ENVIRONMENTAL, SOCIO-ECONOMIC AND POLITICAL IMPACT
OF THE WAR-DISPLACED PEOPLE: THE CASE OF THE
SOUTHERN SUDANESE IN KHARTOUM

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ABSTRACT

This study attempts to assess the environmental, socio-economic and political impacts of the war-displaced people from Southern Sudan living at the outskirts of Khartoum City in the following selected settlements: Bentiu, Nisba and Zagalona in the Three Towns: Khartoum, Khartoum North and Omdurman, respectively.

The morbidity and mortality rates were studied and found to be high. The methods of collection and disposal of wastes in the settlements were considered and found to be the main cause of the high morbidity and mortality rates. In general, the study revealed that unhygienic behavioural practices observed in the displaced settlements had tremendous impacts on the spread of diseases and general health situation in addition to the proximity of these camps to the garbage disposal areas.

The methods of water collection were mainly by donkey carts leading to high cost and consequently consumption rates were low.

It was found that the majority of the displaced in Bentiu, Zagalona and Nisba were Dinka from Bentiu in Upper Nile Region and Aril in Bahr al Ghazal. There were only few displaced from Equatoria. These people were found to have come to Khartoum at different times.

Most of the households heads have low monthly incomes. They are mainly engaged in low-paid jobs. Wood, bamboo,
cartons and sacks are the predominant building materials in the selected settlements and most of the families live in one-roomed "Takul" tent. The average family size which is 6 persons is considered in relation to the number of rooms occupied and the prevalence of diseases. The study revealed that wood is the main cooking fuel used by the displaced population and its implication was found to be environmentally destructive.

Politically, the government and the urban people showed a negative attitude towards the displaced people. On the other hand, it is found that the displaced have no interest to stay permanently in Khartoum once the war steps. Therefore, it is recommended that a lasting peace will only bring the displacement and its adverse impacts to an end.
عندما تكون هذه الدراسة إلى جانب التطورات البيئية والاجتماعية والسياسية للقرن الأخير، فإن نهج المدارس التي ركزت على النجاح في مساعدة الأهلة الذين يعيشون في الأماكن النائية في إحدى الأنظمة أو الطرق جزئياً بالنسبة للمؤسسات، فإن النتائج يمكن أن تكون أقل قدرة على تطوير مناطق الحضر، وزيادة بالبرامج البيئية، الطرق的结果 الأقل، والطرق التي تم تطويرها في المجالات المحيطة بها، قد تكون مرتبطة ببعضها البعض.

بالمثل، وقد تم استخدام بعض دراسات الرياضيات في ملاحظة مخالفات هؤلاء الأنفس، وجد أن النتائج في هذه الدراسات في المجالات البيئية وغير البيئية، ومن ناحية أخرى، كانت دراسات جينية في الأسلوبية غير النسبية للبيئة في مساحات التأجير، ومعناها ومساراتهم، والتي تعود لجلبها، وقد تحقق تأثيرات كبيرة على التجارب المكرونة وصورة المادة الفعلية، هذه بالطريقة إلى أن نفهم النجاحات الناجحة.

ف entidad مدارس البناء في الأنظمة المتناقضة.

باستخدام الدراسة أيضاً أن هناك الجهد على المراقبة، ومن المهم عبر خطوة العمل، مما يزيد من ارتفاع الكفاءة، وبالتالي نقلنا للاستهلاك.

إذا، فقد نقلنا إلى الدراسة أن الأدلة الناجحة إلى أن تأتي الدراسة، ووضع الأصغر في النطاق، ومن الناحية الأخرى، أن هناك إيجابية عند البرتقالي من النجاح من النجاح المستقل، وقد بدأ في دور الناجحة الناجحة، ونحتاج إلى تشكيل النجاحات المتاحة.

يركز معلم أداء النجاح في خروج شعبيحلة، وهم يعدون أوراقاً في وثيقة عبر إكلاً، يمكن أن يكون النجاحاء من
مباذ البناد من القسم، القلق، الذروة والجوانب في مصادر التأزيم المختلفة للدراسة، يتحول وميض الأسمر في "نكل" من فرصة واحدة بعمق كل خيبة، ويبلغ متوسط حجم إجمالي مساحة الميدان، حيث تؤثر هذا الجهد في مثال يغلب الغرور الذي يجب تأهله وإعتبار الأمراء. كذلك، كسائر الدراسات، أن حزم الرغبة هو العدد الرئيسي للظاهرة للغب في هذه المستويات، وقد وجد أن نتاج هذا العرض ضرورة مبتسامة.

ومن ناحية سياسية، أظهرت الحكومة والسكان المحليون قدرة سلبية نحو حركة التأزيم، ومن ناحية أخرى، أن التأزيم لا يكون النفي بحجة مستدامة في الخطأ، حتى ما تتوارث الحروب سوف يرغمون ما سلادمهم.

لذا يجب أن نحمي السلام الدائم حتى يكون الخيار للمبادأة

مع الآثار السنية للتوزيع وكذلك التأثير عليه كليّة.
I owe deep gratitude to so many people for their help with this work but it is not practicable to list all of them except the pre-eminent.

I would like to express my special gratitude and deep appreciation to my supervisor Dr Paul Wani Gore for his unfailing guidance, encouragement, discussions and comments during the course of the study.

Thanks are due to Dr Yagoub A. Mohamed who gave his time to orient my thoughts in the preparatory stages of the study and who offered comments based on his expertise and experience.

I acknowledge indebtedness to Professor Manoun D. El Khalifa and Dr. Yagoub A. Mohamed of IES for their financial and material assistance.

Sincere thanks are due to my fellow colleagues and workers of IES for their brotherly spirit which made the study conditions conducive.

I would like to express my thanks to all those who have contributed in one way or another to the fulfillment of this thesis.

Finally I acknowledge my great debt to Mr E. M. El Sheikh and Miss Samia A. Wahab for tying this manuscript.
DEDICATION

To my wife and children whose loving, care, tenderness and inspiration have blossomed this work into reality - I dedicate this Thesis.
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CHAPTER ONE

INTRODUCTION

1.1. Background

Since the onset of the war in the Southern Sudan, 1983, there has been a large flow of Southern Sudanese citizens into the three towns of Khartoum, Khartoum North and Omdurman and other parts of Northern Sudan. The number of displaced people has grown steadily with the intensification of the war, especially from the areas bordering the Northern Sudan. According to official estimates more than one and half million Southern Sudanese have come to Khartoum during the last six years, because of the war. An equivalent number are also found in the major towns of the South and in other parts of Northern Sudan (Table 1).

This massive influx of the displaced to Khartoum has increased the already overburdened capital with a large number of migrants who come to seek for work, and is unable to cope with the new influx.

Large settlements of displaced southern Sudanese have sprung up on the periphery of the capital normally attached to an already established slum settlements. The majority of the displaced live in squatter conditions near the illegal settlements where basic services are non-existent.

Sudan is presently in a precarious economic situation.
Table 1. Estimated Displaced population in Sudan 1988-1990 (in the National Capital and the main towns of the Regions).

<table>
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<tbody>
<tr>
<td>Equatoria</td>
<td>107,000</td>
<td>338,645</td>
<td>378,402</td>
<td>420,769</td>
</tr>
<tr>
<td>Upper Nile</td>
<td>90,000</td>
<td>92,000</td>
<td>339,683</td>
<td>50,368</td>
</tr>
<tr>
<td>Bahar el Ghazal</td>
<td>70,000</td>
<td>147,000</td>
<td>200,000</td>
<td>180,000</td>
</tr>
<tr>
<td>Kordofan</td>
<td>69,860</td>
<td>130,000</td>
<td>140,000</td>
<td>174,853</td>
</tr>
<tr>
<td>Darfur</td>
<td>163,000</td>
<td>20,000</td>
<td>23,000</td>
<td>63,111</td>
</tr>
<tr>
<td>Central Region</td>
<td>94,500</td>
<td>55,000</td>
<td>128,953</td>
<td>79,323</td>
</tr>
<tr>
<td>Northern Region</td>
<td>-</td>
<td>165,000</td>
<td>-</td>
<td>219,474</td>
</tr>
<tr>
<td>Khartoum</td>
<td>60,000</td>
<td>167,100</td>
<td>180,000</td>
<td>180,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1040,000</td>
<td>551,845</td>
<td>312,203</td>
<td>345,021</td>
</tr>
</tbody>
</table>

The continuing unresolved war in the South is tearing the political, economic and social fabric of the country. It has not only diverted the country's scarce resources into defence, but has also stopped many of the country's development projects and other activities in the Southern Sudan which could otherwise have contributed to economic growth. These development projects include oil exploration in Southern Sudan and other parts of the country, Mongalla agro-industrial project, Jonglei Canal, Aweil rice project, Tonj Kenaf project, Upper Talanga Coffee and tea projects, etc. The war has also been cited as the main cause of the current problems in the Sudan.

The war in the South, which is in its eighth year, has settled into a long-term low-intensity, brutal conflict. Vast areas of the South have been devastated by both war and famine. Thousands of families have fled the hinterlands to seek food and safety in the towns protected by the government. The principal cities of the South are now host to thousands of rural people living in spontaneous settlements and relief camps at the edge of the towns. Food supplies to these areas are marginal and tenuous and it is clearly observed that many people who have been unable to obtain food have to trek northward (Fig. 1).

The conflict has also intensified in the areas along the borders between the Northern and Southern regions and in Juba, the capital of the South. Thousands of displaced people have fled northward from areas of the south
Fig(1) Map of Southern Sudan showing:
- Administrative division
- Flow of displaced population

KEY
- External flow
- Internal (inter-provincial and regional movements)

Source: Adapted from Survey Department.
especially Bahr el Ghazal and Upper Nile. Some have fled to
the neighbouring countries, i.e. Ethiopia, Uganda, Kenya
and Zaire. The fighting does not affect southerners only.
In recent months, the border towns of Kormuk and Ossen in
the Blue Nile Province were attacked resulting in
displacement of a great number of citizens who have now
settled in and around Damatin.

As the situation in Southern Sudan continued to
deteriorate, the stream of people moving within the
Southern Regions or travelling north increased tremendously.
Official reports estimated that as many as 80 per cent of
the population of Southern Sudan may have been uprooted by
the war and resulting famine, but it is impossible at this
stage to check these estimates.

The population that come from the Southern Sudan have
characteristics similar to those left behind. The Southern
Sudan covers an area of 650,000 km² within which there are
considerable differences in environmental conditions. It
lies between latitudes 4° and 10° N and longitudes 22° and
36° E. It is bordered by five countries: Ethiopia, Kenya,
Uganda, Zaire and the Central Africa Republic.

Physically the region consists of four geological units
which are reflected in the topography, drainage and
natural vegetation. The pattern of rainfall distribution
also reveals the influence of topography.

The socio-economic activities include, agro-pastoral
practices with shifting cultivation system widely used as
well as hunting and fishing activities. Although southern Sudan is an economically viable area, its wealth has not been developed. The cash economy has been retarded by long distances from potential markets, lack of good transport, capital and credit, diseases and insects, war and other environmental and climatic factors.

Exports from the area include primary products such as groundnuts, sesame, timber, skins and hides. Imports consist of grain, salt, food stuffs, building materials and fuel (Berry and Geistfeld, 1983).

The socio-economic disparity between the north and the south constituted the history of conflict in the pre-colonial period. South still lags behind the North in economic and social development. There is great inequality between Northerners and Southerners in occupational and other achievements, and there are extreme differences between them in social status, political allegiance, and access to power and influence. Sudanese nationalism was developed in the North, and Northerners led the country to its independence. According to Garang (1973), power fell into the hands of the Northern intellectuals representing the interests of the national capital and semi-feudalism, and the Northern intelligentsia occupied nearly all the posts in the services.

The degree of diversification in the three Southern provinces is more pronounced than in the six Northern provinces from the evidence of a greater number of
languages and tribes. Linguistically the inhabitants are divided into three principal groups: The Nilotes, the Nilo-Hamites, and the Sudanic tribes (John et al 1962).

The Nilotic groups (Shilluk, Dinka and Nuer, who comprise the largest majority of the population of the South, are generally described as negroes.

The Nilotes speak their own languages (the 3 main languages: Shilluk, Nuer and Dinka are not mutually intelligible, and within them are minor variations of dialect) but a form of pidgin Arabic is the lingua franca not only here but throughout the Southern Sudan. All the Nilotes are cattle owners. The Nuer comprise 2 distinct 'tribes', while Dinka have a large number of tribes scattered widely through Upper Nile and Bahr el Ghazal regions. The Shilluk are living in the vicinity of Malakal. They are a more compact and homogeneous group within a highly organized political structure.

The Nilo-Hamites, too, are by tradition cattle owners. They resemble the Nilotes of Upper Nile in stature but they differ from them in that their language and culture are more Hamitic. They are part of the Northern group of Nilo-Hamites which include the following tribes: Bari and the Bari speaking group, Lokoya, Luluba, Latuka, Lopit Toposa and Lango. The principal occupation of these Nilo-Hamites is pastoralism, with cultivation attaining greatest importance.

The Sudanic tribes of South-Western Sudan are
Classified by Tucker on linguistic grounds as belonging to the eastern Sudan group of Africans. They fall into four classes: The Azande, the Mogo-Sere group, the Moru-Madi, and the Bongo-Baka. They are in complete contrast to the groups of Nilotes and Nilo-Hamites in physical appearance, temperament and culture. They are essentially agricultural and have no cattle, the region being infested with tsetse flies, but they are keen hunters.

1.2. Statement of the problem:

The civil war in the southern Sudan has created problems of different nature and magnitude to the Southern people in particular and to the country at large. These include socio-economic, political and environmental problems, e.g. they have to live in different environment and economic situation. There is practically no formal economy into which these displaced citizens could be absorbed; the Sudanese economy has been declining for some time and jobs are very difficult to find. Therefore, the already marginalized population of the displaced southerners in the capital have been further marginalized through their having to find survival in the informal sector. Some of the occupations in this sector such as cigarettes selling, shoe cleaning, car cleaning and others are viewed as illegal by the authorities thereby laying the displaced open to police raids and the accompanying harassment.
There is a general fear from the city authorities that the displaced people are environmentally destructive, they cause environmental degradation inside and at the peripheries of the urban centres because they cut forest reserves, wind belts and uprooting woody species for domestic purposes (fuel for cooking and building materials). They also cause serious sanitation problems in the settlement due to over population and their habits of waste disposal which result in their suffering from communicable diseases.

Socially the displaced are considered a burden by the city authorities and the urban dwellers. They cause social and political instability beside problems which arise from the unavailability of food, health, education, employment, housing and other essential services.

The living conditions of the displaced people are acute. Housing varies from rented or self-built or mud-walled houses to make-shift card-board make-shifts; built on garbage dumps on the outskirts of Khartoum, mud broken glasses, tin cans, plastic bags and general urban refuse. Families have scraped small patches clean, built temporary shelters and crowd together. There is no running water and no electricity. Water is provided by donkey carts at incredible prices which many if not all find it difficult to procure.

Economically, most of the displaced people in the settlement live on the brink of existence with an
irregular income if any, with no legal rights to settle permanently in an area, with no identification papers from the authorities and thus without the legal rights to stay in Khartoum or any other part of the country where they have settled. The majority of the displaced earn their living through casual or other low paid jobs, petty-trade, car-cleaning, shoe-polishing and many others. Many children, even if they do not have parents with whom they live, spend their day on the streets trying to earn a living by whatever means open to them. The women usually either take unpaid house jobs, production and selling of food (most commonly) the brewing of local drinks 'Merisaa'. This being illegal further marginalizes the displaced.

Generally, it is believed that the impact of the displaced people in the settlements at the urban centres and the periphery will result in the following implications:
- sudden increase in the urban population since these people tend to move in large numbers, which will result in the stress on the available facilities,
- deterioration in the environmental sanitation followed by the spread of diseases in urban centres as well as in the displaced settlements due to congestion of people and the proximity of these settlements to sewage or garbage disposal areas. It is to be noted thatMillat Shokk and Hisba are near industrial areas, i.e. they are next to areas of industrial waste disposal.
The issue of the displaced people is an increasingly serious socio-economic, political and to some extent environmental phenomenon, which has attracted the attention of various indigenous and international organizations to render services to those people who live at the periphery of the Three Towns.

Population problems have no doubt been adding to numerous problems arising as consequences of civil war and tribal conflicts in the Sudan. No organized published survey has been conducted to investigate the environmental, social and economic impacts of the war affected people from the South. This study, therefore, not only has significance in studying demographic features and the possible impact brought about by civil war and to some extent tribal conflicts but also its results will provide basic data for regional planning required in resettlement and rehabilitation programmes for the displaced population in the centre and the periphery of Khartoum.

The general objectives of this study is to generate proposals and recommendations which can be used for proposing socio-economic, political and environmental precautions to minimize future impacts.

The more specific objectives include social, economic and environmental assessment of the displaced population in Khartoum.

As regards the social aspects, the main objectives are:
1. To examine aspects of social change; the mode of living, human settlement and the access to social services.

2. To find out and evaluate government efforts and policies in rehabilitating and settling the displaced people.

With regard to the economic aspects, the study will attempt to:

i. Examine the problem of employment.

ii. Examine the change in economy and occupation of the displaced population.

On the political aspect, the study will endeavour to see the future of the displaced and their attitudes towards the urban life.

On the environmental aspect, the study will attempt to:

i. Investigate the environmental impact (type and intensity) which may be caused by the displaced people on the area occupied inside and at the periphery of the urban centres.

ii. To assess the impact of environmental sanitation on the health status of the displaced population and the prevalence of diseases in the settlements.

The main hypothesis to be tested in this study include the following:

i. The impact of the civil war in south and the subsequent famine led to displacement of people from their areas of origin, which in turn resulted in degradation of and
deterioration of environmental sanitation and consequently to high rates of morbidity and mortality as a result of disease-incidence on the areas occupied.

11. Unemployment and the resulting little or irregular income for the displaced population lead to poor standards of living.

11i. The present war in the south and the continuing heavy influx of people to the north and other parts of the country lead to permanent desintegration of the families.

11iv. The unnecessary and indiscriminate delay in finding a lasting peaceful solution to the conflict will lead to the continuation of war and the subsequent displacement and influx of people from South to the North and other parts of the country.

1.3. Methodology:

1.3.1. Area of Study:

Location of the sample areas of the displaced people:

The study was carried out in Khartoum i.e. Khartoum South, Khartoum North and Omdurman. The field survey was conducted in Hilla Shook (Ben tieu) south of Khartoum centre on the road to Shagara, with an estimated population of 25,000 persons, Sagalons in Omdurman industrial area with 10,000 persons and Hilla Kusha (Hisha) with 6,000 persons. The total population of the three camps
is estimated to be 41,000 persons.

The above mentioned camps were not organized by the government, but they sprung up as spontaneous camps near urban residential areas (Fig. 2). The government and non-governmental organizations (NGOs) came into help them with the provision of essential human needs which were desperately needed by the displaced.

I selected these areas because people in these settlements are not mixed with the urban residents, in other words they were purely displaced people. However, they include a mixed composition of the southern tribes.

The other reason was also that these areas are located on the industrial waste disposal sites which make them ideal for the assessment of the environmental impact on these people.

1.3.2. Sample selection procedure:

Through observation and with the help of the data available from the Office of the Commissioner for Displaced, I have selected a sample of 341 households from the three camps. I have selected the camps with purely displaced population and a mixed composition of the southern tribes. I have allocated each camp a certain number of households to be interviewed. The sample for the three camps is distributed as follows:

- Bentieu (Hilla Shook) 208 households
- Zagalona 83

Fig (2) MAIN CONCENTRATIONS OF DISPLACED PEOPLE in KHARTOUM AREA

THE STUDY AREA

Source: Adapted from United Nations, Oct 1988
- Section B contained community base information.
- Section D included migration pattern.
- Section E included health history.
- Section F included employment and economy.
- Section G contained social organization of the displaced.

The questionnaire was filled on the basis of personal interviews. Different types of questions were used in the questionnaire:

1. multiple choice, where the respondent was to select one or more from a number of suggested responses,
2. dichotomous, the respondent was asked to choose one of the responses "yes" or "no", and
3. free answer, where the respondent is to give a free answer in his/her own words which is then recorded.

1.3.3.3. Data processing:

This was done in order to separate and extract the relevant data from the information collected. The field work was carried out during May up to July, 1985. Data processing started in August, 1989 involving a process of coding into a master sheet, sorting and analysis of the results. Some tables were prepared for the purpose of more illustration.

1.3.4. Research problems:

There were many obstacles encountered during the
2.1. Introduction:

This chapter presents a background literature on the subject. The concept of displacement, causes and its consequences are considered. The chapter also looks on the displaced southerners in the Three Towns; their impact and living conditions.

2.2. Conceptual base: Displacement, causes and its consequences:

2.2.1. Displacement and its causes:

Population displacement may be defined as a dislocation of people individually or collectively from their normal habitat either through natural or man-made disasters. In contrast with this Hansen and Oliver-Smith (1982:2) defined migration as a "collective movement of people who are related, sometimes as families, communities or nations (ethnic or political) sometimes through sharing status sets and normative orientations". Similarly, volition can only be regarded as a matter of degree and not as an absolute measure. In this way, "forced migration" is distinguished from voluntary migration by the diminished power of decision in the former, sometimes reaching an
both groups, the UNHCR made it clear that the first group were refugees and the second, impoverished and displaced local residents. More accurate according to UNHCR would be the term "war-evacuees". The 1962 Britannica Year Book stressed that the Algerians in Tunisia and Morocco are "considered to be displaced by the accidents and vicissitudes of internal civil war rather than as a result of political persecution of the refugees themselves as a political or racial group".

Displacement needs to be seen as the culmination of evolving forces operating much earlier than the actual physical migration of people (Scudder and Colson, 1976). The analysis must also take into account that the migration itself may take a long time and involve several stages and locations, both urban and rural. Furthermore the way migration takes place and whether people are moved as individuals and families or communities is important, Scudder concluded.

On the other hand, population displacement needs to be
social, economic and political forces, and not as a single event taking place at a moment in time (Scudder and Colson, 1982). The 1956-1972 and the present civil war in the Sudan are good examples. Scudder and Colson (1982) maintained that the investigation of the social implications of this process must take into account its spatial and temporal dimensions. The consequences are multiple - not only for the displaced group but also for the communities left behind and the receiving communities and indeed for the society as a whole.

The three major agents of displacement are: direct action by the state to make way for development projects; war and other types of political upheaval or persecution; and natural disasters. It can also be the result of a combination of causes involving a multiple set of factors that eventually culminate in displacement. These set of factors may include wars, famines, droughts and earthquakes as stated above. A few examples show the scope of the phenomena: Syrians and Lebanese have all been subject to displacement due to Arab-Israeli wars; the Lebanese conflict has led to massive population dislocation; the Iraq-Iran war has led to a large influx of Kurds into Turkey where the state has its own problematic relationship with the local Kurdish population. In Sudan the conflict between North and South has led to a heavy influx of the displaced to the capital and other cities creating large squatter settlements.

The task is all the more relevant because some well-
known cases of displacement in the Middle East raise questions that are at the very core of the major theoretical issues. To name a few: The Aswan High Dam project, 1964 and the displacement of 50,000 Egyptian Kubians from their villages which has been the subject of much documentation and study in Egypt, is one of the most important examples of relocation during that era of development where emphasis was largely on massive infrastructural construction (Callender, 1964, Fahim, 1968, Farnea, 1962, 1963, Geisler, 1987).

According to Scudder and Colson (1982) the causes and consequences of the phenomenon (displacement) are located precisely in the power domain of the "developers", "modernizers" and "wannabes" rather than embedded in an abstract process of economic or political evolution. On the other hand Oliver Smith (1986:10) maintained that while the natural catastrophe may be the "agent" of dislocation, it is the prevailing social and political hierarchies that are the "cause" of disaster.

2.2.2. The consequences of displacement:

Displacement has repercussions for the society as a whole, but socially and geographically differential ones. The impact on men, women and children differ geographically depending on the type and locus of displacement, results will, for example, border areas suffering the greatest changes and ecological damage in passive refugee movements. It is believed that for example the increase in human and
animals in a particular habitat accompanied by inappropriate land use practices which are incompatible with the natural conditions are the major causes of the ecological degradation (Ibrahim, 1984). These practices include deforestation for fuel, overgrazing, deforestation for crop cultivation, overcultivation, loss of soil productivity and irrational uses of water sources.

Scudder (1976:4) points out, displacement results in "multidimensional stress" including physiological, psychological and socio-cultural stress. Scudder (1976) continued the host society, which often is not consulted in the matter of accommodating the new groups, will be hostile especially since there will necessarily ensure competition over already scarce resources, such as agricultural land or social services. Other studies, however, show that symbiotic relationship may form between the dislocated population and host population which includes redistribution and exchange of resources made available to this population through relief works and aid agencies (Christensen, 1982).

According to Ohregon (1974) the impact of movement into cities in terms of accelerated growth has resulted in desperate need for housing, schools, water supplies and other vital services in addition to creation of competition for jobs. The displaced people, especially those to the urban areas usually face the same problems as the migrants. According to Gugler and Gilbert (1977) migrants often undertake functions which are avoided by local work force,
some of dirtiest and hardest jobs as cleaning the streets and garbage, the building industry, carrying loads, manual work in factories, markets and ports as is the case with the Southern displaced people in Khartoum. In addition to this O'Connor (1983) stated that several studies on population movements revealed significant shifts in the occupational pattern. This shift usually takes place in two directions; the skilled and educated and the less fortunate ones opt for manual work and domestic services.

Carnegroes et al. (1983) mentioned that large movement of people whether voluntary or involuntary bringing various problems connected with sanitation and infectious diseases. In connection with the latter aspect, population mobility leads to the introduction of diseases and health problems by the moving population to the settled population and the exposure of the dislocated to diseases they are not familiar with at their home areas. On the other hand cities have capacities for increasing incidence of diseases due to concentration of poor people in crowded unserviced slums and squatter areas and their attraction for transient people, often bearing diseases.

Taylor and Williams (1982) stated that health problems are particularly acute in the areas inhabited by the lower income groups; but health facilities serving these areas are the most inadequate and frequently unsuited to the needs of these groups. These areas (slums), as experienced by the health administrators, form the focus of all
Dinka and Nuer who are displaced in the Three Towns give as an immediate reason for their coming to the North the fact that they have lost their cattle and thus the possibility of their existence. The loss of cattle is central in the reasons for the displacement; where tribal conflict in the past always may have existed, and mutual cattle raiding a regular occurrence, the easy availability of arms have now caused much more extensive damage, death, cattle raiding and thereby the accompanying displacement. Unlike the famine in the West and the subsequent displacement of people to Khartoum during 1984-85, these are with the Southern displaced at present no option of resettlement, or any other form of long term rehabilitation until the war is brought to an end and a peaceful solution reached.

Moreover, the Southern citizens often feel vulnerable in the new Northern environment and are therefore unwilling to live in smaller numbers in other cities in the North Sudan. Most of the displaced from the South seek to Khartoum where they are likely to be able to find some of their own people from the same tribe, village, area, etc. and thereby a feeling of security (Sudan Council of Churches, 1988).

Bearing the above in mind, it is therefore unlikely that the Southern displaced people will seek any long term refuge than Khartoum. Of course Khartoum displaced in many other Northern Sudanese towns and also the populations are likely to increase, but Khartoum will continue to remain
the main magnet attracting people hoping to find security among their own kin, seeking employment and schooling or simply considering that their chances for survival are greater in Khartoum than elsewhere. The influx increases or decreases as the war intensifies or calms. However, the fact remains that this is a frighteningly large influx considering that there are no services, schooling, water, sanitation, health facilities in most of the area where these displaced people settle. Moreover, it should be remembered that there are many displaced who are not included in the official figures of the displaced population in Khartoum. They do not live in organized displaced camps. As mentioned earlier, many, if not most, of the displaced people settle with relatives, who already are only barely existing on low salaries living in the urban slums. Most if not all Southern homes in the Three Towns house a big number of displaced relatives (SOCC, 1988).

2.3.1. The impact of the displaced people in Khartoum:

Rapid increase of population in Khartoum city due to the influx of people from the South because of war has resulted in severe socio-economic and environmental problems, these include:
- The spreading of the shanty towns and squatter areas at the fringes of Khartoum where no services of any kind are available.
- Straining of services which are sent for limited number of people.
- Employment, underemployment and self-employment are widely spread due to continuous influx of the people from the south and other parts of the country.
- Crimes of various types are the order of the day in Khartoum.

2.3.2. The living conditions of the displaced in Khartoum:

Upon their arrival from the South, the displaced people are usually at a loss as to where to go. Most have never been in a big city before. It is therefore usually the case that people upon their arrival stay together for a few weeks or days depending on the circumstances. Often some relatives already in Khartoum will have heard of their kinsmen arrival and will arrange for some temporary accommodation. More often than not, this accommodation is in an unlitished house where a relative is employed as a ghaffir, in a church compound, in an open square in a neighbourhood which is predominantly of the tribe of the new arrivals or in the railway station in the case of those who come from Bahr el Ghazal (SUDANID, 1947).

After a few days or a couple of weeks, the new arrivals will tend to scatter into more permanent settlements where they are quickly absorbed into the community and no longer distinguished from the long-term settlers. The settlements to which they go, are usually Millat Shook
The displaced people arrive with literally no possessions as is the case with anybody displaced. No cooking utensils, very little clothing, no food resources and no or very little money to support themselves. Once they move from the temporary refuge, the struggle for survival really begins. These settlements are on unsurveyed land and, they are considered illegal in the eyes of the authorities and therefore eviction is a likely prospect at any time. Moreover, being unplanned settlements, the authorities do not wish to give air of permanency by providing water, sanitation, health facilities and schooling (SOC, 1988).

The services which are provided in these areas are carried out mainly by church and charitable organizations as well as some international non-governmental organizations. However, it is widely known that diarrhoea and measles are the major causes of deaths among the under fives (MSF-Holland, 1988). Nutritional related diseases are also common in the displaced camps. SCC (1988) on its finding revealed that lack of water is a major factor in the poor health situation of the settlements. None of the settlements have a sufficient supply of clean water. Most settlements are provided with water by donkey carts at prices at which many find it difficult to procure sufficient water. Education is perceived by most displaced
Southerners as of utmost importance, but the educational opportunities for the children in the settlements are very slim indeed. All the schooling is provided by charitable organizations, church personnel and the equipments and teaching methods are very rudimentary.
3.1. Introduction

This chapter discusses the background of the displaced in Khartoum. It emphasizes on the demographic characteristics of the displaced population, which include age, sex, marital status, etc. It also casts light on the socio-economic characteristics - area of origin, duration in Khartoum, educational characteristics, occupation, income and its relation to mortality and morbidity in general terms, the level of income and the living standards and finally, the housing characteristics.

3.2. Demographic characteristics:

3.2.1. Age and sex structure of the total households population of the displaced:

The results of the age and sex structure of the surveyed total households population are shown in Table (2). Accordingly the total number of females exceed the total number of males by 3.2%. This reflects an imbalanced sex ratio for the whole surveyed population. On the other hand, there is a small proportion of those aged 16 - 50 years for both males and females, i.e. 13.7% males and 18.1% females. In addition, there are more females in this age range than males. This age range, which is considered to be economic-
Table 2.

Age structure of the total household population of the displaced.

<table>
<thead>
<tr>
<th>Age Class</th>
<th>Male Number</th>
<th>Male Percent</th>
<th>Female Number</th>
<th>Female Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-6</td>
<td>205</td>
<td>9.5</td>
<td>190</td>
<td>8.8</td>
</tr>
<tr>
<td>7-15</td>
<td>211</td>
<td>9.8</td>
<td>340</td>
<td>15.8</td>
</tr>
<tr>
<td>16-20</td>
<td>106</td>
<td>2.5</td>
<td>98</td>
<td>4.8</td>
</tr>
<tr>
<td>21-30</td>
<td>53</td>
<td>2.6</td>
<td>57</td>
<td>2.6</td>
</tr>
<tr>
<td>31-40</td>
<td>47</td>
<td>2.2</td>
<td>61</td>
<td>2.8</td>
</tr>
<tr>
<td>41-50</td>
<td>89</td>
<td>4.1</td>
<td>175</td>
<td>8.1</td>
</tr>
<tr>
<td>51-60</td>
<td>275</td>
<td>12.8</td>
<td>155</td>
<td>7.2</td>
</tr>
<tr>
<td>61+</td>
<td>34</td>
<td>1.7</td>
<td>30</td>
<td>1.7</td>
</tr>
<tr>
<td>Total</td>
<td>1040</td>
<td>48.3</td>
<td>1112</td>
<td>51.5</td>
</tr>
</tbody>
</table>

ally active and productive are not available in the settle-
ments. This active group is said to be either in the
permanent areas of the city or some might have left
Khartoum for other parts in the North especially the
areas of production for example the Gezira, Gedaref,
Girba, Kenana, Assalaya and other agricultural schemes. The
remaining 24.2% are between 51 and above 60 years of which
4.2% constitutes the age group 60 years and above.

It can be concluded that the population is slightly
composed of young with few old people with more females
than males.

3.2.2. Marital characteristics of the total households
population:

Table 31 shows the marital characteristics of the
households population. The results show a low percentage of
single households 49.2%. Females constitute a bigger pro-
portion of 12.4% in comparison with males 7%. A substantial
number of them are married 33.4%, a significant 16.4% are
divorced and 25.7% are widowed. Of those married females
are more than males, 24% and 8.3% respectively. Those who
are divorced state that due to hard living conditions in
the camp that is they have little or no income, therefore
they are unable to maintain their families. This leads to
the family disintegration. This supports hypothesis III in
Chapter one which states that the present war in the South
and the continuing heavy influx of people to the north and
<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Single</td>
<td>85</td>
<td>7.0</td>
</tr>
<tr>
<td>Married</td>
<td>100</td>
<td>8.3</td>
</tr>
<tr>
<td>Divorced</td>
<td>120</td>
<td>10</td>
</tr>
<tr>
<td>Widowed</td>
<td>113</td>
<td>9.4</td>
</tr>
<tr>
<td>Others</td>
<td>69</td>
<td>5.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>487</td>
<td>40.4</td>
</tr>
</tbody>
</table>

Table 1.
Marital characteristics of the total households population of the displaced.

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Male Number</th>
<th>Male Percent</th>
<th>Female Number</th>
<th>Female Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>85</td>
<td>7.0</td>
<td>150</td>
<td>12.4</td>
</tr>
<tr>
<td>Married</td>
<td>109</td>
<td>8.3</td>
<td>280</td>
<td>24.0</td>
</tr>
<tr>
<td>Divorced</td>
<td>120</td>
<td>10.0</td>
<td>76</td>
<td>6.4</td>
</tr>
<tr>
<td>Widowed</td>
<td>113</td>
<td>9.4</td>
<td>197</td>
<td>16.3</td>
</tr>
<tr>
<td>Others</td>
<td>64</td>
<td>5.7</td>
<td>6</td>
<td>0.5</td>
</tr>
<tr>
<td>Total</td>
<td>489</td>
<td>40.4</td>
<td>719</td>
<td>59.6</td>
</tr>
</tbody>
</table>

been observed. It will be shown later that this household size is relatively large because of the type of housing conditions these people live in.

3.3 Socio-economic Characteristics:

3.3.1. Area of origin of the displaced people:

According to the sample results, the original regions for the displaced in the surveyed areas were stated to be Upper Nile with the displaced majority of 62.8%, this is followed by Bahar el Ghazal with 21.4% and lastly Equatoria Region with 6.1% (Table 5). It can be concluded from these figures that more than half of the displaced in the sampled areas come from Upper Nile Region followed by Bahrel Ghazal with only a small proportion from Equatoria. This is in line with the findings of SUDANAID (1987) that most of the displaced in the Three Towns originate from Upper Nile or Bahar el Ghazal regions as these border the Northern Sudan. On the other hand, it can not be concluded that these two regions are the most hit by the civil war, but they have easy access to the North; they come on foot, railway, steamer and road beside sharing the borders with the North as stated earlier. The only route to Khartoum from Equatoria is by air. This makes its influx of the displaced people from Equatoria to the northern parts of the country rather difficult.
Table 3.

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Male Number</th>
<th>Male Percent</th>
<th>Female Number</th>
<th>Female Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>85</td>
<td>7.0</td>
<td>150</td>
<td>12.4</td>
</tr>
<tr>
<td>Married</td>
<td>100</td>
<td>8.3</td>
<td>290</td>
<td>24.0</td>
</tr>
<tr>
<td>Divorced</td>
<td>120</td>
<td>10</td>
<td>76</td>
<td>6.4</td>
</tr>
<tr>
<td>Widowed</td>
<td>111</td>
<td>9.4</td>
<td>197</td>
<td>16.1</td>
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<tr>
<td>Others</td>
<td>69</td>
<td>5.7</td>
<td>6</td>
<td>0.5</td>
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<tr>
<td>Total</td>
<td>487</td>
<td>40.4</td>
<td>719</td>
<td>59.6</td>
</tr>
</tbody>
</table>


followed by the parents (fathers and mothers) 31.1%. The
grand parents reveal the least proportion of 11%. Relatives
rank third after the grand parents 10.8%.

The high average household size is consistent with the
general households size found in surveys and censuses in
the Sudan, where an average of between 2.6 and 3.3 have
other parts of the country lead to some disintegration of families. The reason for high percentage of the widowed is that they lost their patterners, some of them with natural death and others died as a result of the war. Most of the widowed are females. A very small percentage 6.2% refused to respond to the questions on the marital status.

Generally some of the families in the displaced settlements are headed by females. This phenomenon is reflected on the age and sex structure where females slightly exceed males by 3.2%. This also explains the impact of war on any population.

3.2.3. Household size and composition:

According to the results of the survey, the majority of the households range from 6 - 10 persons which is about 54.1% . 36.7% ranges between 1 - 5 persons per household (Table 4). The average household size is about 6 persons.

On the other hand, the relationship between the total households population is clearly shown in the table. Daughters and sons constitute a bigger proportion (47.1%) which is almost half of the households population. This is followed by the parents (fathers and mothers) 31.1%. The grand parents reveal the least proportion of 11%. Relatives rank third after the grand parents 10.8%.

The high average household size is consistent with the general households size found in surveys and censuses in the Sudan, where an average of between 5.6 and 6.3 have
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<tr>
<td>Total</td>
<td>226</td>
<td>296</td>
<td>517</td>
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<td>233</td>
<td>192</td>
<td>177</td>
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<td>1 - 5</td>
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<td>86</td>
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<td>6 - 10</td>
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<td>51 - 55</td>
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<td>56 - 60</td>
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</tr>
<tr>
<td>61 - 65</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>66 - 70</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>71 - 75</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>76 - 80</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>81 - 85</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>86 - 90</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>91 - 95</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>96 - 100</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Field work data, July 8, 1989
been observed. It will be shown latter that this household size is relatively large because of the type of housing conditions these people live in.

3.3 Socio-economic characteristics:

3.3.1. Area of origin of the displaced people:

According to the sample results, the original regions for the displaced in the surveyed areas were stated to be Upper Nile with the displaced majority of 62.4%, this is followed by Bahri el Ghazal with 31.4% and lastly Equatoria Region with 6.2% (Table 5). It can be concluded from these figures that more than half of the displaced in the sampled areas come from Upper Nile Region followed by Bahri el Ghazal with only a small proportion from Equatoria. This is in line with the findings of SUDANAJD (1987) that most of the displaced in the Three Towns originate from Upper Nile or Bahri el Ghazal regions as these border the Northern Sudan. On the other hand, it can not be concluded that these two regions are the most hit by the civil war, but they have easy access to the North; they come on foot, railway, steamer and road beside sharing the borders with the North as stated earlier. The only route to Khartoum from Equatoria is by air. This makes its influx of the displaced people from Equatoria to the northern parts of the country rather difficult.
Table 5.
Area of origin of the displaced households in the sampled area.

<table>
<thead>
<tr>
<th>Home Town</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bentieu</td>
<td>200</td>
<td>58.6</td>
</tr>
<tr>
<td>Wali</td>
<td>77</td>
<td>22.6</td>
</tr>
<tr>
<td>Abel</td>
<td>30</td>
<td>8.8</td>
</tr>
<tr>
<td>Renk</td>
<td>6</td>
<td>1.8</td>
</tr>
<tr>
<td>Malakal</td>
<td>7</td>
<td>2.4</td>
</tr>
<tr>
<td>Equatoria</td>
<td>21</td>
<td>6.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>341</td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

3.3.2. Duration of stay in Khartoum:

The results of the sampled households show that they had arrived at different times in successive waves. The influx started in 1983 and continued to the time this research was conducted in July 1989. Table (6) summarises the arrival time and duration of the displaced in Khartoum. It is apparent that the first group which arrived between 1983/84 constituted a percentage of 7.8%. They have spent more than six years in Khartoum. This group first settled in the camps. Those who spent between 4 - 5 years account for 22.3%, this group arrived between 1985/86. These influxes continued in the years after with different volumes depending on the intensity of the war. The major influxes maximized between 1987/88 - 1989 with the increased rebel activities in the war zones. The displaced who arrived towards the end of 1988 and the beginning of 1989 constituted the majority of the sample, this group has spent almost a year. They were settled in relief camps. It is clear that the war has resulted in a large movement of people to the north from the southern part of the country. The largest influx coincided with the intensification of the war in the South.

Finally as stated by Scudder and Colson that displacement has many implications not only on the displaced group but also for the communities left behind and the receiving communities and indeed for the whole society. The decision
Table 5.
Duration in Khartoum of the households in the selected areas.

<table>
<thead>
<tr>
<th>Time spent in Khartoum (yrs)</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1</td>
<td>140</td>
<td>41.1</td>
</tr>
<tr>
<td>2-3</td>
<td>97</td>
<td>28.4</td>
</tr>
<tr>
<td>4-5</td>
<td>78</td>
<td>22.9</td>
</tr>
<tr>
<td>6+</td>
<td>26</td>
<td>7.6</td>
</tr>
<tr>
<td>Total</td>
<td>341</td>
<td>100.0</td>
</tr>
</tbody>
</table>

to leave one's original home is not a tolerable one as had been expressed by the displaced. Most of them have to take this decision at a family level rather than at a group level. With the increased tension on the whole society as a result of the intensification of the war and the immediate loss of lives of their people created fear. The situation deteriorated further with the disappearance of animals taken by force as their lives depend entirely on this, toler- ance became impossible as such people decided to leave their homes.

3.3.3. Educational characteristics of the total households population of displaced:

Table (7) summarizes the levels of education attained by the displaced population. The table clearly show that three quarters i.e. 85.4% of the population is illiterate. Out of this 30.2% are males and 55.2% almost half are females. This phenomenon is attributed to their rural back- ground where educational services are almost nil. Out of the total population 11.3% have received primary education; of this 6.9% are males and 4.4% females. Thus educational attainment beyond the intermediate level is almost zero among the displaced population.

The relatively low level of educational standards of displaced people is reflected on the occupational character- istics and the low level of incomes among the households. The type of jobs they perform are of the low nature and of
Table 7.
Educational characteristics of the total household population of the displaced.

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Male Number</th>
<th>Male Percent</th>
<th>Female Number</th>
<th>Female Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>620</td>
<td>35.3</td>
<td>840</td>
<td>47.8</td>
</tr>
<tr>
<td>Primary</td>
<td>152</td>
<td>8.7</td>
<td>67</td>
<td>3.8</td>
</tr>
<tr>
<td>Intermediate</td>
<td>63</td>
<td>3.5</td>
<td>15</td>
<td>0.9</td>
</tr>
<tr>
<td>Secondary</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Higher</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Total                | 835         | 47.5         | 922           | 52.5           |

the low reward. These statements support the findings of Oconnes (1983) that population movements revealed significant shifts in the occupational pattern, this shift usually takes place in two directions; the skilled and educated and the less fortunate ones opt for manual work and domestic services. On the other hand objective II in Chapter 2 is upheld that examines the change in economy and occupation of the displaced has a negative impact on the sanitary standards of this group since education plays an important role on hygienic awareness of any group.

3.3.4 Occupational characteristics of the households of the displaced population:

The majority of the displaced population reported that they are casual labourers 81.5%, 6.6% are self employed, 1.6% permanent labourers and 8.1% unemployed (Table 8).

The majority of the sampled population do not have regular employment as such they have irregular income to depend on. There is a high competition for jobs. This support the work of (Orbregen, 1974) that says the impact of movements into cities results in creation of competition for jobs. The casual labour do not offer them enough income to subsist on. As a result of the low income of the displaced, life in the settlements is very hard. They sometimes have little or nothing to eat. Almost all the children are malnourished due to the fact that the parents have
Table 8.
Occupational characteristics of the total households population of the displaced in the sampled areas.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casual labourers</td>
<td>1007</td>
<td>83.5</td>
</tr>
<tr>
<td>Permanent labourers</td>
<td>20</td>
<td>1.6</td>
</tr>
<tr>
<td>Self employed</td>
<td>79</td>
<td>6.6</td>
</tr>
<tr>
<td>Unemployed</td>
<td>100</td>
<td>8.3</td>
</tr>
<tr>
<td>Total</td>
<td>1208</td>
<td>100.0</td>
</tr>
</tbody>
</table>

practically nothing or a little to provide them and whatever is available is of low quality.

3.3.5. Income of the displaced households heads:

Incomes of 93.3% of the respondents are less than 250 Sudanese pounds, 5.1% received between 250 - 300 Sudanese pounds and only an insignificant proportion 1.5% with incomes ranging from 300 - 350 Sudanese pounds (Table 9). This insignificant category with higher incomes are the permanent labourers. As mentioned earlier, the living conditions of the displaced population is reflected on the levels of their income. The average income of the displaced is about 135.9 Sudanese pounds.

3.6. Housing characteristics of the displaced people:

The results of the surveyed house-holds in the selected areas show that 89.2% live in one-roomed tukul made of sacks, bamboo, cartons, wood, broken tins, pyrus and whatever materials available. Only 10.8% have two-roomed tukul (Table 10). Families are crowded in these rooms with unspecific compounds. The sanitary conditions of these houses are poor in addition to poor social services and therefore diseases are unavoidable.

It can be clearly seen from the research findings that the high level of illiteracy among the displaced means that the type of employment they get is unskilled one and this results in the low income. It also means low standard of
Table 9.

Incomes of the displaced households in the sampled areas.

<table>
<thead>
<tr>
<th>Income/month ($)</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 250</td>
<td>318</td>
<td>93.2</td>
</tr>
<tr>
<td>250-300</td>
<td>18</td>
<td>5.3</td>
</tr>
<tr>
<td>300-350</td>
<td>0</td>
<td>1.5</td>
</tr>
<tr>
<td>350-400</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>400-450</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>450-500</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>500+</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>341</td>
<td>100.0</td>
</tr>
</tbody>
</table>

living which sometimes have to be subsidized with relief supply by the government and relief organizations. The poor sanitary and housing conditions in addition to the large household size in the displaced settlements give rise to high incidence of diseases which result in high rate of mortality.
Table 10.
Housing characteristics of the households in the sampled areas.

<table>
<thead>
<tr>
<th>Number of rooms/RH</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>One room</td>
<td>304</td>
<td>89.1</td>
</tr>
<tr>
<td>Two rooms</td>
<td>37</td>
<td>10.9</td>
</tr>
<tr>
<td>Three rooms</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>More</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>341</td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

CHAPTER FOUR

IMPACT OF THE DISPLACED ON THE URBAN ENVIRONMENT

4.1. Introduction:

The chapter presents the impact of the displaced on the urban environment with particular emphasis on morbidity, mortality, water supply, sanitation, fuel consumption and their relationship to income. Besides the concluding remarks, the chapter ends with the attitudes of the displaced in Khartoum.

4.2. Morbidity:

There are no regularly collected statistics relating to morbidity among the displaced people, but government and agency surveys and reports provide estimates of the most common diseases.

Morbidity rates are high amongst the displaced. In Khartoum, according to a survey conducted earlier in 1978, in the unplanned settlements (slums) that 56.5% out of 609 children had diarrhea in the previous two weeks, approximately three times greater than that in most African countries. Moreover, 4.7 per cent of children surveyed were found to have vitamin A deficiency. In addition, the most serious health problem facing the people in the slums is malaria as a result of excellent breeding grounds of mosquitoes.
According to the sample results (Table II), there is no significant differences in the disease pattern reported in the settlements with malaria slightly leading. All the other diseases are also proved to be fatal amongst the displaced population. This is attributed to the poor environmental conditions and the subsequent deterioration of health. Furthermore, the incidence of these diseases which are in most cases carried by flies, are the results of unorganized system of defication and refuse disposal in the settlements.

It is to be noted that most of the diseases mentioned in Table (II) are usually commonly found among children. The poor hygienic conditions, poor nutrition and low income of the population are direct causes of the very high incidence of such diseases among the displaced people.

Due to the absence of permanent health facilities in the displaced settlements in Khartoum, the existing health facilities near to the settlements in the permanent areas have to provide services for the displaced population. As indicated in the results of the survey, 96.2% of the sampled population walk for distances for treatment in the government health centres, while 3.8% have their treatment inside the camps’ clinics, in most cases established by the relief organizations operating in the field of health and others by indigenous organizations for example the Islamic African Relief Agency (IARA) and the Sudanese Red Crescent (SRC) in unplanned areas to provide primary health care in
Table 11:
Prevalence of diseases among the sampled displaced households.

<table>
<thead>
<tr>
<th>Diseases</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dysentry</td>
<td>61</td>
<td>17.9</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>62</td>
<td>18.2</td>
</tr>
<tr>
<td>Malaria</td>
<td>64</td>
<td>14.8</td>
</tr>
<tr>
<td>Measles</td>
<td>52</td>
<td>15.2</td>
</tr>
<tr>
<td>Meningitis</td>
<td>60</td>
<td>17.6</td>
</tr>
<tr>
<td>Typhoid</td>
<td>16</td>
<td>4.7</td>
</tr>
<tr>
<td>Whooping cough</td>
<td>26</td>
<td>7.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>341</td>
<td>100.0</td>
</tr>
</tbody>
</table>

cooperation with the Central Ministry of Health, Khartoum Health Commission and the Relief and Rehabilitation Commission (RRC).

4.3. Mortality:

Mortality and morbidity are not separable and are caused by the same factors. The improvement of the former is reflected on the later.

The health and the nutritional standards of the displaced people in Sudan in particular and the whole population at large continue to increase demands on the existing health infrastructures throughout the city.

In Khartoum, mortality rates reported for children under five in the displaced settlements have been projected by the non-governmental organisations (NGOs) surveys at 8/1000/year in 1988. These rates compared with annual estimates of 60 - 70/1000 for all of Khartoum. The rates reported in Southern Kordofan for instance are also very high. Accordingly daily mortality figures from 21 Makran were reported as being 16.8 times those estimated for all of Sudan in 1980.

According to research findings table (12), the mortality rates for children (both sexes) between the age of 0 - 6 years old is very high 28.8%. These high childhood mortality rates are attributed to diarrhea and dehydration, pneumonia and malaria as mentioned earlier in chapter three and this is concurrent with and exacerbated
Table 12.
Mortality rates of the total households population of the displaced in the sampled areas.

<table>
<thead>
<tr>
<th>Age group</th>
<th>Male Number</th>
<th>Male percent</th>
<th>Female Number</th>
<th>Female percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-6</td>
<td>364</td>
<td>16.9</td>
<td>256</td>
<td>11.9</td>
</tr>
<tr>
<td>7-15</td>
<td>100</td>
<td>4.6</td>
<td>50</td>
<td>2.2</td>
</tr>
<tr>
<td>16-20</td>
<td>96</td>
<td>4.3</td>
<td>78</td>
<td>1.6</td>
</tr>
<tr>
<td>21-30</td>
<td>85</td>
<td>3.5</td>
<td>69</td>
<td>3.2</td>
</tr>
<tr>
<td>31-40</td>
<td>84</td>
<td>4.1</td>
<td>60</td>
<td>3.0</td>
</tr>
<tr>
<td>41-50</td>
<td>104</td>
<td>4.8</td>
<td>82</td>
<td>3.8</td>
</tr>
<tr>
<td>51-60</td>
<td>119</td>
<td>5.5</td>
<td>97</td>
<td>4.5</td>
</tr>
<tr>
<td>60+</td>
<td>235</td>
<td>20.9</td>
<td>208</td>
<td>9.7</td>
</tr>
<tr>
<td>Total</td>
<td>1122</td>
<td>55.4</td>
<td>960</td>
<td>44.6</td>
</tr>
</tbody>
</table>

severe malnutrition.

Considerably mortality and morbidity are inevitable in populations that are nutritionally depleted, and that have little access to clean water, food, shelter and basic health care. The most vulnerable are young children as established in the research findings. This situation is due to the low income levels of the displaced population and lack of educational attainment.

4.4. Water supply:

The results of the survey show that 93% of the displaced households fetch water in jericans from the water points, only 7% buy water from donkey carts with high prices. This supports the findings of SOC (1988) that water in the displaced camps is supplied by donkey carts sometimes with high prices where a barrel of water at certain times costs about twenty Sudanese pounds and the minimum water consumption for an average family is about two barrels. Therefore with these high prices of water, most of the displaced have resorted to carrying water themselves since they cannot afford to buy it.

As mentioned earlier, insufficient water supply for drinking and general cleanliness of the households in the displaced camps is a major factor in the poor hygienic conditions of the households especially the children. The displaced are unable to have enough water for domestic use due to their limited incomes.
4.5. Sanitation:

The sanitary services in the displaced settlements are almost nil. According to the research findings, throwing of garbage outside the compounds of the households is the method applied by 73.3% of the surveyed families. 15% use garbage pits in the middle of the camp and only 11.7% of the families burn their refuse collected (Table 13). Furthermore, it is revealed that 88.5% of the displaced households defecate outside close to the camp and 11.4% go far, a distance of about two to four hundred metres from the camp (Table 14). This is proved to be a health hazard, the final results are the high incidence of disease pattern followed by high mortality rates especially among the poor children who have no resistance to diseases and who suffer from malnutrition. Objective II in chapter I regarding environmental aspects is upheld that is to access the impact of environmental sanitation on the health status of the displaced population and the prevalence of diseases in the settlements.

4.6. Fuel consumption

In general terms, minimal wood consumption for domestic use in the third world countries is very high. According to Michael (1977), as over 100 million people depend on this type of fuel for their daily needs in the Arid zones of Africa and Middle East, a theoretical estima-
Table 13.
Refuse disposal of the households in the sampled areas.

<table>
<thead>
<tr>
<th>Place</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garbage hill</td>
<td>51</td>
<td>15</td>
</tr>
<tr>
<td>Burning</td>
<td>40</td>
<td>11.7</td>
</tr>
<tr>
<td>Throwing outside</td>
<td>250</td>
<td>73.3</td>
</tr>
<tr>
<td>Total</td>
<td>341</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 14.

System of defecation by the households in the selected sampled areas.

<table>
<thead>
<tr>
<th>Place of defecation</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latrine inside the house</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Neighbour's house</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Communal latrine</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Near the house</td>
<td>302</td>
<td>88.6</td>
</tr>
<tr>
<td>200-400 mt. from the house</td>
<td>39</td>
<td>11.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>341</td>
<td>100.0</td>
</tr>
</tbody>
</table>

ate of destruction can be about 25 million ha/year. This is of course mere speculation but it shows the magnitude of a very serious problem around almost all towns and cities of the Sahelian and Sudan zones of Africa.

The results obtained from the surveyed households (Table 15) showed that 97.4% use wood for cooking and only 2.6% use charcoal because they cannot afford to buy due to their low incomes. On the other side, 85.7% of them stated that they collect the wood themselves, 14.3% purchased the wood they use. More than half (60.5%) of the households collect wood from the immediate vicinity compared to 34.5% who travel a distance from the camp. On this respect, income plays an important role in determining who is able to buy and who collects wood. Those without or with lower incomes are not able to purchase neither wood nor charcoal.

Most of the displaced households about (77.5%) use 'Laduya' a traditional cooking stove for cooking and where wood is the main item used. This indicates a high consumption of wood as mentioned earlier. The use of 'Kamun' (local stove) accounts for 22.5% which is related to the use of charcoal. The use of charcoal is determined by a household income since charcoal is only purchased but cannot be collected anywhere like wood, so those without money cannot afford to buy.

It can be noted that a big proportion of the displaced households in the surveyed areas depend entirely on the wood collected because of their low purchasing ability and
Table 15.

Fuel consumption by the households in the sampled areas.

<table>
<thead>
<tr>
<th>Type of fuel</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire wood</td>
<td>332</td>
<td>97.4</td>
</tr>
<tr>
<td>Charcoal</td>
<td>9</td>
<td>2.6</td>
</tr>
<tr>
<td>Crop residues</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Parafire</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>341</td>
<td>100.0</td>
</tr>
</tbody>
</table>

it is possible to find woody shrubs near the settlements.

This chapter partly can be summarized that, the main causes for the unprecedented morbidity and mortality rates in all ages can be attributed to the poor sanitary conditions in the displaced settlements, overcrowdiness as mentioned earlier, water shortage which is usually polluted, increased susceptibility to infectious and other diseases due to malnutrition, etc. This supports the findings of Collins (1975) which say that rapid deterioration of urban services and worsening of health status and sanitary conditions are the direct consequences of growth of slums and squatter areas. The displaced people are initially ill-equipped to shift from a rural life style to an urban one where higher standards of hygiene and environmental sanitation are required to prevent disease transmission. People squat in the open space far or around the camps. This adds a load to the environmental sanitation problems already existing in the national capital, where the existing sanitation facilities are insufficient to cope with the present population, therefore, giving rise to problems concerning the availability of health and sanitation services. This is found to be in line with the findings of (Medecine and Oms Fountiers (MSF) (1988) that people squat (debase) in an open space far or around the camps. In addition to these problems, it has been observed that people in and around the city also cause problem on the woody species by uprooting them for
domestic purposes.

4.7. Attitudes:

The new comers arriving in a new society different from the original one are usually classified according to their degree of assimilation and adaptation in the new society. Accordingly, assimilation and adaptation have been observed; feeling of first arrival, infiltration to Khartoum, result of first contact with the city inhabitants and their intention for staying permanently or returning to home area have been studied.

Many were homesick and feeling strangers to the social style of the city. This could be attributed to the sudden transfer from a simple traditional social life to a sophisticated complicated urban life. A matter which leaves most of them depressed as it is not easy for them to be absorbed in the new social conditions.

Table (16) assesses the intention of the surveyed households for settling in Khartoum. The majority of them (96.8%) expressed unwillingness to settle in Khartoum after peace is achieved. Few (3.2%) had no intention for returning to the South even if peace is achieved. The reasons they gave were that they have lost all their relatives and wealth, therefore they see no reason for going back, after all, life is the same whether here or at home. It will take them the rest of their lives to recover whatsoever they have lost they concluded.
Table 16.
Intentions of the displaced households for permanent stay or return home in the sampled areas.

<table>
<thead>
<tr>
<th>Intentions</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staying permanently</td>
<td>11</td>
<td>3.2</td>
</tr>
<tr>
<td>Return to home area</td>
<td>330</td>
<td>96.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>341</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Assimilation is a long process which implies a profound social transformation to the point that the new comers have completely accepted to adapt themselves to the new society. Comparing this to the displaced feeling after arrival to camp sites, their perception to Khartoum social life, their attitudes to the host community and favourable area for living, assimilation is probably inapplicable to the situation of the war displaced people, who are mostly proud nomads or seminomadic pastoralists, strongly attached to their traditional rural life. Many of them expressed with bitterness their continuous stay in Khartoum for reasons ranging from social, economic and political. Some of them went to the extent of saying that it is better to die than live in this situation where one has lost his human values. They are not used to city life and strongly attached to their pastoral cultural values. They had been pressed otherwise they would not leave their homes.

On the other hand adaptation which implies the ability of the new comers to adapt themselves to the social conditions of a host community without losing their own culture, may be applied in the case of the displaced, since the majority of them wanted to go home with the end of the civil war.

It is clear that the displaced are faced with a new social mode of life that is different for them to adapt or to be assimilated at present. Regardless of the adaptation or assimilation, it is most possible that they are going to
stay in Khartoum as long as they are able to maintain their lives which are not guaranteed in their area of origin.
4.1. Conclusion:

It is unlikely that the influx of the displaced to Khartoum and other parts of Northern Sudan will decrease or stop until a lasting peaceful solution is found. It can therefore be foreseen that displacement of people from the South will continue as long as the war lasts. It has been said that providing services to the displaced will lead to a larger influx, however, seeing that the war is the push factor, any services are unlikely to act as a pull factor, as most people leave, having lost their cattle and/or other property and thus their livelihood; they do not leave in search of the bright lights of the city.

The fact remains, however, that Khartoum at present is not able to provide these newcomers with job opportunities, and the creation of large scale alien population dependant on outside assistance is therefore what the coming years will witness.

The study has revealed that, in the last few years, the displaced population in the Three Towns has grown dramatically. According to the Department of Statistics (1984), there was a combined population of approximately 1.43 million in 1983. In the Relief and
Rehabilitation Commission (RRC) 1984/85 report, drought forced another 2.5 million into Khartoum in search of food and economic benefits. At the end of the drought, many of these people returned to the West only to be replaced in turn by approximately one million southern Sudanese fleeing the war in the South. It is now estimated by the government (Ministry for Displaced) that 70 to 80 settlements of various sizes referred to by the government as "unplanned settlements" ring the capital with an estimated total of 1,800,000 million displaced (Early Warning System Bulletin, May, 1990).

It is established that as the results of the accelerated migration to Khartoum and the subsequent increase in the city population, arise problems of health and environmental deterioration beside the economic, social and political problems. There is a high rate of unemployment (8.3%) among the displaced population followed by a relatively low levels of income. The average income per household is about £s.135.9. The rate of illiteracy among the displaced is very high (85.4%). This high rate of illiteracy is reflected on the occupational characteristics of the displaced population i.e. the type of jobs they perform.

The study demonstrated that, mortality rates for children under five years of age and sixty years and above in the displaced settlements in Khartoum have been very high about 28.8% and 20.6% respectively. The findings relat-
ing to morbidity among the displaced population provided high frequencies with insignificant differences on the most common diseases such as malaria, dysentry, bilharzia, etc.

It is shown that the main causes of the disease pattern are poor sanitary conditions in the settlements, overcrowding, shortages of or polluted water, increased susceptibility to infectious and other diseases due to malnutrition attributed to the displaced low incomes and their poor standards of living. Observations indicated that the displaced persons are initially all equipped to shift from a rural lifestyle to an urban one where higher standards of hygiene and environmental sanitation are required to prevent disease transmission.

The relationship between environmental health and the improper storage, collection and disposal of waste in the displaced settlements were clearly shown in the results. The prevalence of diseases and disease-vectors were related to the refuse collection and disposal system.

The study revealed that the displaced people in those settlements also contribute to the destruction of the forest resources, the shrubs and the woody species in and around the city since they depend entirely on wood as fuel for cooking their meals.

4.2. Recommendations:

There is no easy solution to the present situation of the displaced and their impact on the city, only a lasting
peace will bring the displacement and its effects to an end. Moreover, it is a worldwide phenomenon that once urbanized setting back in the rural setting is very hard and equally unlikely.

In the meantime, however, the authorities (the Ministry of Health, Khartoum Province, the Relief and Rehabilitation Commission, the Ministry of Education, the Ministry of Social Welfare, Iksa and Displaced and the NGOs) must continue with their tireless efforts to provide services for those citizens from the South who are the innocent victims of a war they did not want and are not fighting.

Therefore, in order to provide adequate services to the displaced in Khartoum and in the other parts of the country to avoid adverse impacts of any kind and intensity on the displaced population and on the occupied areas, the study suggests that the government should have well defined, immediate and medium-term policies.

4.2.1 Immediate policies:

To provide the displaced wherever they are throughout the country with their basic needs which include shelter, food, health, education, security and a clean and healthy environment.

- To provide special health and medical services for the most vulnerable groups i.e. the elderly, women and children.
- Active involvement of the displaced in determining their
own destiny; these include preparation and implementation of plans and programmes for their settlements, as well as provision of essential services.

- Provide the displaced with productive work opportunities, for example small farms, animal husbandry since most of them are cattle owners, fisheries, and traditional crafts particularly among the women to make them self-reliant and useful citizens as quick as possible.

- Undertake studies and social surveys to enumerate the displaced and categorize them on the basis of age, sex, qualifications, profession, etc. to enable the government to provide them with work opportunities in line with their skills and aspirations.

- Creating the proper social, economic and political climate, providing the necessary security and improving living conditions of the displaced using a well studied scientific approach.

- Upgrading some of the spontaneous camps established inside or outside residential areas to make them secure and suitable for living, having the basic services required. As for those who have settled spontaneously outside the camps, the government have to try to integrate them into the local communities, take care of them and strengthen the infrastructure and public services in these areas to cope with the increasing population.

- Establishment of reception centres at the inter-regional frontiers to care for the displaced so as to stop their
moved to the capital and other urban areas in order to avoid any impact that will subsequently occur. The aim is to help them to stay close to their original areas, environment, and the lifestyle they are accustomed to so that they may return without difficulties once the cause for their displacement is removed.

4.2.2. Medium-term policies:

The ideal solution to the problems of the displaced in Khartoum and the regional capitals is their voluntary return to their areas of origin. At this juncture, to approach this problem, the government have to undertake the following:

- Establish settlements in areas close to the original homes of the displaced and similar to theirs in climate and social environment as stated in the immediate policies with the provision that these areas are void of tribal tensions and disputes.
- The settlements to be established are to be productive and will provide basic services as well as meet the needs of the displaced.
- Continuing and strengthened efforts to increase the supply of food to the severely affected population of the Southern Sudan, to be carried out in coordination with peace efforts on process.
- A comprehensive urban strategy to help direct urban
growth and to reduce the adverse environmental consequences of overpopulation and the resulting poverty in the metropolitan Khartoum area.


Peacham, R. C. et al. (1977). Water Wastes and Health in Hot Climates. London: John Wiley and Sons Ltd.


Oliver-Smith, A., ed. (1986:10). *Natural Disasters and Cultural Responses.* Virginia, College of William and Mary: Studies in Third World Societies.


APPENDIX

The Environmental, Socio-economic and Physical Impact of the War-displaced People: The Case of Southern Sudanese in Khartoum City

Identification Information:
1. Town:
2. Area:
3. Number of questionnaires:
4. Date of interview:
5. Name of informant:
6. Tribe:

Section A:
Household members' Information:
6. What is the number of persons presently living with you:
Name:
relationship:
Does this person live here?
Sex: i. male ii. Female
7. How many rooms do you have in the house?
8. What do you use as building materials?
   i. tin ii. wood iii. mud iv. others (specify)
9. Where do you defecate?
   i. latrine inside the house ii. latrine at the neighbours house
   iii. Communal latrine outside the house iv. open space near the house
10. Where do you get your water from?
   i. Tap inside the house
   ii. Tap outside the house
   iii. Well inside the house
   iv. Well outside the house
   v. Buy from donkey cart
   vi. Others (specify)

11. Where do you throw the refuse you collect from your house?
   i. Garbage hill in the middle of the village
   ii. Burn it
   iii. Throw outside the house

12. Do you keep animals in the house?
   i. Yes
   ii. No

13. If yes, where do you keep them?
   i. Inside the fence of the house I am living in
   ii. In separate fence
   iii. Others (specify)

14. What other properties do you have in the house?

Section B

Community base information:

15. Schools: No. of boys No. of girls
   Date of establishment: government NGO

16. Health Centres: Date of establishment:
-government -NDD

27. Number of pupils attending the schools:

18. Level of schools:
   i. primary   ii. intermediate   iii. secondary

Section C
-----------------------

Social services:
-----------------------

19. Do you send your children to school in the area?
   i. yes   ii. no

20. If yes, go to questions 15, 16, 17, 18.

21. If no, where do you send your children to school?

22. How much do you pay for transport?

23. Do you pay any school fees?
   i. yes   ii. no

24. If yes, how much do you pay per child?

25. Where do you go for treatment?
   i. In the area   ii. Outside the area

Section B
-----------------------

Migration pattern:
-----------------------

26. When did you come to Khartoum?

27. How did you come to Khartoum?
   i. Directly to Khartoum
   ii. First to _______ then to Khartoum

28. What did you use for transport?
   i. lorry   ii. steamer   iii. train   iv. foot +
29. How long did you take on the journey?
30. Did you come alone or with your family?
31. If you came alone, when did your family joined you?
32. How did they learn of your presence in Khartoum?
33. Why did you come to Khartoum?
   i. looking for a job
   ii. famine stress
   iii. security
   iv. tribal conflict
34. Why did you choose Khartoum?
   i. Centre of government
   ii. have relatives
   iii. familiar with the place
35. Who received you on your arrival to Khartoum?
   i. relatives
   ii. government
   iii. relief agencies
   iv. friends

Section E
-----------------
Health history:
-----------------
36. Had any of the family members been sick during the last months?
   i. yes    ii. no
37. If yes, please tick the case of the sickness and mention the treatment he/she received, place of treatment, duration of sickness:
<table>
<thead>
<tr>
<th>Disease</th>
<th>Treatment</th>
<th>Place of treatment</th>
<th>Duration of sickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dysentry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diarrhoea</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bilharzia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malaria</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measles</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wooping cough</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typhoid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schistosomiasis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hook worms</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

38. Age of the sick member:
39. Sex of the sick member:
40. Has any of the family members died during the last few months?
   i. yes
   ii. no
41. If yes, please tick the cause of the death and mention the place of the death

<table>
<thead>
<tr>
<th>Cause of the death</th>
<th>Place of death</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dysentry</td>
<td>Schistosomiasis</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>Typhoid</td>
</tr>
<tr>
<td>Bilharzia</td>
<td>Schistosomiasis</td>
</tr>
<tr>
<td>Malaria</td>
<td>Hook worms</td>
</tr>
<tr>
<td>Measles</td>
<td>Others (specify)</td>
</tr>
</tbody>
</table>

42. Age of the deceased member:
43. Sex of the deceased member:
Section F

Employment and Economy:

44. Are you employed?
   i. yes    ii. no

45. If yes, go to question 6 (occupation)

46. How much do you earn per
   i. week    ii. month

47. Do you have other sources of income?

48. If you receive any extra economic support, from whom?
   i. Friends    ii. Government    iii. Relatives
   iv. Charitable bodies

49. If you are not employed, how do you earn your living?

50. What makes it difficult for you to get employed?
   i. I.D. card    ii. Nationality certificate
   iii. Residential card    iv. Others (specify)

Relief Programme:

51. Do you receive any relief items?
   i. yes    ii. no

52. If yes, please tick the organization which provide the relief:
   i. S.C.C.    ii. Sudanaid    iii. USAID    iv. I.R.A.
   France/Holland.

53. How many times do you receive the relief items per week?
54. How much do you receive?
55. Is it enough for the family?

Food consumption/nutrition:
---------------------------
56. How much do you eat per day?
   i. Three times  ii. Two times  iii. Once  iv. When
      there is food.
57. What is the food you eat composed of?
   i. Kitaa, Asida and Molah  ii. Meats, eggs
      iii. Vegetables  iv. Lentiles
58. Do your children eat the same food with the adults or
    they have a special food?

Fuel consumption:
------------------
59. What type of fuel do you use for cooking?
   i. Wood  ii. Charcoal  iii. Crop residues
60. If you use wood, from where do you obtain it?
   i. Purchase it  ii. Collect it
61. If you collect, from where?
   i. Distant area  ii. Immediate vicinity
62. If you purchase, how much do you pay per:
   i. Maaiwa  ii. Kam  iii. Others
63. What do you use for cooking?
   i. Stove  ii. Kadaya  iii. Others (specify)
Section C

Social organization:

Family conditions before displacement:
64. How were you living at your former village?
   i. Separately   ii. Mixed
65. Who was living next to you?
   i. Close relative (son, daughter, father, brother, sister)   ii. Relative   iii. Stranger
66. Who was supporting the family?
   i. Husband   ii. Wife   iii. Sons   iv. Daughters
Family conditions after displacement:
67. How are you living now?
   i. Mixed   ii. Separately
68. Who is living next to you
   i. A close relative   ii. Relative   iii. Stranger
69. Who is supporting the family now?
   i. Husband   ii. Wife   iii. Sons   iv. Daughters   iv. Others (specify)
70. If any of the male family members work outside the
    camp, mention the nature of employment:

Native organizations:

71. Do you have any native organization in the area?
   i. yes   ii. no
72. If yes, what are its functions?
Attitudes:

73. Do you have any intention of staying permanently in Khartoum:
   i. yes    ii. no

74. Please give reasons for both yes and no:

   Yes
   __________________________________________
   Reasons:
   __________________________________________

   No
   __________________________________________