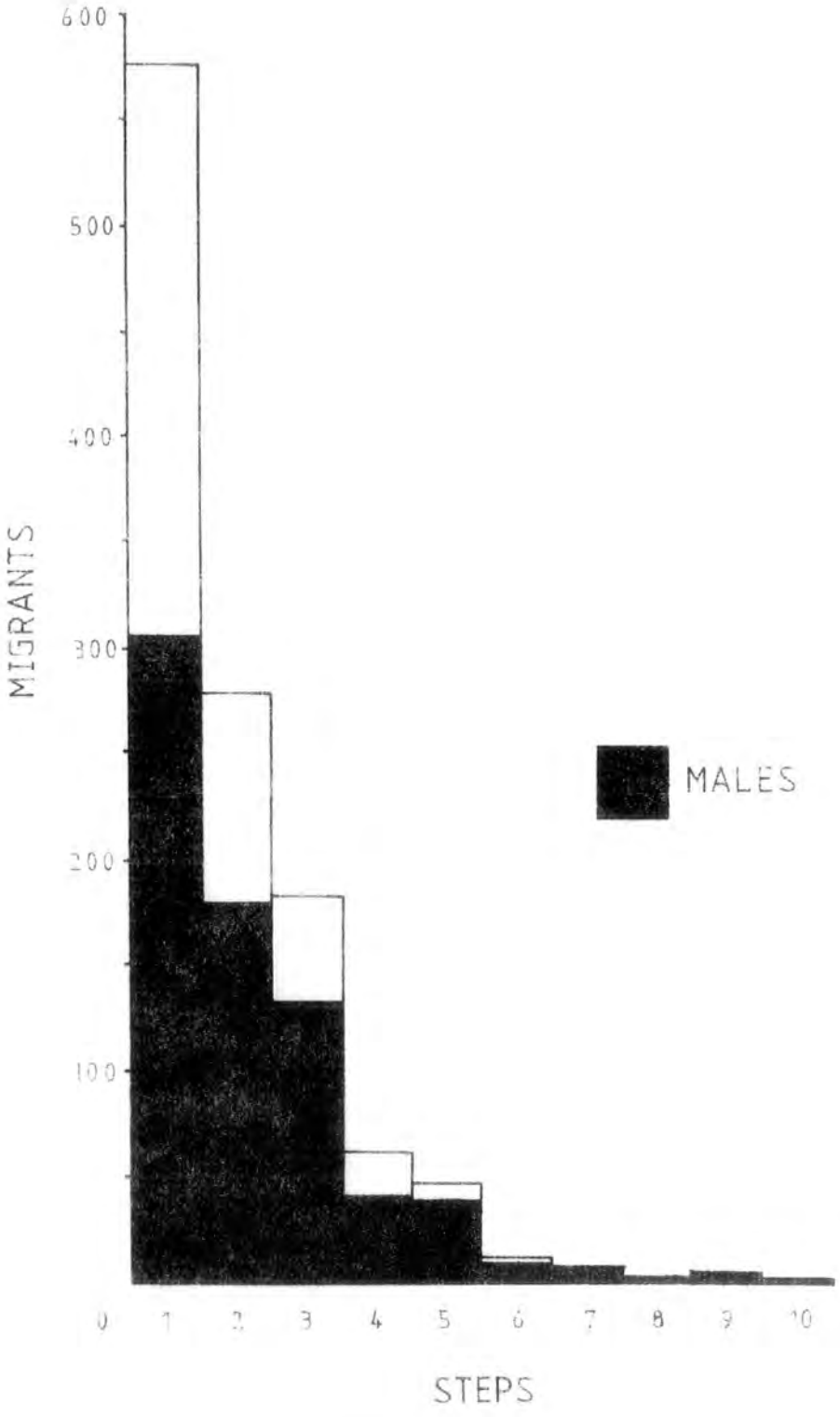


FIG.6.5

TABLE 6.7 : JUBA SAMPLE POPULATION : PERCENTAGE DISTRIBUTION OF THE DIRECTIONS OF STEP-MIGRATION TO JUBA

ROW	DIRECTION	MALE	FEMALE	TOTAL
1	NON-URBAN TO JUBA (DIRECT)	44.3	53.7	47.9
2	NON-URBAN TO URBAN (SAME PROVINCE) TO JUBA	8.0	8.8	8.3
3	NON-URBAN TO URBAN (DIFFERENT PROVINCE) TO JUBA	8.4	4.3	6.8
4	URBAN TO JUBA (SAME PROVINCE)	10.3	15.6	12.3
5	URBAM TO JUBA (DIFFERENT PROVINCE)	14.3	9.1	12.3
6	URBAN TO NON-URBAN (SAME PROVINCE) TO JUBA	1.9	1.4	1.7
7	URBAN TO NON-URBAN (DIFFERENT PROVINCE) TO JUBA	2.1	1.7	1.9
8	URBAN TO URBAN TO JUBA (SAME PROVINCE)	1.6	-	1.0
9	URBAN TO URBAN TO JUBA (DIFFERENT PROVINCE)	9.1	5.4	7.7
	TOTAL	100 (573)	100 (352)	100 (925)

STEP-MIGRATION TO JUBA : AN ILLUSTRATION OF THE HIERARCHIES

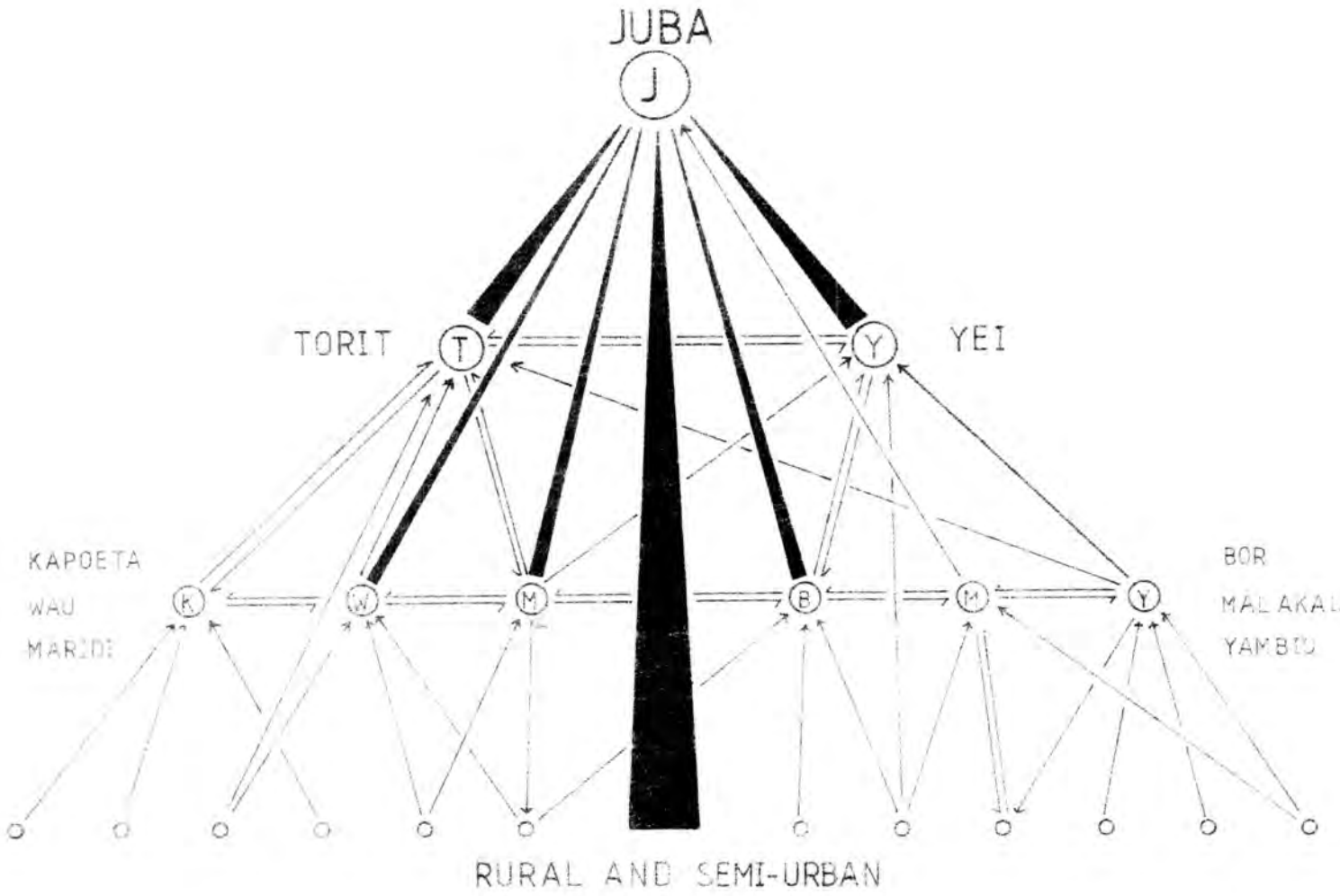


FIG. 6.6

TABLE 6.8 : JUBA SAMPLE POPULATION : PERCENTAGE DISTRIBUTION OF IN-MIGRANT YEAR OF ARRIVAL : POPULATION AGED 12 YEARS AND ABOVE NOT BORN IN JUBA

YEAR	MALE	FEMALE	TOTAL	YEAR	MALE	FEMALE	TOTAL
1979	20.9	16.2	19.1	1961	0.8	0.5	0.7
1978	11.1	10.2	10.8	1960	0.3	1.5	0.8
1977	9.9	7.5	9.0	1959	0.8	0.2	0.6
1976	8.7	8.2	8.5	1958	0.6	0.2	0.4
1975	5.9	7.0	6.3	1956	0.5	0.2	0.4
1974	8.0	6.2	7.3	1955	0.3	1.7	0.9
1973	6.5	6.5	6.5	1954	0.15	0.2	0.2
1972	9.7	9.2	9.5	1953	0.15	0.7	0.4
1971	1.4	2.5	1.8	1952	0.15	0.5	0.3
1970	3.1	1.5	2.5	1951	-	0.5	0.2
1969	2.0	2.7	2.3	1948	0.15	0.5	0.3
1968	1.1	1.0	1.0	1946	-	0.2	0.1
1967	1.1	1.0	1.0	1945	0.15	0.2	0.2
1966	0.6	2.5	1.3	1942	-	0.2	0.1
1965	1.4	3.0	2.0	1941	0.3	-	0.2
1964	1.9	3.2	2.4	1938	-	0.2	0.1
1963	1.4	2.2	1.7	1937	0.15	-	0.1
1962	0.8	1.5	1.0	1933	0.15	-	0.1
				TOTAL	100	100	100
					647 No	402	1049

given in this section concerning numbers of in-migrants are readily compatible with those presented in Table 4.1 which showed rates of growth over the past few decades.

Mention was made earlier to the proportions of growth in the past which were attributable to in-migration and natural increase. For the period 1973 to 1979, however, it was only possible to estimate these proportions, as figures on natural increase are not available. The statistics possessed by the Ministry of Health and Juba Hospital are not directly applicable as they cover a far wider area than Juba town.

The sample survey recorded 639 individuals as having migrated to Juba since 1973 which would imply that about 32,000 of the 1979 residents had entered the town in the previous six years. As the population has only increased by an estimated 28,000 this would seem to be, at first glance, rather implausible. Such a situation, however may not be impossible given that out-migration would have accompanied the inward movement. Unfortunately no official statistics on this subject exist.

In this respect the questionnaire enquired as to when respondents expected to leave Juba. While almost 60 per cent of the sample stated that they would not move from Juba some 18 per cent anticipated that they would leave within the next five years. A further 10 per cent were undecided as to whether they would be staying or leaving. If we can assume that a certain proportion of the population will be leaving in the future then it is equally possible to assume that over the past six years a certain proportion of the 1973 population have already left, thereby producing an estimate for the level of out-migration.

Using the 1973 population total of 57,000 and the anticipated departure rate of one person in every five or six it can be suggested that between 10,000 and 11,000 people might have emigrated from Juba since 1973. If this is the case and it is accepted then the estimate of 32,000

the volume of migration. The bulk of in-migration appears to have occurred in the last seven years and it can be assumed that a counter stream of out-migration has also been in existence.

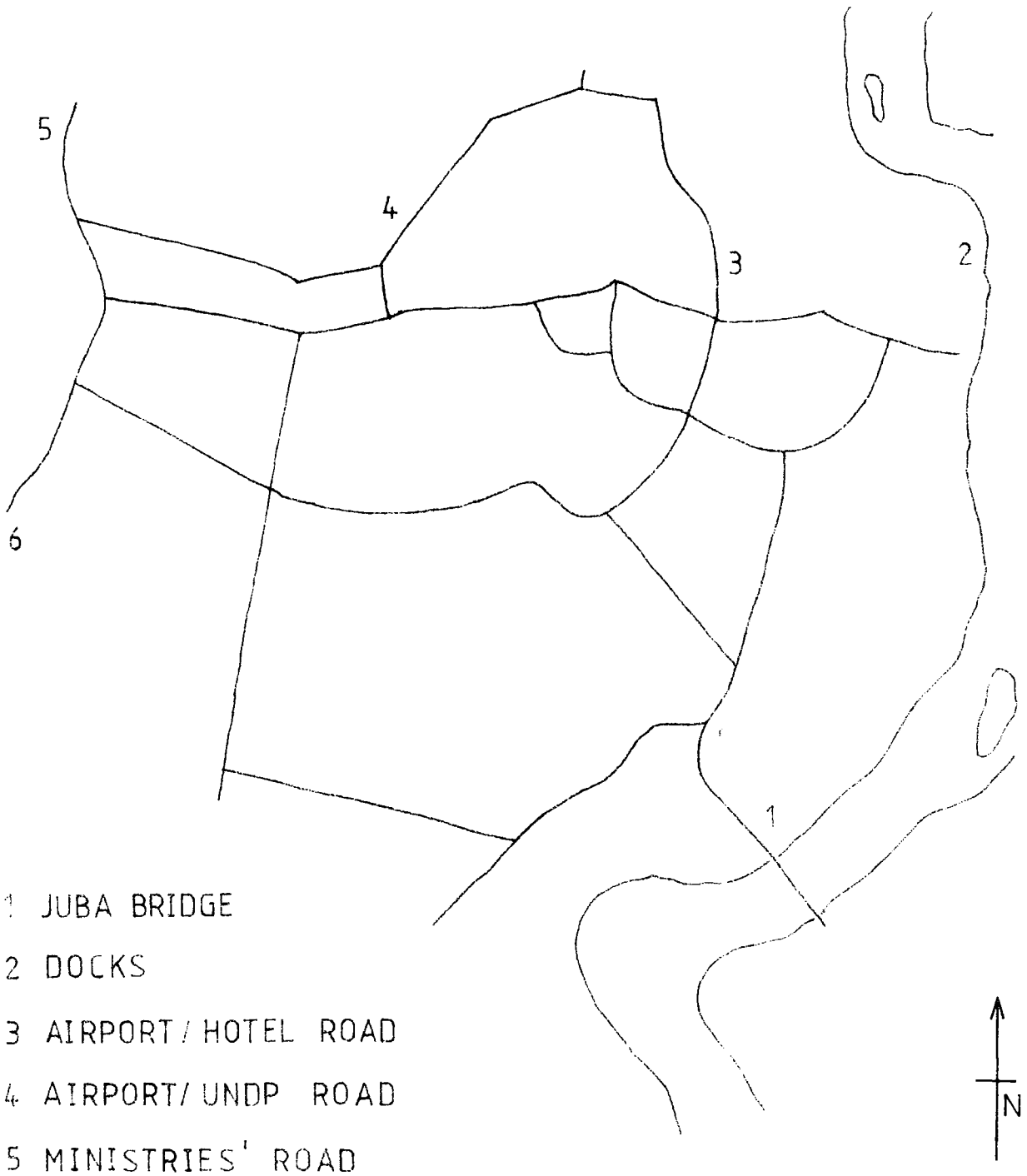
6.4 A Brief Survey of Daily Migration

A phenomenon that has not been mentioned thus far in this study of human migration into Juba is that of daily migration, or that type of movement which elsewhere might be termed commuter migration. There is no doubt that daily migration, in some form occurs in Juba.

In many large cities throughout the world this phenomenon of commuting, the daily journey into and out of the city, is growing rapidly and developing into a migration stream and counter stream of considerable size. It can be viewed as resulting from a combination of factors. Primarily it is the outcome of urban sprawl, whereby large numbers of people are forced to live at some distance from the city centre and their place of work. But it is more than just this. In most instances it is a voluntary decision, as against a truly forced one, in that people in western societies are choosing, increasingly, wherever practical to live away from the city centre and as near to the countryside and a rural environment as is possible. Daily migration of this type, mostly in the form of a journey to work and back, but also for evening recreational purpose, is made possible and facilitated by modern transport means that enable individuals to cover fairly large distances in relatively short periods of time.

Daily migration as briefly described above nowever, is essentially a western phenomenon. This is not to say that it does not exist in African locations. In fact quite the opposite is often true, although the reasons for the daily movement into cities may have different bases. In many towns and cities in Africa rural to urban migration has so increased the physical size of the urban area, that many people are forced to live on

DAILY MIGRATION : ACCESS POINTS



1 JUBA BRIDGE

2 DOCKS

3 AIRPORT / HOTEL ROAD

4 AIRPORT / UNDP ROAD

5 MINISTRIES' ROAD

6 YEI POLICE POST

0 1km

FIG. 6.6

seven to ten days duration. The reasons for these temporary migrants, a majority of whom are males, entering Juba appear to be two-fold. It seems that they were either bringing goods for sale which are not produced locally, or they were coming to buy goods not available elsewhere. Of the commodities entering the town, the main ones were dried fish from Mongalla, sacks of flour, and teak poles for the construction of tukls. Alternatively, the migrants who were coming to purchase goods were mainly traders operating in the smaller towns on the east bank. Only a few of those migrants arriving by vehicle were purely visitors. A fuller account of the daily migration pattern as recorded at the bridge is shown in Table 6.9.

At the Yei road junction similar results were recorded, although the numbers involved in the daily migration stream were much smaller. The main influx here was between the hours of 7 and 8 am. and whilst similar reasons to those given at the bridge were also recorded at this access point, there was the additional motive of water collection to force both men and women to come into Juba.

The third route studied was the road entering Juba at the site of the government ministry buildings, leading from the new native housing area at Munuki, as well as from smaller dispersed settlements further away from Juba. Here the principal imports were grass and charcoal, whilst a number of men and women were recorded as being ministry employees such as messengers, petty officials and labourers.

Two of the remaining points of entry (the roads leading from the direction of the airport) appeared to be used by the inhabitants of one large and dispersed settlement area known as Tongping, although additional daily migrants may have also come from the area of Roton, some five kilometres from Juba. The main imports here were sour milk and charcoal. Whilst the bulk of the migration again occurred in the early morning hours, there appeared to be a second stream of in-migrants coming to

Juba in the late morning and early afternoon. The migrants were mainly male and it is thought that the principal reason for their coming to Juba was to buy and drink local beer.

The final point of observation was slightly different from the other five in that it concerned the arrival of people from one of the main islands in the river at Juba and also from isolated settlements on the far bank. All transport was by canoe. Nearly all the females observed crossing to Juba were bringing fruit and vegetables for sale, whilst the activities of the males were divided between bringing grass and some fruit and coming to work as labourers.

This brief look at daily migration into Juba illustrates the differences between the situation here and those studied elsewhere. The emphasis in Juba is firmly on people entering the town on foot and not in vehicles and in the main, covering only short distances. The maximum distance noted, for those migrants walking, was ten kilometres. The main reasons for coming to Juba centred on the buying or selling of various commodities in the urban markets. Of far less importance, particularly amongst women, was the occurrence of people migrating specifically for employment. The bulk of the influx into the town comes in the morning hours, between 7 and 9 am., and as the markets draw to a close in the early afternoon it can be assumed that there is a corresponding counter stream of out-migration. The actual figures recorded at the six access points are reproduced in Appendix D.

the economically active section of the population, appear to have completely dominated the migration stream numbering 82 per cent of in-migrant males, 50 per cent of the total in-migrant population and 34 per cent of the whole sample population. Although females were heavily outnumbered by males in this age group it is worth noting that it was also the most populated amongst in-migrant females, containing 75 per cent of all in-migrant women and thus re-emphasising the importance of this age range within the in-migrant population and also of 15 to 49 year old migrants within the whole sample population.

A comparison of the whole sample population and that of in-migrants does not yield very significant variations in the characteristics of the age/sex structures. This is not surprising given the in-migrant domination of the whole population. The major points of difference were the smaller percentage of in-migrants aged less than 15 years, 17 per cent as compared to 33 per cent and the greater percentage in the 15 to 29 year range, 54 per cent as against 45 per cent. There were, however, very noticeable variations between the age and sex characteristics of the in-migrant population and those of the population born in Juba.

Comparisons similar to those made above revealed that almost 70 per cent of the population born in Juba were less than 15 years old and that only 27 per cent were aged between 15 and 29 years. Almost 85 per cent of the population born in Juba were less than 20 years of age and the combined male and female economically active group contained only 32 per cent of the native Juba population. Figure 7.1 illustrates some of these differences and also shows that there was a less marked sex imbalance in the Juba born population with an overall ratio of 125/100 compared to 153/100 for the in-migrant group. The bulk of the potential labour force in Juba would appear to be made up of in-migrants rather than native Jubans and the size of the former group seems to have overshadowed the extent of youthfulness

that existed in the Juba born population, thus producing a rather lower proportion of people aged under 15 years than might otherwise have been expected.

Age characteristics have been considered so far with reference only to age at the time of enumeration but such an analysis presents a limited viewpoint and it is necessary to examine age at the time of migration if a more complete picture is to be obtained. Table 7.1 presents therefore, partial sex and age data for the in-migrant population with ages taken at the time of arrival in Juba. The data presented is not a complete set and includes only those migrants aged over 12 years at the time of the survey and who had arrived in Juba after 1971.

TABLE 7.1 : JUBA SAMPLE POPULATION : PERCENTAGE DISTRIBUTION OF IN-MIGRANTS BY AGE AT TIME OF ARRIVAL IN JUBA FOR POPULATION AGED 12 YEARS AND OVER (1972 - 1979)

AGE GROUP	MALE	FEMALE	TOTAL
12-14	8.4	14.4	10.5
15-19	23.0	26.0	24.0
20-24	17.4	26.0	20.4
25-29	21.1	13.3	18.3
30-34	10.7	8.8	10.0
35-39	8.4	3.2	6.6
40-44	4.8	2.1	3.8
45-49	3.3	1.8	2.7
50 and over	2.9	4.2	3.3
TOTAL	100.0 (522)	100.0 (285)	100.0 (807)

Just over 50 per cent of in-migrants were unmarried, which was 15 per cent less than the figure recorded for the whole sample population and, correspondingly, nearly 45 per cent, compared to 32 per cent, were married. A greater proportion of males were not married (57%), while a smaller proportion were married (41%). Once again however, a relatively large number of females were either divorced or widowed (9%) which may be a reflection of the effects of previous civil disturbances on demographic factors.

TABLE 7.2 : JUBA SAMPLE POPULATION : PERCENTAGE DISTRIBUTION OF IN-MIGRANTS (AGED 12 YEARS AND OVER) AGED BETWEEN 15 AND 19 YEARS AT TIME OF ARRIVAL (1973 - 1979)

YEAR	MALE	FEMALE
1979	31.1	32.3
1978	27.7	29.3
1977	25.0	30.0
1976	21.4	24.2
1975	13.2	25.0
1974	19.2	24.0
1973	11.9	3.8
TOTAL	100.0	100.0

An examination of the ethnic composition of the in-migrant population (Table 7.3) emphasizes the spatial origins and migratory tendencies of members of some ethnic groups. That the Bari were the original inhabitants of the Juba area is emphasized by the fact that almost two thirds of their members had been born in Juba. No other tribal group exhibited this characteristic so strongly, except the Lokorong, although these were

found in only small numbers. Conversely it was found that 95 per cent of the Dinka were in-migrants which is, in part, a reflection of their cultural system and the needs of their society and its individuals. The Dinka supply the bulk of fresh meat consumed in the town, walking their cattle down from more northerly pastures. At the same time it has become increasingly common for young male Dinka to migrate to earn money with which to purchase bride price cattle. No other tribal group of this size was composed so totally of in-migrants but people born in Juba Town also formed only small proportions of the population in tribes such as the Acholi, Kakwa, Kuku, Madi and Zande.

The figures provided seem to suggest that members of some tribal groups have been more mobile than members of others, a factor noted earlier in the more general discussion on the mobility of the Sudanese population. Unfortunately it was not possible to further examine this aspect of migration to determine, for example, whether the increased migrational tendencies of some groups are related primarily to spatial or cultural factors.

7.2 Migrants and Education

The question of the relationship between education and the migrant is one that has received some lengthy discussion in migration literature and it seems that two points of view have been put forward. There have been suggestions that migrants are more likely to be uneducated, while other studies have seemed to indicate the reverse, stating that it is the better educated members of a society who are more likely to migrate. The evidence presented below would seem to favour the second opinion but there is also some justification for supporting the former. Treatment of the educational data has been simplified somewhat and presented in the form of highest education levels obtained, whether current or past. Some indication of the division in this respect can be obtained from the analysis of reasons

TABLE 7.4 : JUBA SAMPLE POPULATION : PERCENTAGE DISTRIBUTION OF IN-MIGRANTS BY LEVEL OF EDUCATION AND NUMBER OF MIGRATORY STEPS TAKEN

NO.OF MOVES	NO EDUC-ATION		PRIMARY 1-3		PRIMARY 4-6		INTERMEDIATE		SENIOR		POST SENIOR		TOTAL		TOTAL PER STEP	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	No.	%
1	27.8	45.3	13.6	18.0	20.7	18.7	21.7	15.0	13.6	2.6	2.6	0.4	53.6	46.4	576	50.1
2	16.9	48.0	4.1	15.3	16.9	14.3	27.9	14.3	22.1	7.1	12.2	1.0	63.7	36.3	270	23.5
3	9.0	31.6	7.4	15.8	20.5	24.6	20.5	14.0	27.0	12.3	15.6	1.8	68.2	31.8	179	15.6
4	15.8	17.6	2.6	5.9	10.5	23.5	15.8	47.1	26.3	5.9	28.9	-	69.1	30.1	55	4.8
5	5.6	25.0	2.8	16.7	8.3	8.3	13.9	16.7	41.7	33.3	27.8	-	75.0	25.0	48	4.2
OVER 5	14.3	-	-	-	9.5	14.3	9.5	-	28.6	-	23.8	-	85.7	14.3	21	1.8

MIGRATORY STEPS AND EDUCATION (MALES ≥ 12 YEARS)

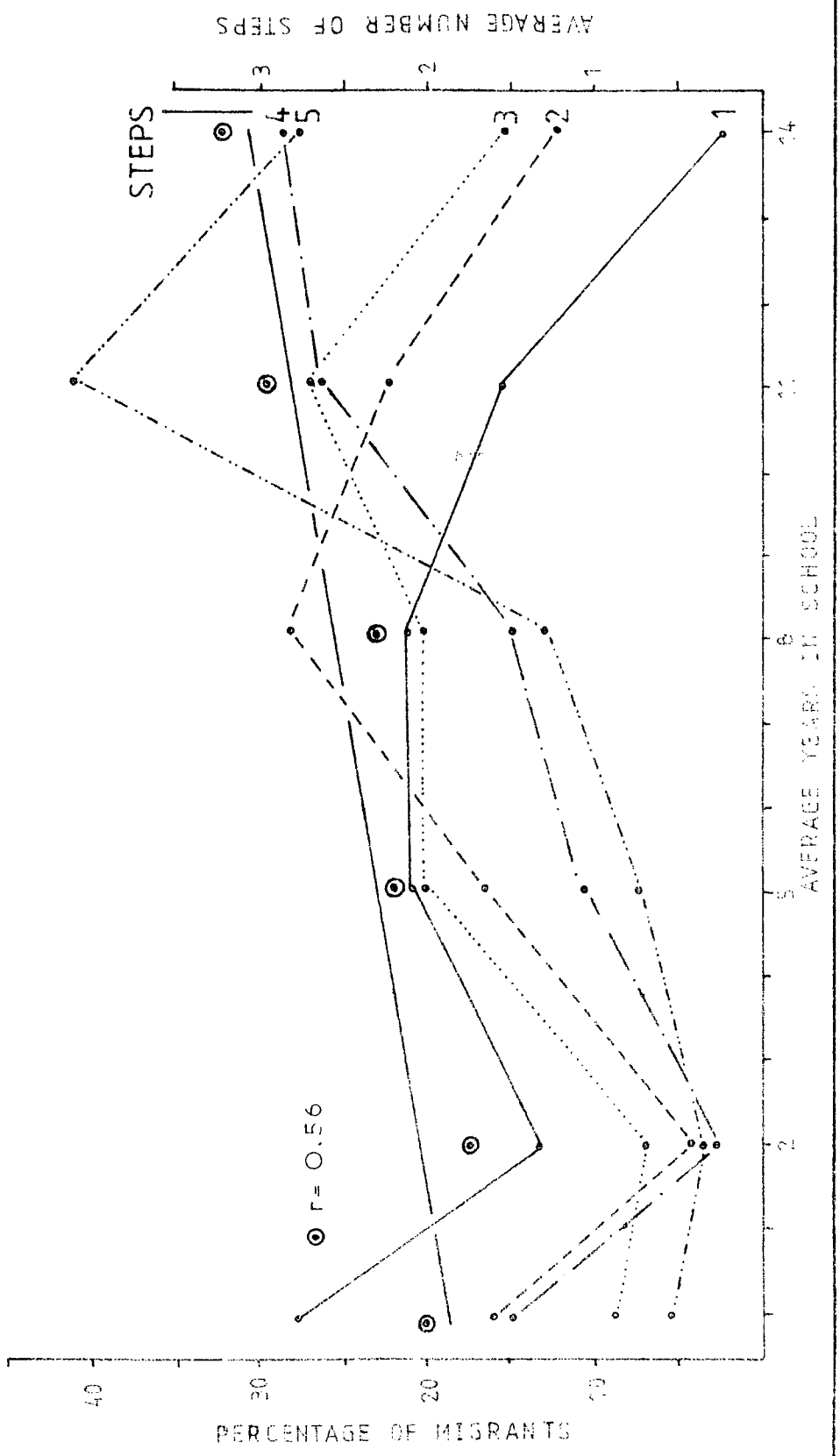


FIG. 7.1

TABLE 7.5 : JUBA SAMPLE POPULATION : REASONS FOR UNEMPLOYMENT AMONGST MALE IN-MIGRANTS AGED 12 YEARS AND OVER (PERCENTAGE DISTRIBUTION

STATED REASON	%
NOT INTERESTED/NEVER APPLIED	9.7
SCHOOLING	72.1
HOUSEWIFE	-
TOO OLD	3.9
TOO YOUNG	0.6
LACK OF QUALIFICATIONS	3.9
LEGAL PROBLEMS	2.9
REFUGEE	1.6
OTHER	5.2
TOTAL	100

TABLE 7.6 : JUBA SAMPLE POPULATION : OCCUPATIONS OF MALE IN-MIGRANTS AGED 12 YEARS AND OVER (PERCENTAGE DISTRIBUTION)

OCCUPATION GROUP	%
PROFESSIONAL, TECHNICAL AND RELATED WORKERS	8.6
ADMINISTRATIVE AND MANAGERIAL WORKERS	3.7
CLERICAL AND RELATED WORKERS	16.1
SALES WORKERS	5.7
SERIVCE WORKERS	21.2
AGRICULTURE, ANIMAL HUSBANDRY, FORESTRY, FISHERMEN, HUNTING	4.3
PRODUCTION, TRANSPORT, EQUIPMENT OPERATORS, LABOURERS	28.9
ARMED FORCES	11.5
TOTAL	100

by year of arrival for in-migrants not there for educational purposes. Table 7.8 shows the results of this exercise. Again it can be seen that a large proportion of 1979 in-migrants were unemployed, having been in Juba for less than one year. There were however significant reductions in the proportion unemployed for most of the other years in the sample. The year 1975 however was an exception, as was 1972 to a lesser extent. This may be the result of higher in-migration because of the civil disturbances. In 1972 peace came to the Southern Region and large numbers of people flocked to the towns, while in 1975 there was a sizeable influx of refugees from Uganda.

7.4 Reasons for Migrating to Juba

In this section the motives behind the migratory movement are examined. Those people not born in Juba were asked to state why they had first come to Juba. They were asked to name only one reason, the primary motive upon which they had acted in deciding to migrate to the town. It should be stressed here that the question was as straightforward as possible and involved no attempt to investigate a migrant's perception. It is readily accepted that, for the longer stay migrants at least, their conception of their initial reason for coming to Juba may have become blurred.

The reasons stated are laid out in Table 7.9. Two single reasons emerged as the most important: 'looking for employment' and 'coming to Juba with family' although the factors of 'education' and 'to join family' were also significant. There were considerable differences in motives between the sexes. The variable 'looking for employment' was the single most important amongst males with almost one third of all male in-migrants (aged 12 years and above) naming this as the primary reason in influencing their decision to move. Amongst females however, this factor had only small significance.

A sizeable proportion of male in-migrants came to Juba for educational

purposes, which is understandable considering the large number of schools located within the town, although, again this factor was of only minor importance amongst females. A majority of female in-migrants appear to have been influenced by family links, in that 37 per cent named 'came with family' and a further 22 per cent named 'to join family' as the reason for coming to Juba. Although proportions in these areas were smaller amongst male in-migrants (less than 10 per cent in both cases), the high overall significance of these factors, together with the surprisingly high number of married in-migrants may indicate that migration to Juba has been more family oriented rather than being exclusively the domain of the single person.

A wide range of reasons (running to more than twenty) was stated by the in-migrants but a majority were only named by a few individuals. Amongst the males, apart from those already mentioned, the only remaining reason of any significance was that of job transfer. Administrative organisation in the Southern Region is still incomplete and thus members of the civil service are frequently reposted to other positions. Few other variables, for either male or female in-migrants, were of any real importance and there was a fairly even distribution of the remaining migrants between these variables.

A more complete understanding of the situation is perhaps gained if the motives stated are grouped rather than presented as single variables. Economic reasons, in one form or another, were stated by 31 per cent of all in-migrants, while a further 36 per cent named family or personal reasons. Educational motives were classified separately and accounted for 13 per cent of all in-migrants, while 9 per cent of individuals claimed that civil disturbances, either in Sudan or in Uganda were the reason for their coming to Juba. The real importance of this latter group may be somewhat higher than indicated because while only 3.6 per cent of in-migrants named 'refugee' as their reason for coming to Juba,

TABLE 7.10 : JUBA SAMPLE POPULATION : REASONS FOR COMING TO JUBA BY AGE FOR MALE IN-MIGRANTS AGED 12 YEARS AND OVER (PERCENTAGE DISTRIBUTION)

REASON STATED/AGE	12-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50+
TO LOOK FOR EMPLOYMENT	-	7.6	31.4	52.0	42.3	53.1	42.9	20.7	45.5
JOB TRANSFER	-	2.1	5.7	9.8	22.5	15.6	14.3	20.7	22.7
ON DUTY	-	0.7	1.0	0.8	1.4	3.1	2.9	3.4	-
INVEST MONEY IN TRADE	-	-	1.0	3.3	7.0	14.1	5.7	6.9	4.5
FOR COURSE/TRAINING	-	-	-	-	-	-	-	-	4.5
INCREASE STANDARD OF LIVING	2.0	2.1	2.9	1.6	-	-	2.9	6.9	4.5
TO BUY LAND	-	-	-	-	1.4	-	-	-	-
JOIN ARMED FORCES	-	0.7	-	0.8	-	-	-	-	-
TO CONTINUE EDUCATION	20.0	33.8	26.7	11.4	5.6	4.7	2.9	-	-
MARRIAGE	-	-	-	-	-	-	-	-	-
CAME WITH FAMILY	46.0	20.7	5.7	3.3	2.8	1.6	-	-	-
TO JOIN FAMILY	14.0	17.9	6.7	7.3	5.6	3.1	2.9	6.9	-
REPATRIATED AFTER CIVIL WAR	-	-	1.9	0.8	2.8	3.1	5.7	-	-
REFUGEE	6.0	3.4	1.9	4.1	5.6	-	5.7	10.3	-
SECURITY REASONS IN CIVIL WAR	10.0	4.1	2.9	1.6	1.4	1.6	8.6	13.8	13.6
HOLIDAY	-	3.4	5.7	1.6	-	-	2.9	-	-
VISIT FRIENDS	1.0	1.4	2.9	-	-	-	-	6.9	-
TOWN LIFE	-	2.1	1.9	1.6	-	-	2.9	-	-
CARE FOR SICK	-	-	1.9	-	-	-	-	-	-
MEDICAL TREATMENT	-	-	-	-	-	-	-	3.4	4.5
DEATH/FUNERAL CEREMONY	-	-	-	-	1.4	-	-	-	-
TOTAL	100	100	100	100	100	100	100	100	100
	50 No	145	105	123	71	64	35	29	22

TABLE 7.11 : JUBA SAMPLE POPULATION : REASONS FOR COMING TO JUBA FOR IN-MIGRANTS AGED 12 YEARS AND ABOVE BY SEX AND PROVINCE (PERCENTAGE DISTRIBUTION)

REASON STATED	BAHR EL GHAZAL		EAST EQUATORIA		JONGLEI		LAKES		UPPER NILE		WEST EQUATORIA		NORTHERN		NON-SUDANESE		TOTAL	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
TO LOOK FOR EMPLOYMENT	39.1	-	32.3	3.6	23.9	5.0	10.0	-	16.0	-	35.6	3.6	31.4	-	38.5	2.6	31.4	3.2
JOB TRANSFER	16.1	-	8.0	0.4	14.1	-	40.0	-	20.0	-	8.0	1.8	2.9	-	-	-	9.7	0.5
TO INVEST IN TRADE	4.3	-	0.3	0.4	12.0	-	-	-	20.0	-	-	-	14.3	-	-	-	3.7	0.2
TO INCREAST STANDARD OF LIVING	2.2	-	1.9	4.4	3.3	5.0	-	-	4.0	-	1.1	7.3	2.9	-	-	-	2.0	4.0
TO CONTINUE EDUCATION	6.5	-	16.9	7.3	14.1	-	10.0	-	4.0	-	27.6	3.6	-	16.7	12.8	5.3	16.8	6.0
CAME WITH FAMILY	8.7	33.3	12.1	35.1	-	27.5	20.0	77.7	12.0	50.0	10.3	49.1	22.9	33.3	5.1	28.9	10.2	37.1
TO JOIN FAMILY	10.9	33.3	10.2	19.8	10.9	32.5	20.0	22.3	4.0	25.0	8.0	18.2	25.7	41.7	5.1	23.7	9.0	21.6
REFUGEE	-	-	1.3	0.4	6.5	-	-	-	-	-	-	-	-	-	38.5	31.6	3.9	3.2
SECURITY REASONS	-	-	7.3	5.2	5.4	-	-	-	-	-	-	-	-	-	-	-	4.3	3.2
HOLIDAY	-	-	3.2	3.6	2.2	15.0	-	-	4.0	-	1.1	-	-	8.3	-	-	2.2	2.2
VISIT FRIENDS	2.2	16.7	-	3.2	4.3	15.0	-	-	4.0	25.0	2.3	5.5	-	-	-	7.9	1.4	4.7
ATTRACTION OF TOWN LIFE	-	16.7	1.9	5.6	2.2	-	-	-	-	-	-	3.6	-	-	-	-	1.2	4.5
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

TABLE 7.12 : JUBA SAMPLE POPULATION : CONTACTS IN JUBA FOR IN-MIGRANTS AGED 12 YEARS AND OVER (PERCENTAGE DISTRIBUTION)

CONTACT	MALE	FEMALE	TOTAL
NO CONTACT	23.2	28.4	25.6
FATHER	11.6	13.9	12.5
MOTHER	1.1	0.7	1.0
BROTHER	21.6	12.7	18.2
SISTER	1.7	7.0	3.7
UNCLE/AUNT	15.8	13.4	14.9
SON	0.2	3.2	1.3
DAUGHTER	0.2	-	0.1
FRIEND	10.5	2.5	7.4
NEPHEW	2.3	0.2	1.5
COUSIN	5.7	1.2	4.0
GRANDPARENT	1.7	0.7	1.3
GRANDCHILD	0.2	-	0.1
WIDER RELATIVE	3.2	3.9	3.7
FELLOW TRIBESMAN	0.8	-	0.5
HUSBAND	-	10.0	3.8
WIFE	-	-	-
OTHER	0.3	0.5	0.4
TOTAL	100 647 No.	100 402 No.	100 1049 No.

existed provincially in that fewer than average Eastern Equatorian born male in-migrants and more than average Eastern Equatorian born females made no remittance, while migrants of both sexes from Western Equatoria sent less remittance than average. The overall low level of remittance sending is probably a reflection of the hardships that a majority of the migrants in Juba face.

TABLE 7.13 : JUBA SAMPLE POPULATION : DEGREE OF PRE MIGRATION CONTACT BY PROVINCE FOR IN-MIGRANTS AGED 12 YEARS AND OVER (PERCENTAGE DISTRIBUTION)

PROVINCE	MALE	FEMALE	TOTAL
BAHR EL GHAZAL	70.8	58.3	70.7
EASTERN EQUATORIA	84.3	81.5	83.1
JONGLEI	66.3	75.0	67.9
LAKES	40.0	22.2	31.6
UPPER NILE	76.0	62.5	72 7
WESTERN EQUATORIA	82.8	72.7	78.9
NORTHERN	77.1	33.3	65.9
NON-SUDANESE	41.0	23.7	32.5

Examination of correspondence levels with the home area showed that this sphere was the one of highest positive contact. Almost 90 per cent of all migrants stated that they wrote to friends and relatives in their place of birth. Land and animal ownership variables provided the example of greatest negative contact in that only 20 per cent of in-migrants owned land or animals or both in their home area. A far greater proportion of these migrants were males. The low levels of land and animal ownership might be an indication that landlessness is a factor influencing the decision to migrate, but given the widespread availability

FUTURE OUT MIGRATION : ANTICIPATED DIRECTIONS

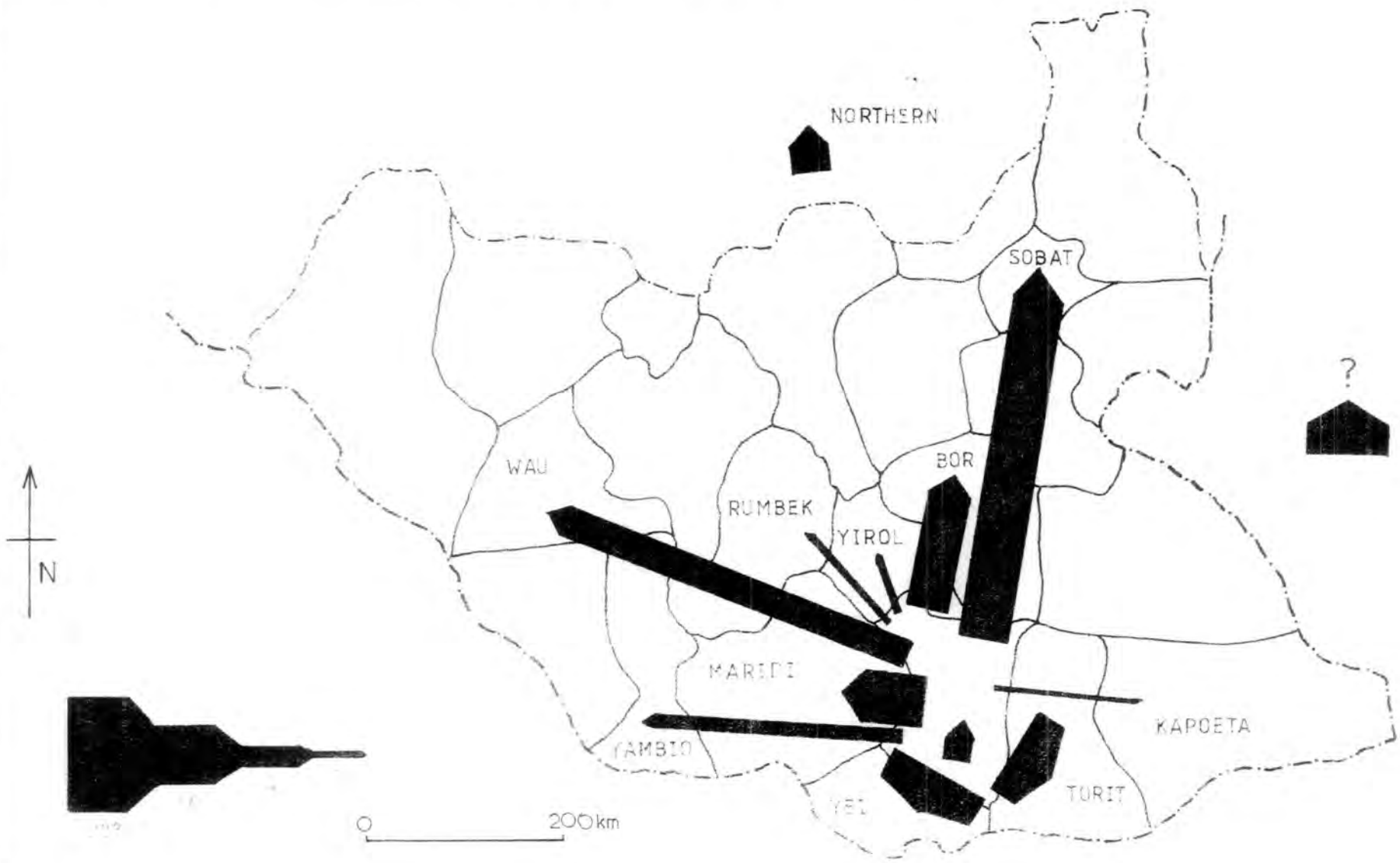


Fig. 3.3

CHAPTER EIGHT

INTERNATIONAL MIGRATION : REFUGEES AND RETURNEES

The past two decades in Africa have witnessed an increasing volume of refugee migration and, with civil strife continuing in many areas and seeming likely to influence African life in the foreseeable future, there appears to be little hope that the volume of refugees will be reduced. The 1970's provided less and less indication that the refugee phenomenon is a temporary situation and by 1974 it was estimated that there were more than one million refugee Africans (Table 8.1).

8.1 Some Characteristics of Refugees in Africa

Refugees in Africa can be divided into two groups, political and non-political, reflecting the causes of their migration. It can be argued that such a classification is too simplistic and that political causes should be further divided according to religious, ethnic and political factors. Whilst these factors can often be identified, most refugee movements in Africa have multiple and overlapping causes and thus precise distinction between political, religious and ethnic factors is often meaningless.

Political factors have been the cause of the more serious refugee migration streams and it is this type of migration that is relevant to the present study. In this respect, the Organisation for African Unity definition of a refugee is a useful base and is one that is followed here:

> "Any person who, through aggression, occupation from outside, foreign domination or events gravely disturbing public order, in part of or all of his country of origin or the country of which he has nationality, is obliged to leave his usual place of residence to seek refuge outside this country".
>
> (Goundiam, 1970, p.8)

The occurrences that might lead to such a situation can be identified as secessionist tendencies, independence movements, ethnic conflicts, political repression and religious oppression. Of these five factors, perhaps the single most important and widespread has been ethnic conflict or racial and tribal intolerance. In Burundi, for example, between 1960 and 1973, there were four major outbreaks of violence resulting from age old animosities between the Hutu and Tutsi peoples. The United Nations High Commission for Refugees suggests, in fact, that it is a refusal to acknowledge ethnic nationhoods that has caused the largest refugee upheavals (Akol, 1976). The troubles in Burundi, Nigeria and Sudan all illustrate this phenomenon.

Some characteristics of African refugee movements are readily identifiable. Refugee migration normally involves large numbers of people suddenly crossing international boundaries, producing discontinuous and periodic flows, dependent on conditions in the source areas. The bulk of refugees seem to be from rural origins and thus normally lack the skills and an education which might be of use to them in the country of asylum. Refugee migration seems also to be less differentially selective than population movements initiated under more normal circumstances.

Although refugee migration is considered to be a continental phenomenon, the majority of political refugees have come from only nine countries. These are Angola, Burundi, Ethiopia (and Eritrea), Guinea Bissau, Mozambique, Rwanda, Sudan, Uganda and Zaire. Similarly the problems that come with granting asylum to refugees have fallen on a small number of countries and in particular on Tanzania, Sudan, Uganda and Zaire (Rogge, 1977, p.188). Perhaps the greatest problem here is that the host nations are often as poorly developed as the areas that the refugees have just left and the provision of aid and assistance can therefore, prove exceptionally difficult.

8.3 The Situation in the South

The Southern Region has faced similar problems. The first real influx of refugees occurred in 1965 when about 6,000 Zaireans sought refuge in Sudan. They were housed in a camp at Rejaf, some 10 kilometres from Juba and encouraged, successfully, to become self-sufficient. The latest arrivals are Ugandans fleeing from the turmoil that surrounded the fall of Amin. Figures produced by UNHCR in October 1979 indicated that they had catered for over 35,000 refugees, some 12,500 of whom were thought to be living in Juba Town (Table 8.2).

The Southern Region has, however, been more than a host area and during the civil war an estimated 220,000 Southern Sudanese fled from the Region. They sought refuge in neighbouring states, distributed as follows:

Uganda	86,000
Zaire	67,000
C.A.R.	30,900
Ethiopia	35,000
Kenya	500

(Relief, Resettlement & Repatriation, 1974,p.79)

The effect of this exodus of approximately 10 per cent of the Region's population was alarming and illustrates the effect that the war had on population redistribution. At the height of the troubles, in the mid-1960's, the urban centres in the South were almost all completely depopulated and abandoned (Table 8.3) and it was not until the granting of amnesty in 1969 that international refugees and those who had fled to the bush began to return. By October 1973, over 70 per cent of the international refugees were thought to have returned to Sudan, as shown in Table 8.4.

TABLE 8.3 : POPULATION LEVELS IN SELECTED URBAN CENTRES IN SOUTHERN SUDAN

TOWN/YEAR	1963	1965	1973
JUBA	18,000	5,000	56,737
MARIDI	4,000	29	9,618
NZARA	5,000	200	17,230
TAMBURA	2,000	110	8,719
TORIT	3,000	-	14,745
YAMBIO	2,500	-	7,024
YEI	3,000	-	11,696

SOURCE : SOUTHERN REGION ARCHIVES

8.4 Refugee and Returnee Migrants in Juba Town

The recent past and current situation involving international migrants in Juba can be broken down into several component parts, all of which reflect civil disturbances. The refugee problem today is essentially the result of the troubles in Uganda in 1978 and 1979, which culminated in the fall of President Idi Amin. The returnee situation is slightly more complicated. The conditions in the Southern Region in the 1960's caused a large number of people to seek refuge outside the country. The majority of these individuals returned in the early 1970's assisted by a UNHCR programme but there was a large number of Sudanese, particularly in Uganda, who did not return at that time. Many of these refugees became returnees in the late 1970's. UNHCR registered over 22,000 returnees during 1978 and 1979, a figure which is considerably higher than the estimate made in 1974 of Sudanese still outside the country.

The UNHCR and Government estimate of the number of refugees in Juba was 12,500 but the field work carried out for this study has provided an alternative figure. The sample survey indicated that 6.7 per cent of the estimated population of 85,000 were or are refugees, providing a provisional total of 5,700 persons. This figure, however, covers the period from 1962 to 1979 whereas the UNHCR figure relates only to the years 1978 and 1979. More than 60 per cent of the refugees enumerated in the sample gave 1978 or 1979 as their year of arrival in Juba: this represents about 3,500 persons, a figure which is markedly lower than that provided by UNHCR.

Although recent refugee arrivals comprise a sizeable proportion of the whole refugee population in Juba it is worth also considering the earlier arrivals. Table 8.5 provides information collected in the sample, on the dates of arrival of refugees in Juba for a period of over 15 years.

It is immediately obvious that the bulk of refugees arrived in the last three years (69%) but refugee numbers were not inconsiderable in the period 1972 to 1975 when 20 per cent of refugees currently resident in the town made their way to Juba. It is thought that this group was mainly composed of Ugandans leaving their country and seeking safety in Southern Sudan. Prior to 1972 there appear to have been far fewer refugees entering Juba, although it is likely that the arrivals in an earlier period may have returned to their country of origin. A minor peak in 1965 is still evident which probably represents the influx of Zairean refugees, who today comprise perhaps 1.5 per cent of the total urban population.

A similar comparison can be made for returnees, although UNHCR did not record a figure for returnees arriving in Juba in 1978 and 1979 on the grounds that they were not in need of assistance. This study indicates that as much as 14 per cent of the population of Juba are returnees (11,645 persons) of whom approaching 20 per cent arrived in 1978 or 1979. This, however, is only one part of the overall returnee situation in Juba, as illustrated in Table 8.6. The main phase of the returnee movement came in 1972 and 1973 when half of the returnees currently living in Juba left Uganda and the other countries of refuge. The years of 1974 and 1975 showed a continuing but dwindling returnee migration to Juba, while the small amount of repatriation that occurred in the years after 1967 but before 1972 is a reflection of the suspicion shown at the granting of amnesty.

8.5 Migrant Characteristics

There were considerable differences in the age and sex characteristics of the refugees and returnees. Amongst refugees there was a remarkable balance in the sex structure, with almost equal numbers of males and females, but there was a considerable imbalance amongst returnees and a sex ratio of almost three to one (Figure 8.1). This can imply two things:

AGE-SEX PYRAMID FOR REFUGEES AND RETURNEES

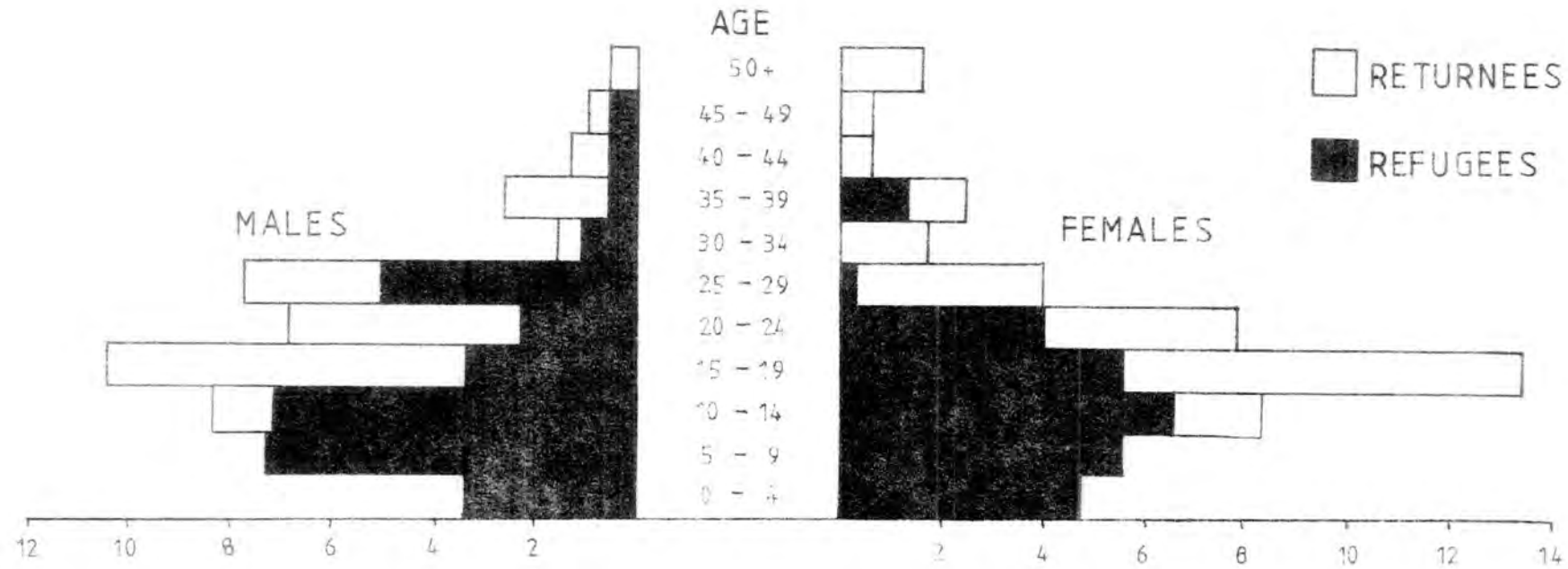


TABLE 8.7 : JUBA SAMPLE SURVEY : EDUCATIONAL ATTAINMENT OF REFUGEES AND RETURNEES AGED 12 YEARS AND OVER (PERCENTAGE DISTRIBUTION)

	EDUCATIONAL LEVEL	MALE	FEMALE	TOTAL
REFUGEES	NO FORMAL EDUCATION	7.7	10.5	9.1
	PRIMARY 1 - 3	12.8	23.7	18.2
	PRIMARY 4 - 6	30.8	28.9	29.9
		23.1	21.1	22.1
	SENIOR SECONDARY	10.3	15.8	13.0
	FURTHER EDUCATION	15.4	-	7.8
	TOTAL	100.0	100.0	100.0
				114 No.
RETURNEES	NO FORMAL EDUCATION	13.9	36.1	19.7
	PRIMARY 1 - 3	4.0	8.2	5.1
	PRIMARY 4 - 6	12.7	23.0	15.4
		21.4	21.3	21.4
	SENIOR SECONDARY	28.3	11.4	23.9
	FURTHER EDUCATION	19.7	-	14.5
	TOTAL	100.0	100.0	100.0
				234 No.

are many likely to be sufficiently well established to be able to send a remittance. On the other hand, approximately half of the refugees reported that they had been in contact, through correspondence, with friends and relations in their own country.

The data on this topic for returnees provides evidence of a far more established network. Nearly 64 per cent claimed to have visited their home area and a further 35 per cent stated that they had sent some form of remittance. Money was the predominant form of remittance, whilst yearly visits were the most common. Contact through correspondence has been high (89%) and it also seems that more returnees than refugees own land or animals in their home area.

Finally, for these particular migrant groups, we can turn to the question of intended future movements. Only 24 per cent of refugees stated that they would definitely leave Juba within the next 10 years and 60 per cent did not intend to leave at all (Table 8.8). Answers to the questions concerning the reasons for these decisions were confused but a desire to return to their home area emerged as the single most important reason. A slightly larger proportion of returnees (35%) stated an intention to leave Juba within the next 10 years, whilst 50 per cent did not intend to ever leave the town. Principal reasons for the decision to stay in Juba centred around employment and the fact that many returnees regarded Juba as their homeland.

This examination of refugee and returnee migrants has illustrated significant differences between the characteristics of these groups and the rest of the migrant population. Age and sex features have varied, particularly amongst refugees, whilst educational and economic characteristics of the international migrants were dissimilar to those of the internal migrants. The differences that have been noted are, to a large extent, a reflection of the nature of the migratory movement, emphasising its forced rather than voluntary aspects. It has also illustrated the importance of international migrants in the overall migratory movement to Juba.

PART FIVE

SECONDARY LITERATURE AND CONCLUSIONS

CHAPTER NINE

MIGRATION

9.1 The Problems of Defining Migration

The topic of migration as the study of the movement of people has long fascinated and engaged schools in many disciplines. They have considered the subject from various angles, notably geographical, sociological, anthropological and economic, its study being relevant to the interests of all the human sciences. But as migration is primarily concerned with the movement of people, in space and in time, over the surface of the earth, the subject remains essentially a geographical one. This is not, however, to the exclusion of other viewpoints, and herein, perhaps, lies one of the problems of defining the subject of migration, that of incorporating its interdisciplinary nature.

Within the sphere of population geography the role of migration is very important and it ranks equally with fertility and mortality as a key factor in determining population change. While fertility and mortality are primarily concerned with the size of a population, and although there are considerable spatial variations in the characteristics, migration remains the primary means for population redistribution and adjustment. In this respect Bogue (1959) noted that,

> "Migration is the major unknown component of population estimates. Within a nation, migration is able to offset completely or to reinforce greatly, the population increase resulting from natural increase."

The impression he creates is that of migration being the dominant factor and that its influence is far stronger than that of either fertility or mortality, given of course, that migration is evident. Migration can also be seen as a symptom of basic environmental and social change, as a means of adjustment for the individual or group, but also as a device for maintaining social and economic balance within communities. Alternatively,

and he pointed out that migration thus defined, omitted considerations of a wide range of topics. The view that he took, and the one which has been adopted for the purposes of this study, was that migration included all types of population movement, from inter-continental to daily journeys, involving a span of durations from permanent to a matter of hours.

Since then there have inevitably been many more attempts at producing a satisfactory definition, attempts which have introduced some additional concepts. Mangalam (1968) stated that

> "Migration is a relatively permanent moving away of a collectivity, called migrants, from one geographical location to another preceded by decision-making on the part of the migrants on the basis of a hierarchically ordered set of values or valued ends resulting in changes in the interactional system of migrants."

Such a definition is more informative and far more complex than earlier ones, including as it does the idea of a decision making process involving perceived and expected situations. The inclusion of such items means that beyond the study of population redistribution and relocation, migration is concerned with the questions of how and why population movement occurs. Such questions, however, are difficult to translate into quantifiable terms or even identify correctly, as they are the outcome of human decisions, often based less than rationally on incomplete information.

To most minds none of these definitions is totally acceptable, primarily as a result of their restricted nature. Zelinsky (1971) in recognising the growing complexity of the subject and the subsequent difficulties in providing a suitable definition, acknowledged that mobility was the most general concept in migration, but that migration required more restricted terms of reference which would include both temporal and locational criteria. As such he could write that:

> "when a truly serviceable index of mobility is fabricated, it will certainly be composite, bringing together measures of several dimensions."

regards as being of greater demographic significance than internal migrations, should in theory, be the easier for which to collect statistical data. Crossing an international frontier normally involves leaving forms as as records, but despite this, statistics on international migration are poor. In Africa many borders are not adequately policed and border movements pass unnoticed and unrecorded.

International migration the world over is rapidly increasing as transportation developments link the farthest parts and make most areas relatively accessible. But hand in hand with this development have come stricter immigration laws, limiting the available choices of destination, particularly for permanent movements. Sudan, for example, prohibits entry to Israeli nationals, to all nationalities with Israeli visas and to all South African passport holders. Although possibilities for world wide migration have increased, migratory movements have lost their one time spontaneity and have assumed a much more planned nature.

Internal migratory movements, that is ones within international boundaries, are theoretically more difficult to assess and enumerate. However, modern censuses in Western countries provide data on a regular basis which can answer questions concerning internal migration, through comparison with past data. It is common, for example, to compare place of birth and place of present residence. In developing countries, where census data is often dated and/or inaccurate, sample surveys can be used to compile information on migration.

Just as international migration has increased, so too has internal migration. Certain directional trends have been identified, the most important of which appears to have been rural to urban, although movements from rural to other rural, and urban to other urban areas have also been of some significance. It is believed that the growth of many Third World cities, which has been so rapid in the past few decades, has been the

The impact of the slave trade was probably greatest in West Africa from where it is believed that about 15 million people were removed.

The colonial period brought about vast increases in the amount of economically motivated migration on the continent. The main feature of this period was the initiation of the circulatory migrant labour system, in which migrants, largely males, participated in both town and village life. This system is still active today and forms part of the rural to urban population movement.

Favourable views of this system see Africans as people trapped between the traditions of the tribe and the demands of a monetary economy, with participation in the migratory labour system as the most efficient compromise. Some economists hold the belief that these systems bridge the gap between the primitive and modern economies, as their views are based on the assumption that labour migration arises through the efforts of Africans to adapt to their existence within a dual economy. Alternative arguments point out that Africans have had little choice but to participate in this system and the migratory labour market is anything but a free market. Irrespective of viewpoint it is a fact that migration, either circulatory or permanent, to the urban, economic and industrial centres is the dominant form of migration on the African continent today.

While the colonial era saw the establishment of internal labour migration in Africa south of the Sahara, a different form of migration was introduced in the more northern states and particularly in those bordering on the Mediterranean Sea. In a recent study of Algeria, Lawless (1977) has illustrated the extent and impact of labour exportation to France on the home country.

The independence decades have witnessed no decrease in the trend of rural-urban migration and for many North African countries they have brought an increase in labour exportation, largely to the oil rich states of

studies witnessed the development of explanatory models in migration. Masser and Gould (1975) have identified four types of model believed to be useful in the context of African migration studies : systems models, economic models, models of spatial interaction and sequential models. In spite of their titular differences they are all concerned with the spatial analysis of population mobility and its relation to social, economic and environmental factors.

Systems models, such as the one developed by Mabogunje (1970), considered the factors which control the flow of migrants, but, being largely theoretical and non-predictive, their value lay in the analysis of past situations. Work in the sphere of economic models has been dominated by the thoughts of Todaro (1969, 1970, 1971) and the attempts to explain why rural-urban migration contrives to occur in the face of rising urban unemployment. These models have tried to incorporate variables reflecting the decision making process and, wishing to be predictive, have concentrated on the expected rather than the observed. They are restricted in their outlook, excluding non-economic factors and have proved difficult to test quantitatively.

Spatial interaction models have perhaps proved the most useful. Working on the assumption that migration is determined by distance and regional variations in population, income, education and the level of urbanisation, the findings of these models seem to support the behavioural assumptions of migration theory. Sequential models have been concerned essentially with temporal aspects.

This study of recent migration into Juba Town has basically followed the ideas expressed in the spatial interaction models. It is felt that this type of model is the most geographically oriented, in that it considers variables other than just economic ones. Nor is the situation in Juba suitable for examining the applicability of economic models, and

TABLE 9.1 : TOTAL POPULATION, AVERAGE ANNUAL GROWTH RATE, AND NET MIGRATION RATE FOR SELECTED URBAN AREAS IN THE SUDAN 1955/56 - 1973

URBAN AREA	POPULATION			AVERAGE ANNUAL GROWTH RATE		ESTIMATED ANNUAL NET MIGRATION RATE	
	1955/56	1964/66	1973	1956-65	1965-73	1956-65	1965-73
GTR.KHARTOUM	264,790	428,840	798,593	6.1	6.8	3.7	4.4
PORT SUDAN	47,562	78,940	130,652	5.7	5.6	3.4	3.2
KASSALA	40,612	68,130	106,602	5.7	5.0	3.3	2.0
WAD MEDANI	47,677	63,600	118,000	3.2	6.9	0.8	4.5
EL OBEID	52,372	62,560	87,984	1.9	3.3	0.5	0.9
ATBARA	36,298	48,250	64,226	2.9	3.2	0.5	0.8
GEDAREF	17,537	45,090	67,482	9.3	4.4	6.9	-
EL FASHER	26,161	40,500	50,376	4.7	2.4	2.3	-
KOSTI	22,688	37,860	66,000	5.9	6.2	3.5	3.8
JUBA	10,660	19,763	58,244	7.1	12.4	4.7	10.0
WAU	8,009	14,848	54,169	7.1	15.0	4.7	12.6
NYALA	12,278	26,160	59,089	5.2	9.2	2.8	6.8
EL GENEINA	11,817	20,470	38,244	8.2	6.8	5.8	4.4
EN NALWA	16,499	19,770	27,627	6.0	3.6	3.6	1.2
MALAKAL	9,680	17,947	37,780	7.1	8.3	4.7	5.9
U.RUWABA	7,805	14,210	24,168	6.7	5.9	4.3	3.5
DILLING	5,596	11,180	19,141	8.0	5.9	5.6	3.5

SOURCE: OSMAN EL HASSAN M. NUR

(NB FIGURES FOR JUBA VARY ACCORDING TO SOURCE)

network had been in existence. Wider relatives constituted a high proportion of household members, and it would seem that the presence of relatives or friends already in Khartoum may have had considerable influence in the decision making process of the more recent migrants.

The ILO mission also examined certain characteristics of the in-migrants: age, sex, education and employment. Of the arrivals to Greater Khartoum in the five years before their survey, over 60 per cent were males, thereby supporting findings elsewhere and the belief that males dominate migratory streams. Similarly, their recording that nearly 69 per cent of males were aged between 15 and 29 years is also compatible with other findings. In terms of education the ILO report stated that, of their sample, 40 per cent had received no formal education and that a further 27 per cent had completed only primary school. While these levels of education for the in-migrant population might appear to be low, they were, in fact far above the level of education found in the provinces of origin. This would seem to indicate that it has been the young, better educated males who have migrated to Khartoum. But of those who had been employed prior to migration to Greater Khartoum, 73 per cent had been involved in agricultural activities. Educational attainment was found to have a positive influence on income earning potential (Table 9.2).

As with the study of migration into Juba, the ILO household survey was concentrated heavily on the urban receiving end of the migration stream and thus, as experienced in Juba, some information concerning the motivations behind migration was missed. The migratory stream to Greater Khartoum was, it seems, prompted by economic factors, although several other factors were identified as being of importance in the decision making process. They all reflected the perceived qualities of the rural environment and the qualities expected of the urban environment and included population pressure, lack of job opportunities in rural areas, failure of rains, low agricultural

males doubtless preceded their families to arrange accommodation and to begin the search for employment. The ILO report noted that an influential factor in this trend may have been the cheap land policy that the government was then following in the Greater Khartoum area.

Much has been written elsewhere on the matter of expected earnings and the time lag involved before employment is obtained, questioning the information that potential migrants act upon and the nature of the urban system that the new migrant enters. For Greater Khartoum, the available figures seem to indicate that, while migrants do not enter into particularly well paid jobs, the wages obtained are an increase over their previous rural earnings. It also appears that the level of wages increase with time spent in the urban economic system. This would seem plausible in the case of Greater Khartoum where the ILO reported that unemployment was less than 3 per cent, indicating that new labour was being absorbed and not remaining idle as is often the case. This is all very well, but, as the ILO report remarked,

> "if the earnings differential is the dominant factor behind the migratory movement from the northern provinces towards Greater Khartoum, then why is it that the three provinces in the South contribute so few migrants? The South is equally poor and even worse off although there is no lack of rain as compared with the north."

The answers to this question, as the report pointed out, would seem to be in distance considerations, a lack of information and initial support, lower levels of education, together with political, cultural and religious differences.

Some studies of Southern migrants in Greater Khartoum have been made, and two are briefly considered here. Rehfisch (1962) undertook work of this nature, concerned predominantly with Dinka migrants to the capital. The conclusions he reached again portray the similarities that seem to exist in various migration streams. A majority of migrants were found to

clusters in the urban residential pattern, reflecting kinship relationships and the perceived need for security.

Employment seeking, further education and joining the family and/or relatives were again found (Oberai 1975) to be the main reasons behind recent migration to the Three Towns. It would seem that these three factors have been the motives of the bulk of migrants to the capital, reflecting the role of Khartoum and the disparities that exist between that centre and much of the rest of the country. It must be assumed that the growth of other urban centres in Sudan has been the result of similar causes.

The rural to urban movement that focuses on Greater Khartoum has possessed certain characteristics, similar to those that have been demonstrated in other African countries. The predominance of young males has been evident. Educational levels would appear to have had a significant influence on employment type and wage levels. A majority of migrants appear to have moved to Khartoum for largely economic reasons, primarily to earn money for a specific purpose, and in response to the perceived existence of better employment opportunities and of rural - urban income differentials. To a large extent, the expectations of the former may have been realised, while those of the latter may have proved less satisfactory than anticipated. One characteristic that does not appear to have been present to any significant degree is the circular nature of many migratory movements found in Africa south of the Sahara. While it is probably the aim of many migrants to return home at some stage, migrants to Greater Khartoum do not appear to have journed home at periodic or frequent intervals. A majority, it seems, are essentially long term stay migrants.

In Kenya too, rural-urban migration has been of very significant proportions in recent years, involving a rapid movement of people towards the larger towns, such as Nairobi and Mombasa, and being part of a much wider inter-regional migratory movement. In the period 1962-69 the average rate of

males had left their wives and families behind.

TABLE 9.3: REASONS FOR MIGRATION TO NAIROBI AMONG MALE URBAN MIGRANTS AGED 15-50 YEARS BY EDUCATIONAL ATTAINMENT AND AGE GROUP 1970 (%)

REASON	EDUCATION		AGE		TOTAL
	PRIMARY	SECOND-ARY	15-22	23-50	
COULD NOT FIND WORK	82.8	76.1	79.9	82.6	80.9
LAND NOT AVAILABLE	3.5	2.1	1.4	5.2	3.2
COULD NOT ENTER SCHOOL	2.9	8.1	7.3	0.9	4.4
SCHOOLS NOT AVAILABLE	0.5	0.7	0.7	0.4	0.6
LACK OF SOCIAL AMENITIES	-	0.7	0.4	-	0.2
OTHER	10.3	12.3	10.3	10.9	10.7

SOURCE: HUMAN SETTLEMENTS IN KENYA

It is possible to continue such comparisons with reference to studies from Uganda, Ethiopia and Egypt but to do so would be largely repetitive. One point of this chapter has been to demonstrate that migration, although a well documented and researched subject still contains unsatisfactorily defined areas, and that as a result there remains a great deal of work to be done on the topic. However it was not the objectives of this chapter to develop further ideas on definition or classification. A second point nevertheless was to indicate that as there appear to be certain common characteristics in migrations and migrants, these might be used as base points in further work.

on external aid. During the last decade Juba Town has been the focus of much of the activity that has taken place in the Southern Region. The population has grown rapidly from around 50,000 in 1972 to almost 100,000 in 1980 and much of this growth would appear to have been the result of in-migration. The outcome of this is that Juba is now characterised by extremely poor conditions and is perhaps best considered as an overgrown African village rather than an urban settlement. The growth of the population has meant that existing resources have been placed under considerable strain. In particular the education system has become overloaded and inadequate, while the employment market has been completely outstripped by the growth in the economically active population. A result of this has been the growth of small scale, informal enterprises.

Many of the problems that Juba Town is now facing are unquestionably the result of the rapid growth of the population and the in-migrant group within this population. The objective of this study was thus to look at this recent movement to Juba, although within this overall aim there were a number of individual objectives. The first was to assess the size of the in-migrant population in the town, whilst others included the answers to the questions who?, how?, when?, where from? and why? The work undertaken by the PMU and for this study indicated that about 80 per cent of the population (aged 12 years and over) had not been born in Juba and it was this section of the population that was analysed further, with respect to migration.

The material collected on migration was divided into two parts and concerned firstly the migratory movement and secondly the migrant population. The work on the migratory flow looked initially at direction of movement. The principal type of migration was rural to urban : about

15 to 29 cohort, in the economically active group, was predominant in the latter. As far as education was concerned, the results were somewhat inconclusive, in that it was not clear whether it was the better or lesser educated persons who were more likely to migrate.

Considerable emphasis in this study was placed on the reasons for migration to Juba and the results that emerged indicated that economic reasons were by far the most important, amongst male migrants at least, although there were some variations with age. Of the reasons given 'looking for employment' was the most frequently stated. Family reasons were far more dominant where female migrants were concerned.

The last chapter of this study considered some aspects of the topic of migration as a whole and served, as did the initial section, to place the main body of the work in a wider context. It was placed at the end of the study to enable comparisons to be made with the results on migration and to emphasise that the objectives of this study were to measure migration to Juba and to analyse such characteristics as emerged rather than to test any specific hypotheses.

Conclusions

This study has covered a number of aspects of the recent migration to Juba and an overall picture has been presented. Within this general framework there has been an underlying theme, that of the growth of Juba and the role of migration in that growth. The results of this study would seem to indicate that the town is likely to continue to expand and that migration is going to remain largely responsible for this expansion.

It has not been the purpose here to put forward specific proposals

in the town, the relative number of available employment opportunities declines. This situation is most clearly illustrated below:

	1973	1979	% increase per annum
Total Employed	15,467	21,100	+ 5.3
Population of Juba	56,723	84,000	+ 6.8
Total Unemployed and seeking work	4,146	7,200	+ 9.7

Source: PMU

The number of unemployed persons is now increasing much faster than the overall population of Juba and the number of employment opportunities, and it can be suggested that in-migration has been, to a large extent, responsible for this situation. It is difficult, therefore, to envisage how overall conditions in Juba are going to improve, particularly if in-migration continues at its present rate and no measures are adopted to cater for this situation.

APPENDICES

APPENDIX A GUMBA

In addition to the main sample survey in Juba Town a second, less extensive survey, was conducted in Gumba. This settlement area is located across the river on the east bank of the Nile, although it is very much an extension of the main urban area and a good example of urban sprawl developing around Juba. The results of the survey are presented here in brief. They can be thought of as additional to the main results, but at the same time there are a number of contrasts between the characteristics of the populations of Gumba and Juba Town.

Gumba was defined as the area lying across the recently constructed bridge, stretching from the river to the road junction for Mongalla and Torit. The settlement is essentially linear in form and is thought to contain about 630 tukls. There was no need for a division of building type as in the main survey. Some 25 tukls were selected on a systematic and random basis and the residents interviewed; this provided a 4 per cent sample of the population.

The first two differences that appeared between Gumba and Juba concerned tukl occupancy rates and the sex ratio of the population. Occupancy rates in Gumba were estimated to be 4.6 persons per tukl, which is considerably higher than for the town itself (3.5). In terms of the sex ratio, the population of Gumba showed a complete reversal of the strong male bias shown to exist in Juba with a ratio of 74/100 compared with 143/100 for the town itself. The figures obtained during the study of daily migration at the bridge, when large numbers of females were recorded as entering the town, would seem to support this finding.

A.1 Age characteristics

The population of Gumba seems to be very young indeed. Some 47 per cent were below the age of 15 years. In contrast there were less than 10 per cent of the population aged over 40 years. (Table A.1)

A.5 Employment

The results recorded in Gumba were similar to those found in the main town. Slightly less than 50 per cent of males (aged 12 years and above) stated that they were employed, whilst again female employment levels were very low. It is probable, once more, that a large number of females could be engaged in market activities. Amongst males, the bulk of employment types were semi-professional and technical.

Asked why they were unemployed, a majority of males stated that schooling was the reason, whilst a lack of qualifications was also an important factor. Amongst females, two principal reasons were given to explain unemployment, the duties of being a housewife and a lack of qualifications.

A.6 Spatial origins

The findings at Gumba concerning the origins of the population reemphasised the results of the main survey. Over 90 per cent of the sample respondents were not born in Juba; this characteristic was especially high amongst females. The specific origins of the in-migrants, however, were markedly differerent from those noted for Juba. More than 50 per cent had come from one district, Torit, while a further 25 per cent had been born in Uganda (Table A.5). A further characteristic was the non-urban nature of the majority of birth places.

A.7 Reasons for in-migration

Amongst males there seemed to be two principal reasons for the decision to migrate to Juba. Economic reasons accounted for 48 per cent of the sample, with the single motivation of looking for employment stated by 39 per cent of the respondents. Secondly there were security reasons : nearly 22 per cent stated that they were refugees from Uganda, while a further 9 per cent reported that they had come to Juba for safety during the civil war in the south (Table A.6).

TABLE A:1 AGE CLASSES : GUMBA (%)

AGE	MALE	FEMALE
0 - 4	18.4	21.2
5 - 9	14.3	13.6
10 - 14	14.3	12.1
15 - 19	12.2	12.1
20 - 24	4.1	7.6
25 - 29	8.2	15.2
30 - 34	12.2	9.1
35 - 39	4.1	3.0
40 - 44	2.0	3.0
45 - 49	8.2	3.0
50+	2.0	-
TOTAL	100	100
UNDER 12	42.9	37.9

TABLE A:2 MARITAL STATUS : GUMBA (%) (POPULATION AGED 12 YEARS AND OVER)

	MALE	FEMALE
SINGLE	39.3	29.3
MARRIED	60.7	58.5
DIVORCED	-	4.9
WIDOWED	-	7.3
TOTAL	100	100

TABLE A:5 SPATIAL ORIGINS : GUMBA (%) (POPULATION AGED 12 YEARS AND OVER)

PLACE OF BIRTH	MALE	FEMALE
JUBA	17.9	2.4
ELSEWHERE	82.1	97.6
DISTRICT		
TORIT	65.2	42.5
MARIDI	4.3	2.5
JUBA	8.7	12.5
YEI	4.3	5.0
YAMBIO	-	2.5
NON-SUDANESE	17.3	35.0

TABLE A:6 REASONS FOR COMING TO JUBA (POPULATION AGED 12 YEARS AND OVER)

REASON	MALE	FEMALE
TO JOIN FAMILY	4.3	12.5
CAME WITH FAMILY	4.3	35.0
VISIT	8.7	7.5
LOOK FOR EMPLOYMENT	39.1	2.5
INCREASE LIVING STANDARD	4.3	2.5
JOB TRANSFER	4.3	-
MARRIAGE	-	5.0
CONTINUE EDUCATION	8.7	7.5
REFUGEE	21.7	25.0
SECURITY IN CIVIL WAR	4.3	2.5
TOTAL	100	100

APPENDIX B

THE POPULATION OF JUBA : A RE-ESTIMATION

In June 1980 an attempt was made to re-estimate the population of Juba Town. Again using the Mefit maps from January 1977, 50 areas were selected on a systematic and random basis, and the buildings that existed in 1977 counted. The same 50 areas were then located on the ground and the buildings that were present counted. At a number of buildings within each area questions were asked in order to determine revised occupancy rates. The results were as follows :

1. 1977 - Number of Tukls 430
   - Number of Square Buildings 158

2. 1980 - Number of Tukls 474
   - Number of Square Buildings 168

3. Percentage change 1977 to 1980 - Tukls 10.2%
   - Square Buildings 6.3%

4. Using the building totals of 16541 (tukls) and 4147 (square buildings) and calculating the total change over the 3 years the new figures of 18228 (16541 + 1687) for tukls and 4408 (4147 + 261) for square buildings were derived at.

5. Occupancy rates were determined to be 3.8 persons per tukl and 5.9 persons per square buildings. (In 1978/9 these had been 3.58 and 5.29 respectively).

6. The estimate of population in 1980 was therefore 95,196, and more than 98,000 if that of Gumba is included.

PART THREE

Information and Contact

1. Did respondent know someone in Juba before coming to Juba.
2. Does respondent have contact with home area.

    a) Visit
    b) Remittance
    c) Correspondence
    d) Animal Ownership
    e) Land Ownership

PART FOUR

Educational/Economic Characteristics

1. State Educational level obtained
2. Is respondent employed/unemployed
3. State respondent's occupation (if employed)
4. Give reasons for unemployment (if unemployed)
5. State type of enterprise at which respondent is employed
6. State salary per month
7. State hours worked per week

2. AIRPORT/UNDP ROAD

TIME/TYPE	7-8AM	8-9	9-10	10-11	11-12	12-1	TOTAL
WOMEN CARRYING GOODS	8	5	3	2	2	4	24
MEN " "	7	3	1	6	1	2	20
WOMEN WITHOUT GOODS	17	16	9	10	5	4	61
MEN " "	28	11	14	21	8	2	84
VEHICLES	2	2	1	2	2	2	11
WOMEN IN VEHICLES	6	2	6	3	4	1	22
MEN " "	34	7	27	36	14	18	136
TOTAL PERSONS	100	44	60	78	34	31	347

4. ISLAND/DOCKS

TIME/TYPE	7-8 AM	8-9	9-10-	10-11	11-12	12-1	TOTAL
WOMEN CARRYING GOODS	59	24	34	2	-	4	123
MEN " "	27	3	10	6	3	10	59
WOMEN WITHOUT GOODS	6	7	4	7	3	2	29
MEN " "	13	10	10	4	5	8	50
NO. OF CANOES	10	6	7	3	2	5	33
TOTAL PERSONS	105	44	58	19	11	24	261

BIBLIOGRAPHY

AHMED, A.G.M. (Ed)(1976), Some Aspects of Pastoral Nomadism in the Sudan, Khartoum.

AKOL, J.O.(1976), A Geographical Survey of the Nature and Patterns of Refugee Migration in Agrica, MA (unpublished) University of Manitoba.

ALIER, A. (1973), "The Southern Sudan Question", in Wai, D.M. The Southern Sudan, London.

BARBOUR, K.M. (1961), The Republic of the Sudan, London.

BIRKS, J.S. (1978), Across the Savanna to Mecca : The Overland Pilgrimage Route from West Africa, London.

BIRKS, J.S. & SINCLAIR, C.A. (1978) Human Capital on the Nile : Development and Emigration in the Arab Republic of Egypt and the Democratic Republic of the Sudan (ILO Migration for Employment Project), Geneva.

BOGUE, D.J. (1959) "Internal Migration" in Hauser, P.M. and Duncan, O.D. The Study of Population, Chicago.

BUSHRA, E.S. (1973) "The Definition of a Town in the Sudan", Sudan Notes and Records, Khartoum.

CLAESON, C.F. & EGERO, B. (1971) "Inter-regional Migration in Tanzania", African Population Conference.

CLARKE, J.I. (1972) Population Geography, Oxford.

CONNELL, J. DASGUPTA, B. et al (1978) Migration from Rural Areas : The Evidence from Village Studies, Oxford.

DAVIES, H.R.J. (1964) "The West African in the Economic Geography of the Sudan" Geography, 49.

DEMOCRATIC REPUBLIC OF THE SUDAN (1971), Country Statement (African Population Conference, Vol.4).

DEMOCRATIC REPUBLIC OF THE SUDAN (1974), Final Report on Relief, Resettlement, and Repatriation Commission Activities, May 1972 - April 1974, Juba.

DEMOCRATIC REPUBLIC OF THE SUDAN, DEPARTMENT OF STATISTICS, First Population Census 1955/56 Vol. III, Khartoum.

DEMOCRATIC REPUBLIC OF THE SUDAN (1978) Population Distribution, Migration and Urbanisation in the Sudan, Khartoum.

DEMOCRATIC REPUBLIC OF THE SUDAN (1977) Regional Ministry of Finance, The Six Year Plan of Economic and Social Development, 1977/78 - 1982/83, Juba.

JENKINS, S.J. (1981) The Informal Sector of Juba, Southern Sudan, (PMU Research Paper No. 1), Juba.

KIRKHAM, L. (1980) Data Collected on Education in Southern Sudan (unpublished).

KOSINSKI L.A. & PROTHERO, R.M. (1974) People on the Move : Studies on Internal Migration, London.

LAWLESS, R.I. (1978) International Migration Project, Country Case Study, Algeria, Department of Economics, Durham University, Durham.

LEE, E.S. (1966) "A Theory of Migration", Demography, vol. 3.

LEES, F.A. & BROOKS, H.C. (1977), The Economic and Political Development of the Sudan, London.

LIPTON, M. (1977) Why Poor People Stay Poor : Urban Bias in World Development, London.

MABOGUNJE, A. (1970), "Systems Approach to a Theory of Rural-Urban Migration" Geogr.Annal.2.

MAHGOUB, M.A (1974) Democracy on Trial. Reflections on Arab and African Politics, London.

MASSER, I. & GOULD, W.T.S. (1975) Interregional Migration in Tropical Africa, London.

MATHER, D.B. (1956) "Migrations in the Sudan" in Steel, R.W. & Fisher, C.A. (Ed.) Geographical Essays on the British Tropical Lands, London.

MANGALAM, J.J. (1968) "General Theory in the Study of Migration" International Migration Review 3.

MILLS, L.R. (1975) Notes for the Study of the Manpower Situation in the Southern Region, Sudan (Paper presented at the workshop on the Southern Region's development training needs), Juba.

MILLS, L.R. (1977), Population and Manpower in the Southern Sudan (Report prepared for the ILO and the Regional Ministry of Public Service and Administrative Reform, Southern Region) Juba.

MILLS, L.R. & GARVEY-WILLIAMS, F.H. (1976) Education in the Southern Sudan (Report on The Education System in the Southern Region and Proposals for its Development during the Six Year Development Plan of the Democratic Republic of the Sudan 1977/78-1982/83), Juba.

MINISTRY OF LANDS AND SETTLEMENT (1978) Human Settlements in Kenya : A Strategy for Urban and Rural Development, Nairobi.

NUR, O.M.M. (1974), "Urban Growth and Urbanward Migration in the Sudan", Proceedings of the First National Population Conference, Khartoum.

UNITED NATIONS (1964) Population Growth and Manpower in the Sudan. A Joint Study by the United Nations and the Government of the Sudan, New York.

UNITED NATIONS (1970) "Methods of Measuring Internal Migration", Economic Social Affairs.

UNIVERSITY OF JUBA (1978), Report on the Establishment of the College of Medecine, Juba.

WAI, D.M. (Ed) (1973) The Southern Sudan, London.

WILSON, G.E. (1954), The Analysis of Social Change, based on observations in Central Africa, Canterbury.

ZELINSKY, W. (1971), "The Hypothesis of the Mobility Transition", Geographical Review 61.