

DINKA CATTLE TRADE:  
A STUDY OF SOCIO-ECONOMIC TRANSFORMATIONS  
IN A SEMI-PASTORAL SOCIETY

By

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A Thesis submitted in part fulfilment for the  
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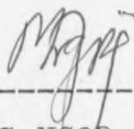
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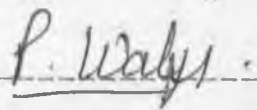
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## ABSTRACT

This study is about cattle trade among the Dinka of the southern Sudan. The Dinka people are a semi-pastoral people. They practice a mixed economy of animal husbandry, agriculture and fishing. Cattle are the most important form of wealth in Dinka society.

Many local persons of Dinka origin have taken up cattle trading in the last two decades as an occupation of economic importance. This innovation is recent and constitutes a change in pastoral attitudes and economic utility of livestock among the Dinka. The study investigates the factors behind cattle trade, the category of persons involved in cattle trade, and the objectives of cattle traders. The social implications of the phenomenon - with reference to family herd ownership, allocation of herds, status, etc. are also investigated.

The study was carried out by method of participant observation. Interviews were also made with fifty six cattle traders found at market sites. The research area was mainly Yirol district of Lakes Province in Southern Sudan. Research findings suggest that cattle trading in the research area was associated with the floods of the 1960's which affected the vegetation and the animal population in the area. These floods were also followed by the intensification of the war



between government forces and Anyanya - (guerilla movement) which made many persons migrate to towns, and to the northern Sudan. These migrants were the first to perceive the economic opportunities that accrued from cattle trading. The proportion of the urban areas in the region increased in 1972 as a result of peace and resettlement measures. Cattle trade was enhanced as a consequence of these changes.

Most of the persons who engage in cattle trade are young, unmarried, illiterate and junior sons in their families. Cattle traders have several objectives - some are immediate and others long-term. The main objectives are - building up a herd, establishing a retail shop and owning a commercial lorry.

Most traders regard property acquired through trade as their individual property contrary to traditional collective ownership. They have more say in decisions affecting herds. In general cattle traders gain status and influence in their families since they become important sources of income.

Cattle traders acquire wider perspectives on modern institutions such as education, regional government, medicine, etc. The traders become important sources of information and opinion leaders in their communities because of their wider knowledge which is acquired through travel between town and country.

Contemporary cattle trade among the Dinka, is thus an economic innovation which has implications for change in the society.

## CHAPTER ONE

### INTRODUCTION

#### PROBLEM STATEMENT

This study is about cattle trade among the pastoral Dinka of the Southern Sudan.\* It is an investigation of the environmental and socio-political factors which led to the emergence of cattle trade as an activity of economic importance among certain communities in Dinka society. The role of indigenous cattle traders as the sole suppliers of beef cattle to big towns and administrative centres in Southern Sudan, and as local change agents in their communities, has led us also to study the social characteristics and objectives of this emerging social category in Dinka society. The general approach here is to see the cattle trade as a socio-economic innovation within the local communities and as a developmental phenomenon within the wider regional economy.

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\* The political entity known here as Southern Sudan refers to the six provinces of Bahr el Ghazal, Lakes, Upper Nile, Jonglei, Western and Eastern Equatoria provinces. These provinces are administered as one (southern region), under the regional self-government act of 1972.

Refer to: Beshir, M.O. The Southern Sudan: From Conflict to Peace, 1975:158-168.

Among the Dinka, the Atuot and Cic sections in Yirol District, Lakes Province, and Bor section in Jonglei Province are the dominant groups in cattle trade. This study concentrates on the Atuot and Cic. It is concerned with cattle trade between Bahr el Ghazal Province and the Western and Eastern Equatoria provinces.

The main reasons for studying cattle trade among the Dinka and the justification for the study are given in the next section below.

#### RATIONALE

There is general emphasis today in Africa on rural development.\* This realization came about as a result of the conspicuous disparities which exist between the elites and the masses, as well as among geographic areas.<sup>1</sup> These disparities in income distribution and equity in services still exist after long decades of development efforts. It has now been realized that development should start from below and not from above. Robert McNamara in an interview with The New York Times on April 2, 1978 said that:

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\* Examples of this development include the ujamaa village development in Tanzania, the Harambee self-help movement and District Development Planning in Kenya. In the Sudan, the government has established village development committees which are a part of the political party. The village development committees have representatives in both the national and regional parliaments.

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"the trickle down theory of growth is an insufficient basis on which to expect human needs to be met in a reasonable period of time". (2)

It has also been stressed that development from below should attract the greatest participation of the rural masses.<sup>3</sup> But in spite of these realizations the planning and implementation of rural development programmes are still impeded by elitist arrogance and values. It is still assumed that the elites know best the needs and aspirations of the rural man. A study of micro-situations and especially those activities which have high acceptance by and participation of the indigenous people is important. They provide understanding of the local conditions and generate reliable data which are useful in the planning of rural development. This study is mainly significant for this reason.

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Secondly, the traditional pastoral sector has suffered much from the elitists' assumptions and prejudices.<sup>4</sup> Pastoralists are stereotyped as conservative and irrational.<sup>5</sup> Traditional pastoralists are seen as a liability to the state with insignificant contribution to national socio-economic development. Traditional pastoralism is in fact seen by some governments as incompatible with modern development.<sup>6</sup> Anthropological studies have contributed much to the correction of this position Asad (1970), Cunnison (1966), Lewis (1961), Gulliver (1966), Abbas (1973),

Lienhardt (1961), E.F. Evans-Pritchard (1940).<sup>7</sup>

These studies have shown that pastoralists live under difficult environmental conditions and their economic systems are rational adaptations to such conditions. They have also shown that livestock play a very important role in subsistence and social relationships in these societies. These studies also show that pastoral societies contribute to the national economy but,

"the persistent neglect of the livestock sector is the main reason for the small size of its contribution to the economy and the low level of production compared with standards achieved in crop production and other sectors". (8)

This study is a humble contribution towards a greater understanding in this direction. It shows the rationality of indigenous pastoral people and their adaptation and contribution to the national economy in a changing environmental and socio-political situation.

Thirdly, cattle trade represents an economic innovation among certain Dinka communities.

Francis M. Deng mentions that: "traditionally Dinkas loathed trade and it is still unpopular".<sup>9</sup> This is not the case with cattle trade as will appear in the

text. Cattle trade is an attempt by the relatively poor and the junior sons who have no rights of property under the traditional system to improve their socio-economic positions. Cattle trade is also an economic innovation in that some cattle traders invest their profits outside the pastoral sector such as in retail trade in consumption goods, and by doing so diversify their economy at the village as well as the district level.

It is important to study such a phenomenon which indicates change in a society stereotyped as conservative and resistant to change.

Fourthly, the present system of indigenous cattle trade in the Southern Sudan is the sole system through which slaughter cattle are supplied to urban and administrative centres in the Region. The butchers in these urban and administrative centres are also ex-cattle traders. Settlements for cattle traders of a semi-permanent nature have also emerged around important cattle markets. Cattle trade in this last sense is an aspect of contemporary urban development in the Southern Sudan. The employment opportunities in the urban centres in the region are limited because of the very low level of economic development. Cattle trade represents self-employment and an emerging informal sector in the urban centres of the Southern Sudan. It is therefore important to study this phenomenon to know how persons

of pastoral origin inter-relate to urbanizing situations with no employment opportunities.

In a study of migration in Nigeria, Otite Onigu asserted that rural to rural migrants contribute to socio-economic development and the emergence of small urban centres. He further stated that:

"migrants link emerging urbanizing situations to the socio-economic organizations of their natal homes, by ties of kinship and cultural symbols as well as those of cash and the impersonal relations of a growing population with diverse occupations". (10)

The above statements are applicable to contemporary cattle trade in the Southern Sudan in the sense that those who engage in the trade move out of their home areas to wealthy cattle areas and big towns where trade in cattle is profitable. They play the rôle of middle-men between urban consumers and the indigenous livestock producers. The cattle traders are a part of the cash economy and they effect changes in their communities of origin through the impersonal market relations which they establish. It is important to know which changes the traders effect in their communities.

The subject of cattle trade was found useful for study for the reasons given above. Most of the reasons given indicate that the subject is of practical



importance for the Southern Sudan. The subject is however, also important for academic purposes. The literature on the marketing of livestock from the traditional pastoral sector shows that the indigenous pastoralists have usually been sellers. The role of the middlemen in cattle marketing was assumed by an outsider who was usually of a different ethnic group. For example, in Nigeria, the cattle of the Fulani pastoralists were marketed by the Hausa middlemen.<sup>11</sup> In some countries the marketing of slaughter cattle was a monopoly of the state or a large commercial organization. An obvious example of this trend is the Kenya Meat Commission.<sup>12</sup> This study will act as a unique example in the literature of cattle marketing and pastoral socio-economic development. And as such it will contribute to more knowledge of the rationality of pastoral peoples under modern national economies.

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The subject of cattle trade was chosen for study for both practical developmental purposes and academic objectives. These purposes, in addition to the reasons given above, are enough justification for studying cattle trade among the Dinka pastoralists.

The section which follows the rationale will deal with a review of relevant literature on the subject. The objective of the literature review will be to arrive at models of explanation which will be used in the interpretation of our data.

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## CHAPTER TWO

### LITERATURE REVIEW

#### CONSERVATISM AND RESISTANCE TO CHANGE

Early anthropological literature on the Dinka characterized them as extremely conservative and resistant to change. Writing on the Nilotic groups in the Sudan and with special emphasis on the Dinka and the Nuer, Audrey Butt observed that:

"They consider their country the best in the world and everyone inferior to themselves. For this reason they despise clothing, scorn European and Arab cultures, and are contemptuous and reserved with foreigners. Their attitude towards any authority that could coerce them is one of touchiness, pride, and reckless disobedience. Each determines to go his own way as much as possible, has a hatred of submission, and is ready to defend himself and his property from the inroads of others. They are thus self-reliant, brave fighters, turbulent and aggressive, and are extremely conservative in their aversion from innovation and interference". (1)

There are some exaggeration in this characterization of the Dinka people and their culture. This exaggeration and bias was based on Dinka resistance to colonial rule. The Dinka and the Nuer were the last groups to be pacified by the British colonial powers in the Southern Sudan.<sup>2</sup>

Admittedly, the Dinka are a proud people. But their pride and ethnocentrism is based on human dignity and respect of each other. Writing on the theme of pride, respect and dignity as human values in Dinka society, Dr. Francis M. Deng maintained that: "...the Dinka do not claim to have power over others, but as many other proud people, they take themselves as the standard of what is "normally human" and, therefore, superior".<sup>3</sup> The early anthropologists took Dinka self-respect and pride in their culture as elements of conservatism.

The Dinka are both pastoral and agricultural but cattle dominate their lives. Their preoccupation with cattle was also interpreted by the early anthropologists as a sign of conservatism. Writing on this issue, Melville J. Herskovits wrote that:

"The Dinka, who live across the Nile from the Shilluk, were bitter enemies of theirs, yet at one with them in their affection for cattle. Here too every thought was how to get more cattle and whatever concerned the beasts was important. Cows were never slaughtered, and when a cow became ill, it was put aside in a special hut and doctored. Only those that died were used for food". (4)

The Dinka people as illustrated in the above passage conformed to Herskovits' theory of the 'cattle complex'. According to this theory, the primary role of cattle in African pastoral societies was cultural

rather than economic. Cattle were kept mainly for prestige and religious purposes, hence the interest in numbers and the non-slaughter. Cattle were also kept for self-identification, and this way became the basis of intimate affection between human beings and the animals. The reluctance of the Dinka and other African pastoralists to sell large numbers of cattle in modern urban markets was thus seen as a function of the cultural complex. Subsequent literature on pastoral societies indicates that the theory of the cattle complex puts emphasis in a wrong place. These studies Rigby (1968), Schneider (1973), Dahl and Hjort (1976), Gulliver (1972), Fielder (1973) show that inherent factors of pastoral production, and administrative policies during the colonial era and post-independence period have been responsible for the minimal integration of pastoral sectors into modern national economies. The inherent factors of pastoral production which tend to inhibit change and development are mainly:

- (1) The marginal physical and economic environment which the pastoralists inhabit.
- (2) The fact that livestock are wealth to the pastoralists.
- (3) The dominant role played by cattle exchanges in forging social and political relations in pastoral societies.

The administrative policies which tend to hamper livestock development among pastoral societies consist mainly of:

- (4) Emphasis on agricultural development particularly cash crop production and neglect or underdevelopment of the pastoral sector.
- (5) Coercive measures used in integrating the pastoral sector into the cash sector.
- (6) Lack of markets for livestock.

We shall examine the relevance and significance of each of these factors in relation to the Dinka. Conservatism and resistance to change - whether as fact or myth in Dinka society-can only be proved in the light of the factors mentioned above.

#### MARGINAL PHYSICAL AND ECONOMIC ENVIRONMENT

The main characteristic of pastoral environments including that of the Dinka is that they are unsuitable for crop production. The majority of East African pastoralists live in arid and semi-arid areas.<sup>5</sup> These areas are predominantly faced with droughts. They are also characterized by poor soils which are not fertile. Pastoral production is thus an adaptive mechanism in a potentially less productive environment. In some societies, the adaptation has been more dependence on livestock products. In others the adaptation has been in the form of mixed farming.

Agriculture is practiced as the dominant mode of subsistence while livestock are kept as insurance against crop failure and climatic disasters.<sup>6</sup>

Writing on administrative development policies among the Karamojong people of Uganda, Randall Baker observed that:

"What was sadly misunderstood was the highly developed adjustment which the pastoralists have made to arrive at a system which offered them the minimum of risk in a very marginal physical environment and the very intimate knowledge of the physical resources which they had acquired in the process". (7)

The Dinka of the Southern Sudan live in a marginal economic environment. They live in the southern Flood Plains.<sup>8</sup> The main land classes of the Dinka country are:

- /
- (a) The Nile and other permanent water surfaces such as Lake No and Lake Ambadi.
  - (b) Permanent swamps along the Nile of papyrus and kindred vegetation, which remain flooded all the year.
  - (c) The flood plain (Dinka: toich) which is inundated from the rivers for a period of four to six months every year.
  - (d) Intermediate land areas where flooding from the rivers is not likely, but which become flooded for several months every year because



of impeded drainage of the rain which falls upon them.

- (e) The highlands which normally escape flooding from the river and have sufficiently permeable soils to drain quite quickly after rain.

Dinka economy and society are an adaptation to the environment described above. Dinka depend for their subsistence on agriculture, animal husbandry and fishing. Fishing is however practiced on a seasonal basis. The major constraints on the economy are centred on the availability of land free from flooding. In the rainy season, the livestock and the human population move from the swampy areas to the highland. In the dry season, they move from the highland to the swampy areas in order to get pasture and water for their animals. The ecological factors are thus the basis of/transhumant mode of livelihood found among the Dinka. As mentioned earlier, agricultural production is inadequate because of floods, poor soils and labour scarcity. The labour is scarce because it is divided between various economic activities. Writing on agricultural production among the Nilotes of the Sudan, Barbour observed that:

"...the natural conditions of their land are ill-suited to crop production, with pests, diseases, droughts and floods all taking their toll of growing crops in the field. In many areas, moreover, the scarcity of suitable agricultural land makes it impossible to hope to grow an appreciable surplus for sale, and it frequently happens that fields which should be fallowed are in fact cropped for want of better land". (9)

Conservatism, resistance to change or acceptance of change and innovations by the Dinka should be viewed in the light of the above environmental factors. Contemporary cattle trading by some Dinka communities is an adaptation to the environmental factors mentioned above.

#### CATTLE AS WEALTH IN PASTORAL SOCIETIES

Gunnar Haaland<sup>10</sup> in an important theoretical exposition on pastoral economies postulated the following pattern of pastoral systems:

- (a) Animals are privately owned and exchangeable.
- (b) Pasture is communal or free and not exchangeable.
- (c) Agricultural land is communal and not exchangeable.
- (d) There is a limited market for wage labour in pastoral communities.

The implications of this system of production according to the author are that: (1) no matter what economic institutions there are, a management unit in

pastoral production is always faced with the possibility of growth, and (2) in the absence of economic institutions which facilitate investment in the agricultural sector, management units in this sector will always be stimulated to invest in the pastoral sector if it is ecologically and politically feasible. Cattle in this sense are capital. They have the potential for growth and are a source of continuous income for their owner. Haaland maintains that the only growth possibility is to invest in the pastoral sector; animals are the only factor of production which is monetized. This is an investment with growth potential since the profits from pastoral production can be invested in the factors of pastoral production. There is no growth potential in the agricultural sector; the profits from agricultural production cannot be invested in land or in labour.

Speaking on commercial sale of cattle by the traditional pastoralists, the author argued that a significant fraction of the income derived from cattle is capital gains (animals produce animals), and that growth in the pastoral enterprise depends on decreasing involvement in market transactions (keeping the sale of productive animals at a minimum). In other words pastoral systems are self-sufficient in so far as economic investment and growth are concerned. The author however, qualified his argument when he analysed pastoralists' responses to prices. He pointed out that

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pastoralists will normally sell unproductive animals (unfertile females and males not needed to maintain the fertility of the herd) when prices are favourable. Concerning productive females he argued that any sale of such animals would imply reduction of capital, and thus less security. He however pointed out that persons whose herd had reached a size where marginal productivity on further investment had reached zero would sell productive animals. As for persons with smaller herds, he pointed out that higher prices would for them mean that they had to sell fewer animals in order to satisfy their consumption needs. Haaland maintained that this response is rational from a private economic point of view. Other writers have argued on similar lines as Haaland. Michael D. Quan in an analysis of cattle marketing in Karamoja District - Uganda observed that there is:

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"....an implicit contradiction in the perception of the economic status of livestock in Karamoja, the buyers in the modern sector see livestock as beef, a nutritional commodity either to be internally traded and consumed or exported. On the other hand the Karamojong see their cattle as wealth and their primary utility is in trade and investment". (11)

He argued that sale of large amounts of cattle which was induced through destocking measures such as the quota system, increased taxes, fines, confiscation etc. was a 'decapitalization' of the Karamajong economy.

Robin J. Fielder in his analysis of the role of cattle among the people of Zambia maintained that:

"expenditure in invested capital in all societies, Ila, Tonga, European, etc. is regarded as morally justifiable only if it is spent on something special such as a house, or a car or on something which will bring a return, like grinding mill or a store". (12)

The above arguments presented by Haaland, Quam and Fielder are relevant in the case of the Dinka people. Dinka regard their cattle as capital. A recent survey report on the response of the Dinka to market demand observed that the greater reluctance to sell is attributable to a rational unwillingness to reduce the household's stock of capital as the margin of safety is thus diminished by a significant amount. To be obliged to sell a fertile cow or heifer is viewed as a great misfortune.<sup>13</sup> The report predicted that the reluctance to sell cattle would diminish with increasing herd size. The distinction between households with large herd size and others with small herd size will be useful in this study. On the general level, it will be argued that Dinka areas with large cattle populations have higher commercial offtake than those with lower cattle populations. Secondly, it will be argued that cattle traders come mainly from households with small herd size. Likewise, areas rich in cattle wealth have few persons engaged in cattle trade, while areas with less cattle dominate in cattle trade.

Pastoralists regard cattle as capital. This is one of the main reasons they do not sell large amounts of cattle in the modern markets. Cattle are also withheld from the markets because they insure family survival in times of climatic and environmental calamities. There are no investment opportunities outside the pastoral sector which can be incentives for more sales. The role of livestock as capital seems the basis of "pastoral conservatism". However, it is also the basis for change. Provision of investment opportunities and elimination of environmental constraints can lead to the integration of the pastoral sector with the modern cash sector.

#### THE SOCIAL AND POLITICAL ROLE OF CATTLE IN PASTORAL SOCIETIES

Cattle are used in pastoral societies in creating and cementing social relationships. They are also used in influencing people and achieving a position of leadership in the community. Writing on this theme among the Jie and Turkana people, P.H. Gulliver observed that:

"...any man is the centre of a field of direct, inter-personal and affinal kinship, with a residual category of quasi-kinship, viz. bond-friendship ...the chief mode of expression and a main thread of continuity lie in reciprocal rights over domestic animals. They are from a vital point of view property relationships. With each of these peoples a man maintains well organized reciprocal..

...rights to claim gifts of animals for certain socially defined requirements. Thus a particular kind of inter-personal relationship is consciously translated into the right to seek stock in times of need and the corresponding obligation to give stock in time of other's needs". (14)

The main institutional channels through which livestock are socially exchanged are bridewealth, religious sacrifices and ceremonies, stock-friendship and reciprocal gift exchanges. The functions of these institutions start with the family group. The role of the heads of the households, and on the community level the elders, is thus very important. Responsibility for herd allocation lies with the heads of the families. A brief discussion of each of the institutions concerned with livestock distribution follows below.

#### Livestock Distribution within the Family

The general pattern as shown by Gulliver and Gray is as follows:

A husband - father allocates portions of his herd first to his wives, if he has more than one, and then to his adult sons when they grow up and have families of their own. Usually he retains at least nominal control or ownership of all the livestock possessed by his family, and when he dies, the sons inherit the animals in their possession, with their

father's residual herd being divided among them.<sup>15</sup> This mode of cattle distribution within the families creates some stratification. There is usually a distinction between wives as well as sons. The distinctions are based on seniority in marriage and age. Among the wives, there is a distinction between senior wife and junior. The senior wife is the one who was married first while the junior was one married later. Among the sons, there is a distinction between elder son and junior son. The elder son was one born first and the junior was one who followed. Because of the differentiation among wives, an elder son of a junior wife can be regarded junior to a junior son of a senior wife. Inheritance is on the male line. The share of an individual in the family herd depends on the position of his mother and his status among his uterine brothers. There is a great deal of inequality and deprivation within pastoral households with regard to livestock distribution.<sup>16</sup> The rules of livestock distribution and their subsequent effects are diffused in the society through kinship relations.

Early anthropological literature on the Dinka suggests that their inheritance system conforms to the pattern described above. Seligman, mentions that among the Dinka a man gives cows to each of his wives, his first wife (the Tingdit lit. "great wife) receiving the most and each succeeding wife getting proportionately a smaller number.<sup>17</sup> As for the sons, he said that when the Wendit (eldest son of the Tingdit) enters an age-class and thus comes to man's estate his father gives him two spears, two clubs, one bith (fish spear), and perhaps as many as six cows. When the



Wendit marries, his father gives a liberal quantity of bridewealth, so also to the other sons of the great wife, but sons of other wives fare less well, unless their sisters have married and by their marriages have brought in cattle. Seligman spoke also of another important position. This was the position of kun - the youngest child of each wife. This position is of social importance specially when the kun is a male. The kun of the great wife received no cattle at his father's death, as the whole of his mother's herd will come to him, and upon him falls the duty of looking after her after the death of his father. The position of kun of second and other wives seems less important. Seligman writes that:

"the kun of other wives inherit some of their mother's cattle, but the elder sons also share, and if the kun should receive cattle through his sister's marriage he might perhaps not inherit from his mother as well". (18)

I wish to point out contrary to what Seligman has described in his account, that after the marriage of the eldest son of the great wife, the next marriage falls on the eldest son of the second wife, etc. Marriages are the principle causes of conflict and fragmentation within Dinka society. The marriage chances of an individual depend on his position in the family and his personality. There is always competition and rivalry over who is to marry first. Seligman's

Account of livestock distribution among the Dinka is important for our study. First, it shows that senior wives and eldest sons in Dinka society are more privileged than others; second that there is inequality in livestock distribution. The position of kun is important, but the fact that those who occupy this position are usually under age make them liable to be cheated by eldest sons. In fact the family is usually under the care of the eldest son when the father has died.

One of the hypotheses in this study is based on the facts related to livestock distribution in Dinka households. We shall argue that propensity to engage in cattle trade among the Dinka is related to the position an individual holds in his family.

#### The Role of Cattle in Bridewealth Payment /

Bridewealth is one of the most important mechanisms of livestock distribution in pastoral societies. The reciprocal contribution of cattle for paying bridewealth of a member, and the reciprocal sharing of bridewealth received are important indices of the closeness of kinship ties.<sup>19</sup> Bridewealth is paid as a symbol of legal marriage, for the loss of a member of the group to another group, and for the procreative potential of the woman who continues the lineage of the husband. Godfrey Lienhardt observed among

the Dinka that:

"in compensation for homicide, and in marriage payments...it is expected that the cattle handed over in the place of the dead man, or in place of the girl will multiply for the lineage of the people who have lost a member, the continuity of generations in cattle thus being balanced against the continuity of human generations which has been broken by the loss of a member to the lineage". (20)

Bridewealth as indicated in the above passage is both individual as well as social in its function. It is the basis for the immortal continuity of a person's name, the lineage and the tribe. Lienhardt mentions that 'Dinka greatly fear to die without issue, in whom the survival of their names - the only kind of immortality they know - will be assured'.

In his study of the Karamojong economy, Michael D. Quam has argued that bridewealth among the Karamojong is an economic investment.<sup>21</sup> His argument runs as follows. Females in Karamojong society are responsible for agricultural work while males perform pastoral tasks. The basis of a successful household's labour is established through marriage. As child bearers, women are the ultimate source of the labour supply. Adult women provide the majority of the household's goods through cultivation. They also give birth to sons and daughters who play significant roles

in the household's economy, boys as herders, girls as agricultural workers. Bridewealth is thus an investment in factors of production.

The transfer of cattle in marriage contracts is one of the reasons pastoralists are reluctant to sell large amount of cattle in modern urban markets. Bridewealth is not easy to acquire and one of the arguments in the thesis will be that the need to acquire bridewealth cattle is a basis for change among the Dinka. This is so because of the stratification system described earlier. It is argued that the majority of persons who engage in cattle trade or wage employment are unmarried persons. One main hypothesis in the area of bridewealth among pastoralists states that the high bridewealth is closely correlated to large livestock holdings, and that as livestock holdings increase bridewealth also increases. This type of development certainly seems to be true of the Dinka. No specific figures have been mentioned in the early literature. But the literature seems to suggest that there was a wide variation in the amount paid as bridewealth between poor and rich communities.<sup>22</sup> E.E. Evans-Pritchard mentioned 40 cattle as the bridewealth among the Nuer.<sup>23</sup> The Nuer are akin in many respects to Dinka and it can be assumed that the Dinka paid the same amount or more.

## The Religious Role of Cattle

Cattle play a very vital role in the belief system of the Nilotic people. This vital role of cattle in religion has been the basis of the theory of the cattle complex. C.G. Seligman observed of the Dinka that they are 'intensely religious', and that in his experience, the Dinka and Nuer were by far the most religious peoples in the Sudan.<sup>24</sup>

Dinka worship a high god known as Nhialic. This high god, they believe dwells in the firmament. The Dinka believe also in lower spirits which are called jaak (sing. jok). These lower spirits are connected with practical affairs of life. Finally, they believe in ancestral spirits. All adult males and females who die are believed to have spirits and through their spirits continue to interact with their living descendants after their death. Francis M. Deng call this last category of belief 'the myth of permanent identity and influence'. He divides the Dinka social world into two - the living participants and the mythical participants.<sup>25</sup>

Cattle are the means through which the human beings intercede with supernatural powers in Dinka society. The Dinka believe that god can be appeased through sacrifice and dedication of a beast. They also believe human life can be saved through

sacrifice of a beast. Animals are sacrificed on occasions of illness, burial, etc. Fertile female cattle are dedicated to spirits, while bulls (castrated) are sacrificed to Nhialic. They can also be dedicated to spirits.<sup>26</sup> The bulls and infertile female cattle are killed on burial occasions.

Goats and sheep are also used in the process of interceding of humans with supernatural powers. But these stock are considered inferior and for that reason, they are used only on minor occasions. Godfrey Lienhardt has studied the religion of the Dinka. The vital role of cattle in religious sacrifices has been discussed elaborately in his book Divinity and Experience: The Religion of the Dinka. What needs to be pointed out here is that the religious role of cattle in Dinka society will not be a constraint on commercial offtake in the future. The reason is that Dinka have accepted modern medicine and this innovation tends to diminish the role of cattle in religious sacrifices. A recent analysis of market sales in one Dinka community showed that market sales in Gogrial consisted of a very high proportion of bulls. The study showed also that the proportion of bulls to cows showed an upward trend for the period 1972-1978.<sup>27</sup> These findings suggest that the role of bulls and oxen in the long run will be commercial rather than religious.

Cattle are also used for aesthetic purposes in Dinka society. Young men use oxen for composing songs. Through these songs, the young man projects his feelings of love, hatred, courage, lamentation, happiness, beauty, etc. Oxen songs are in fact commentaries on social order in Dinka society. They reflect the inequalities and deprivations of youth versus elders. They also reflect the personality of the individual singer.<sup>28</sup>

The aesthetic role of cattle will not be a constraint on commercial offtake in the future. As W.J.A. Payne has observed, young men including cattle traders see cattle and money as interchangeable.<sup>29</sup>

#### The Stock Friendship and Reciprocal Gift Exchanges of Cattle

In most pastoral societies including Dinka cattle are used in interpersonal relationships. Individuals exchange stock with each other. Besides social functions, interpersonal exchanges of cattle serve also economic purposes. Cattle are exchanged between friends as a way of avoiding complete deflation of one's herd in times of disasters. In this case, the cattle exchanged are only kept in trust. The man who has been given a cow keeps it as a property of the lender. The borrower is only allowed to use the products - milk and meat - in case of death. The cow and its calf belong to the lender. Interpersonal

exchange of cattle serves also political ends. A rich man who has lent cattle to many stock friends has more allies in times of inter and intra-tribal wars. In his local community, he has high prestige and is more influential.<sup>30</sup>

One effect of stock friendship and gift exchanges of cattle on commercial offtake is that a household's herd is 'made up of animals that represent various social restrictions and demands'.<sup>31</sup> It can be said however, that stock friendship agreements are not adhered to strictly. Some trustees consider borrowed cattle their property. The borrowed cattle are the ones easily dispensed with in times of emergencies (famine, taxation etc.). As such stock friendship cannot be considered a crucial constraint on commercial offtake. The political function of interpersonal cattle exchanges on the other hand is declining because of the changes in the overall stratification system. The introduction of the modern state system, education, commerce, industry, etc. affected stratification systems in pastoral societies. As such the political function of cattle exchanges is not also a long term constraint on commercial offtake.



## ADMINISTRATIVE POLICIES TOWARDS THE LIVESTOCK SECTOR

The administrative policies which affect livestock development were mentioned earlier in this review. These policies were the emphasis on agriculture at the expense of livestock, the coercive measures used in increasing more sales, and the lack of organized markets. A brief review of each of these policies follows below.

### Pastoralism Versus Agriculture

The under development of the livestock industry in Africa is a consequence of ideological and political factors. According to the theory of evolution, animal husbandry is the last stage of economic development next to hunting and gathering. Agriculture and industry are the highest stages in the hierarchy of human development. Evolutionary theory influenced colonial administrative thinking. Animal husbandry in Africa was considered primitive and unworthy of development by colonial governments. The colonial governments favoured agricultural development to livestock industry. The main reason was that these governments 'were interested in those crops that enhanced industrial development in their respective countries back in Europe'.<sup>32</sup> This trend of development was perpetuated by post-colonial governments. They continued to encourage the production of cash crops for export. Peter Rigby, in a review of administrative policies towards livestock development in East Africa,

argued that there are a generally accepted set of myths about pastoralism and pastoral societies in East Africa. These myths are centred on the belief that pastoral people have emotional attitudes towards their stock which are an inhibiting factor in development. In his criticism of this view, Rigby pointed out that:

"the most common experience of pastoral peoples is that of government initiated compulsory destocking schemes, combined with exhortations that they should grow more crops and become 'civilized' agriculturists". (33)

Commenting on the emphasis on ranching as the strategy for livestock development, Rigby observed that ranching is not labour intensive but essentially capital intensive. As such, livestock industry based upon ranching, even cooperative ranching would not contribute to the solution of rural development problems. It would cause further deprivation by pushing people out of the pastoral areas into the urban centres where unemployment is high. H.K. Schneider has also remarked that economic development for pastoral people has usually meant a change from pastoralism to agriculture. He argues that pastoralists resist this economic development because it involves high opportunity costs for them. He writes:

"From the high status they enjoy because of their wealth relative to agricultural people, pastoralists would be reduced to supplicants in European markets". 34

It has to be pointed out that the administrative emphasis on crop production has resulted in taking away away of fertile areas from pastoralists' control and many of them have already become supplicants in modern African cities.

There was no systematic economic planning in the Southern Sudan during the colonial period. The main aim of the colonial power in the Southern Sudan was guarding the Nile from rivalrous powers.<sup>35</sup> The colonial administration never aimed at exploiting the natural resources of the Southern Sudan. The post-colonial period in the Southern Sudan was characterized by turmoil caused by the war from 1955-1972.<sup>36</sup> The development of agriculture and livestock has lagged behind as a result of the above factors.

If pastoralists in the Sudan have been conservative and resistant to modern innovations, it was partly due to their neglect by colonial and post-colonial governments.

## Coercive Measures

Some of the coercive measures used by administration to increase sale of pastoralists' stock have been, destocking, high taxation, fines, confiscation, etc. These measures have been justified on account of conservation of environment. The measures have been instituted also with the hope that pastoral economies were being commercialized. It is argued that pastoralists keep large amounts of livestock which destroy the environment through erosion. Pastoralists have resisted coercive moves against their economies and for that reason they have been stereotyped as conservative.

Although destocking measures were not applied in the Sudan, the administration used confiscation and high taxation to insure forced sales. Confiscation of cattle was common particularly at the period of pacification.<sup>37</sup>

## Administrative Constraints on Cattle Marketing

Government policies towards cattle marketing represent constraints on commercial offtake. Two of these policies are - control of prices, and heavy taxation of producers, cattle traders and butchers. G.R. Spinks in his report on livestock marketing in Kenya cautioned that:

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"local administration must not treat livestock markets as means of raising revenue through the levying of cesses. Charges should be related to the cost of the marketing services provided". (38)

Aldington and Wilson stressed the same point in a later study on Kenya beef economy.<sup>39</sup> The two authors found that control of prices by the Ministry of Agriculture and Kenya Meat Commission discouraged local producers, traders and butchers from participation in cattle marketing. They recommended that the government subsidize selected groups of producers by providing advisory and veterinary services, free of charge or at subsidized rates, or improvement of the marketing infrastructure - sale rings, holding grounds, and stock routes, and provision of the staff to man the extension services.<sup>40</sup> Lack of market facilities is a severe constraint on commercial offtake in some countries. For example, Robin J. Fielder observed in Zambia:

"the official marketing system every two to three months can be disincentive for Ila to sell for export. The C.S.B. (Cold Storage Board) system of fixed prices and the take it or leave it attitude which this engenders towards the seller does not give the impression of great eagerness to buy". (41)

He further commented that most sellers in Zambia accepted prices with a grumble, but to reject them

meant no sale, and that the C.S.B. made no second offers, with no bargaining. This observation shows the weak position in which pastoralists find themselves when selling cattle in modern markets. William Mackenzie<sup>42</sup> in a study in Tanzania came up with several findings. For example, he found that the government put much emphasis on disease control and neglected marketing facilities, that there was much control on livestock movement, and that control of prices led to fall in supply. The findings of this research are many and cannot be covered in this review. These findings however fall in line with the fact that price control and lack of market facilities are a constraint on cattle sales. The PDU studies on cattle marketing in Southern Sudan concentrated their attention on economic constraints and neglected social constraints. They pointed out that the main constraint on commercial offtake of Dinka cattle in the Southern Sudan will be the low purchasing power of the population in the Region. They recommended that new markets should be sought.<sup>43</sup> Our attention in this study will be on social constraints - particularly the relationship between administration and producers, traders and butchers.

### CONCLUSION

The literature reviewed in this chapter leads us to the conclusion that what early anthropologists termed pastoral conservatism was a gross

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misunderstanding of a productive system which had internal dynamics based on adaptation to environment. The lower integration of the pastoral economy in the modern sector was a result of environmental, social and political constraints. Secondly, it was a result of colonial and post-colonial policies which favoured crop production for export at the expense of livestock industry. The literature reviewed leads us to conclude also that pastoralists will not resist innovations that have benefits for them.

The Dinka of the Sudan have shown great enthusiasm for development in recent times, particularly after the war.<sup>44</sup> Cattle trading is one expression of this enthusiasm. It is based on self-reliance. In the coming chapters, we shall show how this acceptance of change and innovation is based on the internal dynamics of Dinka society.

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## METHODS OF RESEARCH

This chapter deals with methods and techniques used for collecting the data during the field work. The method of participant observation, interview and documentary sources from government departments were the main methods used in the collection of data. The advantages and disadvantages of each of these methods and the justification for using them in the data collection will be discussed in each of the sections below.

### PARTICIPANT OBSERVATION

The method of participant observation has been the main research tool in anthropology since the inception of the discipline. The early writings of 'armchair anthropologists' such as Lewis, H. Morgan, E.B. Taylor, Sir Henry Maine etc. were based on the reports of individuals who had participated in or visited non-European societies.<sup>1</sup> These reporters consisted of geographers, traders, administrators and missionaries. The actual fieldwork combined with participant observation started with the famous visit of Bronislaw Malinowski to the Trobriand Islands in 1914-20.<sup>2</sup> After Malinowski, fieldwork combined with participant observation became a standard method in anthropology. Distinguished anthropologists such as

Raymond Firth visited the Trobriand Islands, while E.E. Evans-Pritchard carried out fieldwork among the Azande and Nuer people of the Sudan in the early 1940s. In general, the method of participant observation has been used for studying small scale illiterate societies in the contemporary developing world. The method was also used for the study of sub-cultures and marginal groups in the industrialized Anglo-European countries.<sup>3</sup>

The main principles of the method as used by anthropologists have been:

- (1) A study of a small scale society or cultural group mainly by an alien researcher who was a non-national or a non-member of the ethnic group under study.
- (2) The researcher was required to spend a period of not less than two years with the community under study.
- (3) The researcher was required to learn the language of the group under study.
- (4) The researcher was given a social status in the community under study, and from this position he/she participated in the life of the community.

- (5) The researcher was required to use a holistic approach in his data collection. He recorded all the aspects of social life in the community. He collected his data by participating in the social life of the community as well as through interviewing of key informants, note-taking, recording of genealogies, village census etc.<sup>4</sup>

The main advantage of the method has thus been the in-depth knowledge of the group under study which a researcher gains because of his long stay in the community. The low level of literacy among the rural communities in the Third World and lack of written documents in these societies has made participant observation more commendable. This observation is particularly true for pastoral societies. Participant observation has also its disadvantages. The main disadvantage is that the results and findings of research based on the method cannot be easily replicated. The reason is that the method is personal in nature. The findings are based on individual observations, opinions etc. Participant observation lacks research design, sampling techniques, hypotheses etc. The data collected through participant observation is usually non-quantitative.<sup>5</sup> The method is still useful however in spite of these weaknesses. The main reason is that there are no consistent written records on rural communities from which the research

design and hypotheses could be drawn before starting the fieldwork. The main advantages of participant observation for this research will be clear in the discussion of problems encountered in the field. Suffice it to say that it was the most useful method of data collection in this research.

Our observations as well as the interviews were made at market sites in Wau, Awail, Gogrial and Thiet in northern Bahr el Ghazal. I used to attend public auctions which started at mid-day and ended at 3 p.m. In Thiet, the auctions started at 6 p.m. Cattle traders gathered round the market sites two hours before the auction. It was during these periods the investigations were made. I also used to visit the traders at their camping sites in the evening. Some traders were also met at their residential quarters at 'Khor Mudir' in Wau town. At the market sites, I acquainted myself with local leadership which consisted of market clerks, cattle guarantors, executive officers, and well established traders. This category of people acted as key informants. I was introduced to the other traders and butchers by these informants.

Some cattle traders used to identify me as a government official working in the market. Others identified me as their customer who wanted to buy their cattle. The first group was suspicious of me

while the second was friendly and cooperative. The impact of these perceptions on the data collection will also be discussed along with other problems encountered during the field work.

The next section in this chapter on methodology deals with interview.

### INTERVIEWS

It has to be emphasized at the beginning of this section that the interviews which were made were complementary to the method of participant observation. The main reason was that there was a low response rate among the cattle traders who were the principle subjects of interviews.

The category of persons interviewed consisted of local government administration officers, market clerks, cattle guarantors, market auctioneers, cattle traders, butchers, village elders and ex-cattle traders who had retired from trade. The number of individuals interviewed from each of the categories is given in Table 1.



Table 1: Categories and Number of Persons Interviewed

Category	Number
Administrative Officer	5
Market Clerk	4
Cattle Guarantor	7
Market Auctioneer	3
Cattle Traders	56
Butcher	15
Village Elders	30
Ex-cattle Traders	10
Total	130

A brief discussion of each of the categories given above is important in order to give the rationale for their selection.

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#### Administrative Officer

The most important market sites in the Southern Sudan are situated in the urban centres and administrative headquarters. As such these market sites fall under the jurisdiction of local government councils. The Administrative Officer in a local council or municipality is responsible for controlling prices of local commodities in markets situated in his council area. He is also responsible for collecting

taxes levied for the use of the market place.

Thirdly, the administrative officer is responsible for issuing licences to all traders who operate in his area.

Concerning cattle marketing, administrative officers fix meat prices, issue licences to cattle traders and fix market fees for the use of market places. They are also responsible for issuing travel permits for cattle from one council area to another. This function is performed in coordination with the Veterinary Department. The permit for trekking cattle outside a council area is issued after the Veterinary Department has given a health certificate which indicates that the animals being trekked are free of contagious diseases. The role of local administration is significant in controlling prices in cattle markets. Through the control of meat prices in the butcheries, their decisions influence the prices of live weight cattle. Secondly, they are detrimental to the free movement of cattle from one market place to another. The permit for free travel of cattle is issued only when the health certificate has been obtained, and when the 'local export' fee has been paid. The local export fee is charged per a head of animal being trekked outside the council area. Administrative officers were thus interviewed because of their important role in the functioning of cattle marketing.

## Market Clerk

A market clerk is the direct representative of the local council in the market place. They are responsible for the collection of market fees and the keeping of market peace. Thirdly, they are responsible for keeping the sales records. They record personal information on both the sellers and the buyers.

The market clerk is also responsible for collecting slaughter fees from the butchers. The slaughter fee is a fee charged per a head of animal from each butcher who slaughters his animal in the council slaughter house.

Market clerks are well acquainted with cattle traders, butchers as well as sellers. They know a great deal about the conditions of cattle marketing.

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## Cattle Guarantor

A cattle guarantor is a man who sits in the market place to identify the sellers. Their main function is prevention of the sale of stolen stock. They are responsible for tracing anybody who had sold a stolen cow. Cattle guarantors have licences from the local councils. They charge a fee per head of animal for their services. Like the market clerks, the cattle guarantors know the cattle traders and the indigenous producers who sell in the council market places.

### Market Auctioneer

A market auctioneer is a person who shouts the prices during the process of public auction. He possesses a licence and charges a fee for his services.

### Cattle Trader

The cattle traders are those who buy and sell cattle. In some market places, they are found as buyers while in others they are the sellers. They have licences from the local councils.

### The Butcher

Butchers have licences from the local councils. Their business is carried out in the local slaughter houses which belong to the local councils. They are charged a monthly fee for using these houses. Some butchers operate as both butchers and cattle traders.

### Village Elder

Village elders were interviewed for the purpose of obtaining information on the factors behind the sales of cattle. They also furnished information on why cattle trade has emerged as an important occupation for the young generation. Most of the elders interviewed were heads of households.

## Ex-Cattle Traders

These are persons who had once been in cattle trade. They worked in various occupations such as agriculture, cattle rearing and retail trade during the time of interviews. These retired cattle traders gave useful information on the historical development of cattle trade in their local communities.

The questions asked of the categories of persons mentioned above were not pre-coded. They were based on an interview schedule. The questions were usually listed on a paper before the interview took place. A questionnaire with unprecoded questions was however administered to the fifty six cattle traders. Some of the questions in the questionnaire such as the ones on age, initial capital, start of trade etc. were however quantifiable.

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The interviews were made at the market sites, offices, villages and camping sites which were situated at the periphery of the market towns.

OTHER SOURCES OF DATA COLLECTION

Other sources of information used during the field work for this study were files from government departments. These files were obtained mainly from local government councils and district veterinary offices. These files contain monthly and annual reports on cattle disease outbreaks, cattle sales, cattle export, famine situation, climatic conditions, and local sectional conflicts within the districts. These files furnished information on factors behind the sale of cattle by indigenous producers, the direction of exports, the principle buyers, prices and the volume of trade. Some of these files are listed with references in the appendix. A brief description of the research sites is given below. The discussion of the problems encountered in the field will then follow.

RESEARCH SITES

Contemporary cattle trade between northern Bahr el Ghazal and Western and Eastern Equatoria provinces covers a wide geographical area. The northern limits of the trade are Abiey\* and Bentiu in Southern Kordofan and Upper Nile provinces, while the Southern limits of the trade are the international

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\* Abiey district lies towards the North of Bahr el Arab (river) and is inhabited by the Ngok Dinka who are also mixed pastoralists. The district is administered as part of the Northern Sudan and does not fall under the Southern Sudan administration.

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borders between Sudan and Republic of Central Africa, Zaire and Uganda. It was not possible to cover this wide area and hence a selection of research sites was necessary. There were two main principles applied in the choice of research sites. First, I chose those areas whose populations were dominant in cattle trade. Second, I chose those areas which had large numbers of cattle. The western Equatoria province which is the main importer of slaughter cattle from Bahr el Ghazal province should have also been chosen for study. This choice was not possible due to limitations of time, money and means of transport. However, butchers and cattle traders operating in western Equatoria were met in Bahr el Ghazal. Yirol district in Lakes Province was chosen in accordance with the first principle, while Aweil, Gogrial and Thiet\* in northern Bahr el Ghazal were chosen according to principle two. It is also noteworthy that Aweil, Gogrial and Thiet have high human populations compared to Yirol. Moreover, the districts of northern Bahr el Ghazal lie in the Flood Plain zone. This zone is relatively free of tsetse fly and is more suitable for animal husbandry than agriculture.<sup>6</sup> Yirol District, on the other hand, lies on the fringes of the iron stone plateau. The ironstone plateau is infested with tsetse fly, more bushy and unsuitable for animal husbandry. Another research site of significance was Wau Town. Wau Town is the headquarters of Bahr el Ghazal province.

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\* Thiet is administratively a part of Lakes Province but is culturally associated with districts of northern Bahr el Ghazal.

The town is a focal point in the network of cattle trade. Cattle bought in northern Bahr el Ghazal and destined for export to western Equatoria Province, pass through Wau Town. Wau is also a principle market in the whole province. Many traders who come to Bahr el Ghazal to buy or export cattle were met in Wau town. There is also a settlement for cattle traders in Wau town. Most of our preliminary observations were made in Wau before visiting Aweil, Gogrial and Thiet. In general, the participant observation, interviews and the whole process of data collection were made at the research sites mentioned above.

#### THE PROBLEMS

Yirol District in Lakes Province was the main research area for our investigation. But cattle traders from this area were at large. They were either dispersed in their villages or away in supply markets or demand areas. The solution to this problem was to travel to Bahr el Ghazal Province where most of the traders operate. The wider geographical dispersion was thus the first problem faced in the field work. Lack of an efficient transport system made travel difficult and this resulted in delays. Our means of transport were lorries which were not easily available. Cattle traders were not also found permanently settled at the market sites. They were usually on the move from one market to another either looking for cattle



to buy or looking for customers to buy their stock. The period January-March is the time when Dinka are at the toich - dry season camps. The toich camps were far from cattle markets. Cattle were scarce at the markets during this period. Cattle traders were usually competitive and busy looking for cattle and this was a constraint on interviews.

Cattle traders were also suspicious of the researcher. They suspected that the research was concerned with enforcement of local government regulations. Cattle traders are expected by local authorities to have licences and to buy and sell through public auctions in the official markets. They are also required to vaccinate their cattle before trekking them to other districts. Dinka cattle trade is spontaneous and unorganized. Cattle traders are against intervention by local authorities. They consider government measures as purely aimed at taxation. The traders suspected me of being a government agent who wanted to apprehend them. It can be generalized also that local people do not differentiate between administrative personnel and persons working independent of government. All educated persons are considered as government employees. Conflict between local administration and the indigenous persons is thus seen in the context of the educated and the non-educated. Educated persons show a lack of interest in activities such as the cattle trade. Most cattle traders were

surprised and puzzled as to why an elite of my status was interested in cattle trade. Some asked whether I wanted to become a cattle trader or whether I wanted to buy their stock.

Another problem faced in the field was lack of well organized consistent records. The inconsistency of records was partly due to the fact that cattle traders avoided registration with local councils. Secondly, there are no officials assigned by the councils to keep records of cattle markets. The official assigned to cattle markets was the market clerk. This official was a member of the accounts section in the council. His main function in the market was collection of taxes. Lack of consistent records could not allow the construction of a sample frame. It was not possible to determine the population of cattle traders. Lack of a sampling frame made it difficult to use sampling techniques and especially the random method of selecting respondents. The difficulties which we have enumerated above made us rely more on participant observation rather than survey techniques.

## CONCLUSION

This chapter has discussed three main methods which were used in the collection of data for this research. These methods were participant observation,

oral interviews, and government documents. Many difficulties were encountered in the field. The respondents were highly suspicious of the aims of the research. They were also frequently on the move looking for cattle and markets to sell. The poor system of records did not allow construction of a sampling frame or use of random method of sampling.

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Footnotes to Chapter Three

1. See Lowie, Robert, H. The History of Ethnological Theory. London, Holt, Rinehart and Winston, 1937, pp. 39-86.
2. Malinowski, B. Argonauts of the Western Pacific. London, Routledge and Kegan Paul Ltd., Seventh impression 1966, pp. 6-25.
3. Whyte, William, F. Street Corner Society Chicago, The University of Chicago Press, 1955, pp. 299-307.
4. Evans-Pritchard, E.F. Social Anthropology. London, Cohen and West Ltd., 1951, pp. 77-80.
5. Naroll, R. and Cohen, R. A Handbook of Method in Cultural Anthropology. New York, Columbia University Press, 1973, pp. 220-30.  
Refer also to:  
Chilungu, Simeon, W. "Issues in the Ethics of Research Method!" in Current Anthropology Vol. 17, No. 3, September 1976, p. 457.
6. Barbour, K.M. The Republic of the Sudan. p. 234.

## CHAPTER FOUR

### BACKGROUND TO THE CATTLE TRADE

#### INTRODUCTION

This chapter deals with four main factors which have made cattle trading a viable economic activity in Yiroi District - Lakes Province. These factors are - the cultural background of two leading clans in the district whose members are predominant in the cattle trade, the environmental changes in the ecology of the district, the civil war which was associated with out migration, and finally the marriage system and bridewealth. A brief description of each of these factors and how they contributed to the development of cattle trade in the District is given below. The chapter as a whole furnishes background information necessary for an understanding and interpretation of the data in the next chapter.

#### CULTURAL BACKGROUND AND CATTLE TRADE IN YIROI DISTRICT

Yiroi District is exclusively a Dinka district. It is inhabited by three main Dinka clans - the Cic, Atuot and Aliab. Of the three clans, the Cic and the Atuot are predominant in cattle trade. The reasons for this variation in response to market opportunities will be shown as the discussion proceeds.

The oral tradition and early literature on the Cic and Atuot suggest that both clans were less endowed with cattle wealth than others in the early stages in their history. Several sections and sub-sections in both clans trace their ancestry to non-cattle owning groups. For example, the 'Pajiek' section among the Cic claim strong affinity with the 'Ajong' section. The Ajong are blacksmiths and did not own cattle early in their historical development. C.G. Seligman in his classical work on the Nilotes of the Sudan wrote that:

"Until recently the Dinka smelted the iron they required, and iron is smelted in the western portions of the Dinka territory...our information applies to Cic on old maps marked "Hadidin" (iron-workers), whose iron-working clans are Nyonka and Gumbek, living to the west of Shambe. Some times these two clans are spoken of as Adjong, though the true Adjong - also Cic-live further west and have intimate relations with the Atwot Dinka, for whom they work iron. This has led to the two clans being considered not true Cic and there is no doubt that their members regard themselves as different from their neighbours, for they have no cattle and besides working iron they are elephant hunters".

Seligman was not certain whether the Ajong were Cic or not. He was not also certain whether they were Atuot. It is claimed in the oral tradition of Cic that the Ajong were the original inhabitants of Yirol District. What happened was that a mutual process

of assimilation took place between the Cic and the Ajong. This assimilation took place through inter-marriage between both groups. Secondly, it took place through trade. Seligman mentions that the Ajong exchanged finished iron works for a bullock.<sup>2</sup> It is still difficult today for an outsider to differentiate between Ajong and Cic. Both groups are cultivators as well as cattle keepers. As for the Atut, John Burton, who has carried out an extensive ethnographic study among them, observed that:

"mythological and historical sources suggest that Atut were at one time less endowed with bovine wealth than at present". (3)

He argues that the establishment of law and order by colonial government (1898-1956), and less cattle wealth in the past among the Atut seem related to their participation in the cattle trade today. The oral tradition among the Atut also supports this argument. For example, a leading section (Apak) in the clan traces its origins to Jur. The Jur are non-Dinka and own no cattle.

The cattle population estimates in 1954 indicate that the Cic and Atut clans were less wealthy than the Aliab. The dominance of the Cic and Atut clans in cattle trade today can be seen in this light. It has to be noted that Aliab are not involved in

contemporary cattle trade, nor have they fared well in modern institutions such as education.

Table 2:      Estimates of Animal Numbers by Sub-Tribe  
in Yirol District 1954\*

Sub-tribe	Cattle	Sheep & Goats	Ratio of Animal Units to Humans
Aliab	75,000	130,000	4.7
Cic	45,000	75,000	1.3
Atuot	50,000	85,000	1.2
Total	170,000	290,000	District average is: 1:8

Source: "Natural Resources and Development Potential of the Southern Provinces of the Sudan, 1954". Adopted from Mark Johnson: Sudan Council of Churches: Yirol Survey 1979 (unpublished).

The oral tradition in the District also indicates that there was a great deal of exchange between the Cic and Atuot and other Dinka groups. The Cic and Atuot used to grow tobacco which they exchanged for cattle with Rek Dinka further to the west. The Ajong used to make canoes which they exchanged for cattle with Twic Dinka who live across the Nile to the East.

The facts presented above based on oral tradition and early reports suggest that cattle trade



in Yirol District is strongly associated with the cultural background of the population. The population of livestock in the District has increased. (Contemporary livestock estimates in the district were not available). But disease—mainly pleuro-pneumonia, rinderpest, and foot and mouth disease — have been a constraint on livestock growth. Environmental factors which will be discussed below have also reduced the growth. Thirdly, it was shown in the literature review that as livestock increase in a community, the bridewealth paid in marriage also increases. As such the need to have more cattle continues to arise — especially since cattle disease is still predominant in the District.

#### ENVIRONMENTAL CHANGES IN YIROL DISTRICT

There are two main ecological changes that have taken place in the last two to three decades in Yirol District. First, severe floods affected the area from 1964-1968. Second, tsetse fly, which is fatal to cattle health, has spread in the area.

#### The Floods

The origins of floods which affected Yirol District are traceable to the construction of the Aswan high dam and the creation of an artificial lake in Egypt. In the northern Sudan, the whole Nubian community in Dongola was evacuated to Eastern Sudan as a result of these floods.<sup>4</sup> In Bor District, which is adjacent to Yirol on the East, the following losses were reported:

- (i) 2,000 people
- (ii) 25,799 cattle
- (iii) 8,271 sheep and goats
- (iv) 266 villages comprising 52,666 huts

There were no records of livestock losses as a result of floods found in Yirol district. But the impact of the floods reported in interviews was mainly the flooding of the dry season grazing areas (Dinka: toich). The flooding was severe on areas lying along the Nile and its tributaries. The floods destroyed natural vegetation in many areas in Yirol district. Secondly, the livestock were confined to highland areas (refer to the literature review p. 15). Highland areas are not very suitable for livestock grazing. The reason is that most grasses in this area are unpalatable. Secondly, the highland areas are forested and contain more animals which are cattle killers - particularly lion. Abundance of flies make highland areas also unsuitable for grazing. The result of cattle confinement to highland areas was overcrowding and as I.R. Spencer observed in Kenya, 'in such over crowded conditions a lighter than average annual rainfall had catastrophic effects and disease spread very rapidly'.<sup>6</sup> As mentioned earlier, cattle disease is rampant in Yirol District. Veterinary services broke down in the District during the war, particularly from 1964-1972. The recent survey by the Sudan Council of Churches in Yirol District reported that 58% of the households claimed cattle

losses through diseases. Gudrun Dahl and Anders Hjort in their analysis of long-term effects of drought on cattle herd assert that the effects of a drought can continue for a period of ten years.<sup>7</sup> The main reason is that the high rate of mortality, particularly among calves of 1-4 years of age, leads to a low growth rate. A herd which has been stricken by disaster such as drought, flood or epidemic, is slow in its growth. This seems to have been the case in Yirol District. The floods in Yirol District have not receded completely. Some parts of the District were still under water during the period of fieldwork, (January-March, 1979). Cattle trade aimed at the acquisition of cattle, is a response to continuous herd decimation in Yirol District.

### The Tsetse Fly

Yirol District lies on the fringes of the iron stone plateau (Refer to ecological Map, III). For this reason it has both the characteristics of the flood plain zone as well as those of the iron stone plateau. The District (Yirol) was marked among other Dinka areas (Rumbek and Aweil) in 1954 as a crop potential area.

Tsetse fly has spread in the District in recent years. The tsetse fly is found in most of the high land areas. Both cultivators and cattle herders in Yirol District complained of tsetse fly during the

Interviews. The villagers alleged that tsetse fly attack them in their homes. The cattle herders attributed most cattle losses to tsetse infection. Elders in the villages used to plead to the researcher to ask the government to supply drugs which could cure trypanosomiasis (tsetse disease). They swore that they were willing to pay for the costs of drugs.

Tsetse fly was not known as a threat to human and animal life among the Dinka in the past. The disease was only known among the Azande people who live in the thick forests on the ironstone plateau. The efforts to eradicate tsetse were thus confined in the Zande District during the colonial days.<sup>8</sup>

The studies of 1954 mentioned earlier, showed that Yirol District was free of tsetse at that time. But recent studies show that large areas in the district have been invaded by the fly.<sup>9</sup> (Refer to Maps V and VI). There have been no official studies of the impact of trypanosomiasis on the livestock population in Yirol district. However, the outcry of the population which was experienced during the field work suggests that the disease is killing large numbers of cattle. Cattle traders who were interviewed in northern Bahr el Ghazal claimed that they joined cattle trading after they had lost their herds due to disease. One trader claimed that he lost 50 cows. He sold the remainder of 6 and then

joined cattle trade. Another trader claimed that he had lost 7 cows which he had acquired through cattle trade. Both traders did not specify the disease, but three quarters of the people in the area alleged that most cattle losses in the District are due to trypanosomiasis. Our observations in the field and interviews suggest that livestock decimation due to tsetse fly is a fact. Cattle trade is associated with this factor.

#### CIVIL WAR, LABOUR MIGRATION AND CATTLE TRADE IN YIROL DISTRICT

Cattle trade in Yirol District is closely related to events of the civil war in the Southern Sudan. It is also associated with labour migration to Northern Sudan.

##### The Civil War

The origins of the civil war in the southern Sudan date back to the mutiny of the Equatoria Corps in August 1955, just shortly before the declaration of independence on January 1, 1956. The Equatoria Corps was composed solely of southern Sudanese and based in Torit town in the Southern Sudan. The causes of the war lay in the separate administration of the Southern Sudan from the north by the Condominium rule (1898-1956), the religious and racial differences between the peoples of the south and the north, and the unequal economic development between both parts

of the country. The official policy of the British administration towards the Southern Sudan until 1946 was:

"...to act upon the fact that the peoples of the southern Sudan are distinctly African and Negroid, and that our obvious duty to them is therefore to push ahead as fast as we can with their economic and educational development on African and Negroid lines, and not upon the Middle Eastern and Arab lines of progress which are suitable for the northern Sudan. It is only by economic and educational development that these people can be equipped to stand up for themselves in the future, whether their lot be eventually cast with the northern Sudan or with East Africa (or partly with both)". (10)

The policy was implemented mainly by restricting northern Sudanese from infiltrating into Southern Sudan. An act was passed known as The Closed Districts Ordinance 1930. Northerners travelling to Southern Sudan were required to obtain permits, and vice versa. Secondly, different wage systems were instituted for the two parts of the country.<sup>11</sup> The main factor which prompted this policy was the slave raiding of Southern Sudanese by Arab slaves from northern Sudan before the establishment of the Condominium rule.<sup>12</sup> The first 'southern policy' was replaced by a second policy in 1946.

The policy of the Sudan government is to act upon the facts that the peoples of the Southern Sudan are distinctly African and Negroid, but that geography and economics combine (so far as can be foreseen at the present time) to render them inextricably bound for future development to the middle Eastern and Arabicized Northern Sudan. (13)

The change of policy by the British administration was a result of pressure from northern Sudanese intellectuals and Egyptian political parties. Both groups were pressing for independence of the Sudan from colonial rule. An administrative conference was held in Juba in 1947 in which the unity between north and south was declared.<sup>14</sup>

The consequence of the policies mentioned above was that southern Sudan lagged behind in economic development. Education in the Southern Sudan was left in the hands of missionaries who had limited financial resources.<sup>15</sup> The only scheme which was established in the south was the Zande scheme. Northern Sudan was well developed in education and agriculture. The Gezira scheme, which is the biggest single enterprise in the country, was started in 1925 in the northern Sudan. Moreover, Northern Sudan was more highly urbanized than the south by the time of independence.

There was no social or cultural integration between the south and the north at the time of independence.

The North remained Islamic and Arabized in culture while the South remained predominantly pagan with a minority of missionary educated Christians. Southern Sudanese regarded the independence in 1956 as a substitution of British colonial rule by the Arab colonial administration. This suspicion was confirmed by the repressive policies of the Northern administration from 1958-1969. A policy of Islamization and Arabization was pursued by successive governments from 1956-1969. The civil war intensified in the southern Sudan in 1964. During this period a guerilla movement known as the Anyanya emerged. It was composed of students, government officials and discontented elements who escaped persecution from the army.<sup>16</sup> Many southerners who lived near the borders ran to neighbouring countries (Ethiopia, Kenya, Uganda, Congo and Central African Republic) during the war. Others ran to Northern Sudan where there was security. Oliver Albino quotes one source as saying that:

"about 311,000 southerners proper (from the 1955-6 census) are already in the north (1965), and the flow continues. The movement in the other direction is relatively slower. The political instability in the south has discouraged population movement in that direction". (17)

The category of southern refugees in the Northern Sudan consisted of government officials, students and villagers whose houses were burnt by the army. The



rural population in the Southern Sudan suffered more as they were accused of collaboration by both of the warring parties - the government army and the Anyanya.

The initiative to trade in cattle by the local people increased greatly during the war (figures were not available). The reasons are connected with the civil war and other factors mentioned in the chapter earlier. The southerners who escaped to Northern Sudan during the war worked as labourers in agricultural schemes and building construction. Only government officials were absorbed into the administration. Students joined schools in the Northern Sudan. Some of them became dropouts and joined the labour market also. Some of the persons well established in trade at present started as wage-earners in the Northern Sudan during the war. One of these traders related his development in trade to the researcher in the following words. He escaped from his village in Yirol from Anyanya persecution in 1964. He then went to Khartoum in Northern Sudan. In Khartoum, he worked as a wage-labourer. He then made savings from this employment and came to Wau - a provincial headquarters in the South - in 1967. He started then to trade in cattle. Cattle trade became a lucrative employment during the war. (it is still profitable). There were many reasons for this. First, the army in the South increased greatly during the war. This resulted in a high demand for meat.

Secondly, most northern Sudanese, particularly the traders, left the south as a result of Anyanya activities. Northern Sudanese were dominant in commerce in the south. Cattle marketing was also in their control. This monopoly was based on their commercial shrewdness, possession of capital and administrative favouritism. Albino observed that 'except in a few cases, Southerners are generally denied trade licences for the same reasons as the whole south is denied economic progress'.<sup>19</sup>

The Anyanya activities from 1964-1971 made free movement for the northern Sudanese in the rural areas more difficult. They could not continue practicing cattle trade during the war. As mentioned earlier, it was at this juncture that some enterprising individuals among the indigenous population started cattle trading. These individuals were based in Wau town. They went to the rural districts and bought slaughter cattle which they sold in Wau. Cattle trade at this stage used to involve lot of risks. Either of the warring parties could accuse a cattle trader of collaboration. Cattle traders solved this problem by pledging loyalty to both warring parties. They obtained licences from the Anyanya who controlled the rural areas. They also obtained travel permits from army commanders who controlled towns. The cattle traders used also to pay taxes to the Anyanya. As for the army, they bribed them with bulls for their consumption.

There are no studies on cattle trade from 1954-1971 when the war was at its peak in the Highlands. The only information relating to this period is based on our intimate knowledge of some of the old pastoralists from Yirol District. Secondly, it is based on our conversations with cattle traders and herders during the time of fieldwork.

The cattle traders who practiced trade during the war operated on two levels. They bought slaughter cattle as well as breeding cattle. The breeding cattle were sent back home. The introduction of these breeding cattle into the District (Yirol) accelerated the process of out migration. This process of out migration is well defined in the Dinka term *nyang*. The term *nyang* means in the Dinka language - 'to look for'. In the context of cattle trade it means 'looking for cattle wealth'. Both cattle trade and out migration are regarded in Yirol as *nyang*. The two practices have been regarded by the community as profitable economic activities and those who return back home empty handed (without cattle or money) are ostracized. This process of looking for cattle wealth in distant places (road to Wau) is particularly significant and related to our discussion of the political organization of the population in Yirol District.

The Post-War Period 1972-1979

Cattle trade in the Southern Sudan has been greatly enhanced by the solution of the Southern problem in 1972. The Anyanya liberation movement and the Sudan government made an agreement in 1972. The agreement is commonly known as the Addis Ababa Agreement. According to this agreement, the Southern Sudan was granted local autonomy within the United Sudan. The President of the Republic issued an act known as 'Self-government act for the Southern Provinces' in 1972. A regional government for the southern provinces - High Executive Council, and regional parliament - People's regional assembly - were instituted as a result of the presidential act.<sup>20</sup> Many southerners returned from neighbouring countries and Northern Sudan as a result of the peace agreement. The majority of the Anyanya forces were absorbed in the Sudanese army while most of the civilians were absorbed in the civil service. Some of the refugees were reinstated in their pre-war departments.

"The Anyanya forces produced for interviews amounted to 15,832 in different provinces. Of these, 6,079 were assimilated into police and prison services, and 5,489 for work in the civil departments. The 2,414 medically unfit were recommended for service in the civil departments". (21)

The resettlement measures of 1972, have increased the urban population of the Southern Sudan. The urban

population has also increased as a result of rural-urban migration as shown by Table 3 below.

Table 3: Total Population, Average Annual Growth Rate, and Net Migration Rates for Three Urban Areas South Sudan 1955/56-1973\*

Urban Area	Population			Average Annual Estimated		Annual Growth Rate Net	Migration Rates
	1955	1964/1966	1973	1958-1965	1965-1973	1956-1965	1965-1973
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
Malakal	9,680	17,947	37,780	7.1	8.3	8.7	5.9

\* Source: Osman, El Hassan, M. Nur: Urban Growth and Urbanward Migration in the Sudan. Proceedings of the First National Population Conference July 11-14, Sudan National Population Committee, National Council for Research, Khartoum.

About 400,000 returnees were repatriated to the Southern Region in March 1972.<sup>22</sup> More markets were opened as a result of increased urbanization and peace. The trading system which is the subject of this thesis is the only means through which small and large urban centres in the Southern Region are supplied with slaughter cattle. The volume of trade (cattle and persons involved) has increased in recent years. We have not analyzed the volume of market sales because records are not

consistent. Secondly, the emphasis in this thesis is on social aspects and not economic aspects.

The analysis of the relationship between the civil war, labour migration and cattle trade as presented above shows that many southerners migrated to centres of wage employment in the Northern Sudan during the peak of the war from 1964-1971. Some of these migrants later came back to the south and used their savings in cattle trade. The analysis showed also that many refugees returned to the southern Sudan in 1972 after the Addis Ababa Peace Agreement. The urban population of the Southern Region was thus increased as a result of the returnees. The demand for meat rose as a result of population increase in the urban areas. Cattle trade was thus enhanced both in terms of numbers of cattle sold and individuals joining the enterprise. /

#### MARRIAGE AND BRIDEWEALTH AMONG THE DINKA

Cattle trade is highly connected with family structure and the livestock wealth which the family owns. The family is the microcosm of Dinka social structure. Writing on this issue in Dinka society, F.M. Deng observed that:

"Family among the Dinka is a relative term. The growth of the family implies spread, segmentation, and fragmentation. It multiplies polygynous families, lineages and clans. On territorial bases, it creates sections, subtribes, and tribes, all reinforced not only by the association of descent groups, but also by fiction of familial relationship and leadership". (23)

The bases of the family in Dinka society are marriage and bridewealth which is paid in the form of cattle. We will show in this section the significance of marriage and bridewealth in Dinka society and how the need for bridewealth cattle makes individuals enter cattle trade.

Dinka lineages are patrilineal, totemic and exogamous. Marriage is prohibited between close consanguine agnates as well as between closely related affines.

There are many forms of marriages found in Dinka society. In a way, the variation in forms of marriages is an indication of the importance attached to the family institution and the ideology of progeny. There are four main types of marriages found among the Dinka. These are:

- (a) Simple legal marriage
- (b) Levirate marriage
- (c) Ghost marriage
- (d) Woman to woman marriage

The simple marriage is the straightforward marriage in which a man and a woman become husband and wife after the payment of bridewealth. Levirate marriage, sometimes called widow inheritance refers to a situation in which a living brother or relative cohabits with the widow of his dead brother. The children of this marriage belong to the dead brother (pater). The genitor does not pay bridewealth but only takes over the widow. In ghost marriage, the brother pays the bridewealth and marries a wife in the name of his dead brother. The children of this union are legal heirs of the dead brother while the living brother plays only the role of a genitor. A woman to woman marriage on the other hand is practiced by barren women who are also wealthy. A woman marries another woman by paying bridewealth. A male relative cohabits with the "bridegroom". The woman who paid the bridewealth is the pater. She is the legal and social husband of the wife woman. These forms of marriage have been discussed in detail by E.E. Evans-Pritchard - Kinship and Marriage Among the Nuer.<sup>24</sup>

One central idea behind the complexity of the marriage system among the Dinka is related to the belief system. The Dinka people believe that the responsibility of all adult persons in their society is to bring forth children in order to continue a person's name and that of his ancestors. Through marriage, an individual establishes



his own line of descendants. At the same time, he continues to propagate the line of his ancestors. In other words, marriage is both a group concept as well as an individual concept in Dinka society. Dinka fear to die without issue. It is the obligation of living brothers to marry and raise children for a dead brother who died without children. The children born out of this marriage are the legal heirs of the dead man, i.e. the ghost.

Strong beliefs in lineage continuity and ancestral worship have made marriage a goal of primary importance in Dinka society.<sup>25</sup> It is the ideal of every Dinka youth to marry and establish his own lineage. But since marriage is only successful after the payment of cattle and bridewealth, many young men find themselves dependent on elders to achieve the goal of marriage. Young men of marriageable ages seek outside opportunities in order to remedy this situation. One of these outside opportunities is cattle trade.

Marriage as a goal in Dinka society has other factors which underline its importance. Some of these factors are the desire to be independent, the desire to have the status of an elder, prestige and a family. Through marriage, an individual establishes a family in which he is the head. Being head of the family implies that he controls and manages the family

estate<sup>26</sup> - be it land, herds or labour. In other words he has domestic authority.<sup>27</sup> Being head of the family also entails achieving the status of an elder. All important decisions affecting the community are taken by elders who are usually heads of families. Marriage is thus the basis on which an individual is incorporated into the decision-making process in Dinka society. To be an important decision-maker in Dinka society requires the individual to be married.

Marriage and family are also the basis of economic organization. The means of production in Dinka society are land, cattle and labour. But agricultural products do not constitute wealth until they are converted into cattle. For this reason, land does not present a constraint on production and hence on social relationships. Cattle are the most important means of production because they are wealth. Secondly, cattle are used extensively in consolidation of social relationships. The primary means of cattle accumulation in Dinka society is the institution of bridewealth. Besides being the basis of accumulation, bridewealth is also the mechanism of livestock distribution. Agnatic descent groups share in receiving and paying of bridewealth in marriages. As bridewealth is the basis of cattle accumulation, a high value is placed on women as sources of wealth. Women perform two functions in the society. They provide sons who perpetuate the patrilineal groups through their

procreative function. Secondly, they provide daughters who through their marriages bring cattle to their families. The balance between male and female children in a Dinka family is thus very important. A family which has more sons than daughters is faced with the problem of how to get cattle for the marriage of its sons. A family with more daughters than sons on the other hand is faced with the problem of lineage discontinuity since all daughters desert to other clans after their marriages. The different types of marriages mentioned above are in part a solution to this demographic dilemma. Secondly the decision to trade in cattle is related to the male-female ratio in a family. This is so because the family herd increases and expands in proportion to the share of bridewealth received through the marriage of the female members. Family herd increases also through natural reproduction. The average number of cattle paid as bridewealth among the Dinka is about 40 herd of cattle. Of this number 35 are usually cows and heifers. Cattle trade, labour migration and many types of petty trade emerged within the last decade as means of increasing herd sizes and paying bridewealth for the relatively poor families.

A high proportion of cattle owned by a family are kept collectively in one herd. Each member of the family has access to the use of their products. But no one is allowed to use the family cattle for his

private interests. The only occasion in which private use of family cattle is allowed is during the marriage. All sons in a family have equal rights to receive a part of the family herd for their marriages. The daughters too, have small shares paid as counter-payments to bridegrooms after the latter has paid bridewealth. Marriage payments for sons in a family are made in order of seniority. This is to avoid complete depletion of the herd and also to allow for reproduction of the herd.

Most Dinka families are polygynous and the seniority of a son depends on the seniority of his mother in the family. In principle, the elder son of the first wife is allowed to marry first. He is then followed by the elder son of the second wife, etc. The result of this arrangement is that the marriages of junior sons are delayed for long periods. For this reason, junior sons are more prone to seek opportunities outside the traditional system than their senior siblings. The principle of seniority does not only apply to marriage arrangements. It also applies to the management and control of the family herd. The head of the family has more say than others in the allocation of cattle. The head of the family is assisted in these tasks by his elder sons. Both inheritance and succession also follow the seniority principle. In general, elders and senior members in Dinka society have more control of property. The

juniors and young men thus feel a sense of relative deprivation and opt for outside opportunities such as cattle trade.

This section has dealt briefly with the institution of marriage and bridewealth in Dinka society. It has been shown that marriage is a goal of primary importance because of the social, religious and economic functions played by the family. Bridewealth is the means through which all values attached to marriage and the family are achieved. The traditional rules of bridewealth payment and the demographic structures in families make junior sons deprived and hence they seek outside opportunities. Cattle trade is one of these opportunities.

### CONCLUSION

In this chapter, we have dealt with the broader factors behind cattle trade. These factors were the cultural background of the population in Yirol District, the environmental changes that took place in the District, the civil war and its aftermath and the marriage system. It has been shown in this chapter that the Atuot and Cic clans in Yirol District were less endowed with cattle wealth than the Aliab in the past. Secondly, the two clans have large numbers of sections of blacksmiths assimilated in them. The Cic and Atuot people traded with distant places in the past. They exchanged tobacco and wooden-carved canoes

for cattle with neighbouring Twic Dinka in the East and Rek Dinka further to the West. A tradition of trading and out migration to look for wealth had thus existed in the District before the contemporary cattle trade. Cattle trade is based on this tradition. Secondly, it has been enhanced by the development of modern transport and political changes in the region. There were two main environmental changes which took place in Yirol District in the last two decades. First heavy and wide-spread floods affected the area from 1964-1968. Second, tsetse fly has spread in the highland areas of the District. These two factors continue to threaten the growth of the herds in the District. Cattle trading is a mechanism of adjustment to these environmental factors.

The political changes in the Region made more persons migrate to areas of wage employment. These migrants were among the first persons to engage in cattle trade. The resettlement measures after 1972 resulted in increased population in urban centres and the demand for meat increased subsequently. More people joined the enterprise after 1972. The description and analysis of marriage and bridewealth in Dinka society show that the need to acquire cattle for one's marriage is one strong motive for some individuals to join cattle trading. The association of marriage and bridewealth with cattle trade will come out clearly in the analysis of data in the coming chapter. The most

important point to observe here is that the factors dealt with in this chapter had a cumulative effect on the socio-economic structure of the population of Yirol District. Cattle trade developed as an adaptation to the impact of these factors.

Footnotes to Chapter Four

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## CHAPTER FIVE

### DATA ANALYSIS

#### INTRODUCTION

The data analyzed in this chapter were obtained mainly through interviews with 56 cattle traders met in northern Bahr el Ghazal. The analysis is mainly concerned with the socio-economic characteristics of cattle traders, their objectives in trade, sources for obtaining initial capital, ownership of cattle acquired through trade and the general impact of cattle trade on community and inter-personal relationships. A brief description of who a cattle trader is, is given before the analysis of their socio-economic characteristics.

#### WHO ARE THE CATTLE TRADERS?

Cattle trade in the southern Sudan is in a state of flux and a distinction between cattle traders and non-cattle traders does not describe the reality. The distinction is however necessary for the purposes of analysis. Polly Hill observed of cattle traders in Ghana that 'most cattle traders comprise a constantly changing section of the population'.<sup>1</sup> This observation is applicable to Dinka cattle traders. Some cattle traders engage in cattle trade to achieve limited objectives. As such they conform to the traditional model of target traders.<sup>2</sup> Other traders tend to take

up cattle trade as a permanent occupation. The decision comes about as a result of long trading, accumulation of much money and more breeding cattle.

Although constantly changing, cattle traders have become a regular aspect of urban and administrative centres in the southern Sudan. Any vigilant observer cannot miss seeing them at market places, public restaurants and marginal residential areas of towns in the southern ~~R~~egion. Cattle traders have come to have different names among different people who come in contact with them. For example, they are known as 'atuot' in northern Bahr el Ghazal where they buy most of their stocks. Cattle traders are known among the Dinka elites and urban dwellers as matajeer. The term matejeer is a distortion of the Arabic word tajeer. It means trader. In Yirol District, cattle traders are called bariya. This term is also of Arabic origin and means 'of the river'. Bariya as a concept is descriptive. It describes those engaged in trade and the origin of trade in Yirol District. Cattle traders in Yirol District became important when many migrants who had returned from labour markets in Northern Sudan participated in it. These migrants travelled to and fro via Shambe, ~~partly~~ on steamers. Presently, cattle traders travel long distances, either to look for cattle to buy, or to look for markets to sell. The term bariya is thus used by the local people to describe a continuous developing phenomenon. Both migration to

labour markets and cattle trade appear interconnected in that they involve travelling long distances, moving out of the district and a search for profitable opportunities.

Cattle traders share similar characteristics with rural-urban and rural-to-rural migrants. For example, they have settlements of a permanent nature in big towns such as Wau and Juba. All the settlements are far from the home base (Yirol). Cattle trade in general is practiced outside the home areas. It involves a movement from home to cattle markets. A difference between the cattle traders and other migrants is that they are self-employed and do not depend on industries, business or the government bureaucracy for employment.

A cattle trader in general terms is a rural-to-rural migrant who exploits the opportunities of cattle marketing for gaining profits either in the form of money capital or breeding cattle. Cattle traders are a distinct social category as shown by the linguistic classifications discussed above. They are a transitional group between the emerging urban centres in the southern region and the rural population in the villages.

#### PERIOD OF STARTING CATTLE TRADE

Cattle trade is not a full time occupation for many traders. Some traders consider it a seasonal activity. Other traders consider it an opportunity which

requires quick exploitation, still a third group consider cattle trade a means of accumulating large sums of money for starting business. The length of time spent in cattle trade therefore depends on the motives and objectives of an individual trader. It depends also on the physical well being and health of a trader. Cattle are trekked on the hoof to distant markets and this requires travel over long distances and involves physical privation. John Burton mentions that cattle traders have been described by fellow Dinkas as having the patience to drive a chicken to Juba.<sup>3</sup> Juba town is 630 miles from northern Bahr el Ghazal where the cattle are bought. The period spent in cattle trade depends also on the freedom of the individual trader from social and economic obligations. Some traders occasionally break off from cattle trade in order to attend to herding duties, cultivation, marriage discussions and ceremonies, religious sacrifices, etc.

The sample of cattle traders interviewed showed the following distribution in relation to period of starting cattle trade:

Table 4: Time Spent Cattle Trading by the Respondents

Starting Year	No.	%
1966-1968	4	7
1969-1971	2	4
1972-1974	12	21
1975-1977	16	29
1978 & After	22	39
Total	56	100

The distribution table above shows that more respondents joined the cattle trade in 1978 and after than in other years. There is a wide variation in time spent cattle trading. Some respondents had been in the enterprise for 8-12 years while others had 1-2 years. The general trend however, as shown by the table was that more respondents joined the cattle trade from 1972. The number then continued to increase. More respondents joined the cattle trade after 1972 for several reasons. The civil war in the South was ended in 1972. Peaceful conditions resulted in the opening of more markets. Many refugees were repatriated into the region. The Anyanya were also absorbed into the army. (Refer to Chapter IV, p.74 and table 3). As the population in urban and administrative centres increased, the demand for meat increased. The prices were also increased and cattle trade became a profitable enterprise for those working in it. Cattle prices

continue to show an upward trend and this acts as an incentive for more people to join cattle trade.

### The Initial Capital for Starting Trade

Several sources used for obtaining initial capital were revealed in the course of interviews with respondents. Table 5 below shows these sources and the distribution of respondents among them.

Table 5: Distribution of Respondents According to Sources of Initial Capital

Source	No.	%
1. Selling part of family's stock	30	54
2. Savings from petty trade	11	20
3. Savings from wage employment	9	16
4. Gift of money from working relative	3	5
5. Combination of 1 & 3	3	5
Total	56	100

Cattle traders who started trade by selling part of the family's herd claimed that the animals sold were their share. However, cattle are owned in Dinka society as collective property. A decision to sell an animal from the family herd requires the consent of the other members of the family particularly the father and his elder sons. There was usually no

unanimous agreement when an animal was being disposed of for the benefit of an individual member. The common situations when agreement was unanimous were in cases such as marriage payment, blood compensation, religious sacrifices, burial slaughter, tax payment, and purchase of grain in the market for the consumption of family members. The present practice among the Dinka of allowing one member in the family to sell a part of the herd for starting a commercial enterprise is new. It is an indication of how the society has accepted cattle trade as a viable economic occupation. Cattle sold for the start of cattle trading are regarded as an economic investment. The Dinka acceptance of cattle trade is in sharp contrast to their attitude towards modern education. It has taken a very long time for parents in Dinka society to sell cattle for the education of their children. Many parents are still reluctant to sell cattle for the education of their children at present. The main reason why parents dislike investing in modern education is that it takes a long time for them to see the benefits of education. It takes an average of 15 years for a child to acquire education and become eligible for employment. Secondly, educated persons do not usually invest in the traditional sector - i.e. they do not use their savings for buying cattle. Cattle trade, on the other hand, is a source of quick profits. Many cattle traders also invest their profits in more breeding cattle. Cattle traders however, show an attitude of individualism in the



ownership of their self-acquired cattle. How far this attitude will affect the high acceptance of cattle trade by the community cannot be determined at present.

Cattle traders who raise their initial capital through petty trade come from relatively poor families. They start trade by selling agricultural produce mainly - tobacco, groundnuts, dura (sorghum), simsim, etc. Some of them sell fish. The savings from this petty trade are then used for buying small stock - goats and sheep or mature animals - which are sold in near markets because they cannot be ~~traded~~ taken to distant places. The progress of those who raise initial capital through petty trade is slow. It takes them a long time to establish themselves in cattle trade.

Labour migration and wage employment were the common channels for raising initial capital in the early period of cattle trade in Yirol District. The main centres of wage employment are in the northern Sudan. Wage employment as a source of capital for cattle traders is declining in importance compared to sale of a part of family's herd. The main reason is that it is time consuming. More time is wasted in travel to areas of employment. More time is also needed to save enough money for travelling back to southern ~~region~~ region where the cattle trading is carried on.

Only a few traders obtained money from working relatives for starting trade. One of our respondents was given initial capital by a brother who worked as a medical doctor with the government. None of the sources utilized by cattle traders for raising initial capital yields large sums of money. The capital is only built up as one remains in trade. Cattle trade is however competitive. Cattle are bought and sold through public auctions. Lack of working capital is a constraint on the operations of small-scale traders and butchers.

#### The Age Structure of Cattle Traders

Cattle traders are generally young. The majority of the traders are in their prime (15-27 years of age). Some of the traders met during the field work were very young (15 and under), while a few were in their middle age. An analysis of the respondents' ages showed the distribution below:

Table 6: Age Distribution of the Respondents

Age Category	No.	%
14-19	7	12
20-24	10	18
25-29	25	45
30-34	8	14
35 and above	6	11
Total	56	100

The significance of the age factor to cattle trade can only be understood in relation to the background of the age-set system in the traditional society. Among the Dinka, boys of the same age in one clan are initiated together into the status of adulthood. The transition from boyhood to the status of an adult was marked by initiation rites. In most tribes it is done by an operation known as "gar" which involves scarring the forehead. When initiated the boys became adheng, a word which also means "gentleman", "handsome man", or "elegant man", as well as "rich", "kind", "generous", "gentle" or "virtuous". While initiation confers important privileges, adult indulgences are acquired piecemeal.<sup>4</sup> The age-set system was however, undermined by the colonial administration through the establishment of law and order. Hostility between tribes was reduced and the military organizations which had existed in the traditional society declined in importance.

The age factor was also the basis of social stratification among the Dinka in the traditional society. The elders were at the top of the stratification ladder followed by initiated adults and the boys were the lowest in status. It is remarkable that Dinka consider an uninitiated adult male a boy and thus of low status. The establishment of educational institutions has eroded the traditional basis of stratification. Educated Dinka elites who occupy positions in government

are held in high esteem in contemporary society regardless of age.

The age-set system was a basis of solidarity and competition among youth in Dinka society. The youth of one clan or lineage herded cattle together. They also fought shoulder to shoulder in defense of tribal pastures, water resources, etc. Each individual strove to distinguish himself among his age mates in these duties. Both characteristics of Dinka youth have found expression in cattle trade in view of declining military functions. The age mates of one village or neighbourhood find in cattle trading a vocation in which they can show their endurance of physical privation. Secondly, each youth wishes to distinguish himself as a successful cattle trader. Success is measured by the number of breeding cattle bought through trade. Success is also measured by the amounts of money possessed as working capital, and the extent to which the trader can meet the cash requirements of his family. Such requirements include buying grain for family consumption, paying poll tax for the father and brothers, paying school fees for children in school, etc.

#### Marital Status and Order of Birth of the Traders

The majority of persons involved in cattle trade are unmarried. They are also junior sons in their families. The proportion of married traders

in our sample was 32% compared to 68% who were not married. There were 68% who were junior sons, 27% senior sons and 5% only sons. (Refer to Chapter Two pp.21-24 for the meaning of these terms). Table 7 below shows the distribution of respondents on marital status and birth order.

Table 7: Distribution of Respondents According to Birth Order and Marital Status

Birth Order	No.	%	% Married	% Unmarried
Only son	3	5	-	100
Elder son	15	27	53	47
Junior son	38	68	26	74

Table 7 above shows that there was no one married among the only sons, while 53% of the elder sons were married. Only 47% of the elder sons were unmarried. Among the junior sons, only 26% were married, while 74% remained unmarried. The table also shows that the junior sons were more (68%) than senior and elder sons were more (68%) than senior and elder sons in cattle trade (32%).

Cattle trade is essentially an occupation for youth who are unmarried. The main reason unmarried are more dominant in cattle trade than the married is that they are free from marital obligations and duties.

Cattle trade involves regular mobility and absence from home. The desire to acquire cattle for marriage is another reason unmarried males are dominant in cattle trade. A demographic analysis in one Dinka community indicated that 32.5% of the population in the age group 20-29 were unmarried.<sup>5</sup> The study also found the average family size as consisting of 7-12 persons.<sup>6</sup>

Despite the central position of marriage in the life of the Dinka (refer to Chapter Four, pp. 76-83), it has been observed that marriages normally take place late after the age of 20, which is not the case among many other communities in the Southern Sudan. Marriage among the Dinka requires payment of bride-wealth in the form of cattle. It is not always easy for a young man to amass cattle and pay for his bridewealth at the early stages of his life. He has to depend on his father and agnatic relatives. The consent of the father and other agnatic relatives is thus very important for a marriage to succeed. While some fathers encourage their sons to marry, others deliberately delay their son's marriage, till they reach an age when marriage can no longer be postponed. The common reason stated in this connection is the inadequacy of the family cattle, in meeting the payment of bridewealth. Relatives who do not approve of a certain marriage might withhold their contribution, in which case the marriage arrangement is deemed to

have failed, or at least to be delayed till an overall consent is realized. The situation becomes more aggravated when a young man intending to marry has many siblings, and half-brothers, since the rule of age succession of brothers (the elder marries first) applies, with all of them drawing their bridewealth from the father's herd. The situation is sometimes very much complicated when a father develops an interest in acquiring more wives for himself. It implies paying his bridewealth from the same herd as his sons, undermining therefore the chances of his sons in getting married. Although all young men in Dinka society face the problems described above, the junior sons are more deprived than the rest. It is for this reason that more junior sons engage in cattle trade with the hope of building up their own herds and paying for their bridewealth. Cattle trade offers a chance for self-improvement for most young men who are deprived in the traditional society.

#### Education Attained by the Traders

Cattle traders are generally illiterate. Only 3 of the 56 traders interviewed reported that they had been to school. One of these traders reported that he completed 3rd year intermediate school and had worked in government service before he joined the cattle trade. The other two were drop outs from elementary school.

Although not literate, cattle traders are a semi-enlightened social group in their rural communities. The reason is that they acquire knowledge and experience in the process of cattle trading. Cattle trading entails migration to cities in northern Sudan, regular movement between towns in the southern Sudan, contacts with educated persons and urban populations. The cattle traders are also aware of the customs and traditions of different ethnic groups with whom they come into contact in the process of trekking cattle or at the market places. The wider geographical movement of the traders and their contacts with heterogenous social groups and populations have made them attain wider perspectives than the average Dinka in the rural area. We believe very strongly that cattle traders can be very effective channels of communication between elites, government, development agents, etc. and the rural masses, because of their wider experiences and perspectives.

#### THE OBJECTIVES OF CATTLE TRADERS

Cattle traders strive to fulfill several objectives in their trade. These objectives are classified into two for purposes of analysis. These objectives should be considered as aspirations and not goals that ought to be achieved. This is how the respondents felt when they expressed their objectives to the researcher. The first objectives are grouped under the category of "traditional" objectives and



consist of the desire to acquire breeding cattle and the desire to acquire cattle for marriage. The second category of objectives refers to "commercial" objectives. It consists of the desire to accumulate money as capital for establishing a retail shop, the desire to accumulate money to buy a lorry for the transport of goods and people, and the desire to accumulate money to start an agricultural enterprise (commercial farming). Some traders aspire to achieve both categories of objectives simultaneously or by stages. Table 8 below shows the distribution of respondents on the basis of objectives.

Table 8: Distribution of Respondents According to their Objectives

Objective	No.	%
Traditional	22	39
Commercial	16	29
Both	18	32
Totals	56	100

The distribution table above shows that contemporary cattle trade among the Dinka is dominated by traditionally motivated individuals. However, it has to be observed that cattle traders do not compartmentalize their objectives. Most traders start cattle trade as a reaction and adaptation to social and environmental conditions. The goal in the start of the trade is

thus to satisfy immediate needs, to solve urgent problems that require cash etc. But as the trader remains in the trade, and accumulates profits, his aspirations are raised beyond immediate needs. He develops commercial attitudes and long-term plans.

#### ATTITUDE OF CATTLE TRADERS TOWARDS COLLECTIVE OWNERSHIP

The family herds are managed under the authority of the head of the household according to the traditional conventions of Dinka society. The head of the household is the only person who decides on the allocation of herds for various uses. Cattle traders were asked if they were willing to part with their breeding cattle obtained through trade under the management of their fathers or elder brothers. The question was posed in the following way:

Can your father or elder brother<sup>2</sup> dispose of your cattle when you are not present?

The answers to this question and respondent's distribution are shown below in table 9:

Table 9: Respondent's Reactions Towards Disposal of their Cattle by Senior Members in their Families

Answer	No.	%
1. They have to wait for me	30	53.6
2. I have to be consulted	16	28.6
3. They have to inform me	10	17.8
Total	56	100.0

The answers given by the respondents indicated one important point and that was the fact that cattle traders take a significant role in the decision making process relating to disposal of their animals. The answers show that a decision concerning allocation of herds would have to be made after consultation with the cattle trader. This practice represents a change in decision making and domestic authority. In the past, all decisions concerning herds were a prerogative of the head of the household. The head of the household made his decision after he had made consultations with senior members of the family. Junior members were never a part of the decision mechanism in the past. Cattle traders have become part of the decision-making body in their families because they are important sources of income to their families. Cattle trade thus raises the status of an individual from that of a junior and non-decision-maker to that of a senior and decision maker. Cattle traders as an emerging social category in Dinka society have prestige and status.

There is a general tendency among cattle traders to regard their property as individual. One of the relatively wealthy traders expressed his opinion during a lengthy interview in the following words:

"My relatives have no voice in allocation of my herd obtained through trade. I can slaughter an ox for you without consulting any one. I did not obtain these cattle through bridewealth, but through my personal efforts".

The above quote and the interview responses show that cattle traders regard cattle acquired through trade as their individual property. Although cattle obtained through trade can be kept together with the rest of the family herd, the cattle trader has always the right to be consulted when his stock are being disposed of such as in marriages, or sale in the markets. When he is not consulted, he can keep his cattle out of family circles. He can keep his cows with friends (stock friendship) and the consequences will be deprivation of family members from the use of dairy products - especially milk.

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Abdel Ghaffar Ahmed observed among the Dinka in the Jonglei area that:

"....the individual motivation behind migration gives a sense of freedom in managing the herds and disposing of animals". (7)

A similar observation was made by F.M. Deng on the Ngok Dinka. He wrote:

"...there has recently been a general tendency among people to individualize their self-acquired property so much so that courts...

....had to enforce kinship obligations, a necessity which would have been regarded as scandalous in the past". (8)

It can be deduced from the above discussion that the tendency to individualize self-acquired property in Dinka society will lead to social differentiation. This social differentiation will affect the stratification system, community authority and status structures. But since poor families and deprived groups are the most involved in cattle trade, it cannot be assumed that cattle trade will have negative effect on the social structure in Dinka society.

### CONCLUSION

The data analysis given in Chapter Five has shown that most cattle traders are young and unmarried. The majority of cattle traders were illiterate. The analysis also showed that marriage and the need for acquiring bride wealth Cattle was one important motivation for young men to join cattle trade. However, a significant proportion of traders joined cattle trade with ~~su~~ sole purpose of becoming small scale businessmen. Cattle trade was a source of capital and a springboard to commerce for such traders. Cattle traders are generally shown to regard wealth acquired through trade as individual property. This in turn leads them to have freedom in the disposal of such cattle.

In general cattle traders appear to be a transitional social category between the traditional Dinka society and the modern urban cash sector. Some members of this category strive to raise their status and socio-economic conditions in the traditional society, while others try to integrate themselves into the urban cash sector.

Footnotes to Chapter Five

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8. Deng, op.cit., p. 275.

## CHAPTER SIX

### CONCLUSIONS AND RECOMMENDATIONS

This study has shown that a combined effect of several factors made the indigenous population in Yirol District - Lakes Province adopt cattle trade as a viable economic occupation. The factors behind cattle trade were classified in the text of the thesis into two: broader factors which affected the area, and specific factors which made some individuals opt for cattle trade more than others. The broader factors consisted of environmental changes in the ecology of the district, the civil war and peace agreement and the cultural background of the population. Yirol District was affected from 1964 to 1968 by floods. Large dry season grazing areas were flooded and the natural vegetation was destroyed. The majority of the cattle population were confined on highlands. Many animals were lost in the area due to over-crowding and disease outbreaks which ensued. Tsetse fly has spread in the highland areas of the District within the last decade. More cattle were lost and continue to be lost because of tsetse fly infection. These environmental changes in the District have created anxiety in the area and cattle trading has been perceived and accepted as the best method of adaptation.

The civil war in the Southern Region intensified in 1964 and continued to increase in scale

until 1972 when a peace agreement was signed. Many indigenous persons migrated to northern Sudan and urban places in the region during the war. The migration was motivated by the need for security. Many of these migrants became wage-earners in the urban places. Some of the war migrants later came back to the south and invested their savings in cattle trading. Cattle trade was associated and is still associated with wage-labour migration. The adoption and acceptance of cattle trade in Yirol District was however related to the cultural background of two leading clans - the Cic and Atuot. These two clans were less endowed with cattle wealth than their neighbours the Aliab. They had built up their herds over the years through trade with distant Dinka groups in the East and West. Cattle trading in the district can be regarded as a development in this historical process of looking for wealth outside the area. The koor (refer to p. 73) has been given impetus by political changes in the region, development of modern transport and security which makes it possible to move across different regions with cattle.

The analysis of the cattle traders has shown that they have the following characteristics:

- (1) They are rural-to-rural migrants
- (2) They are mostly unmarried
- (3) They are mostly junior sons in their families
- (4) They are mostly illiterate
- (5) They are wealth seekers



These inherent characteristics of the cattle traders emanate from the social structure of Dinka society. The cattle traders are the most deprived in the society. They own no herds, have low status and do not participate in decisions affecting allocation of herds. Cattle trading changes the status of those involved. Cattle traders build up their own herds, become important members in their families, and are important participants in decisions affecting allocation of herds after they have been to trade cattle. A significant proportion of cattle traders divert from the traditional sector and join the modern commercial sector. They establish small retail shops in their villages or home towns. Others buy commercial lorries which are very profitable. Cattle trade as an occupation and cattle traders as a social category are thus effecting socio-economic changes in Dinka society.

Although cattle trade has been widely accepted by the indigenous population of southern Sudan, there are some constraints on it which need to be solved by interested agencies in order to facilitate its development. One of these constraints is taxation. Local government councils regard cattle trade and cattle markets as important sources of revenue. There are many taxes levied on cattle traders as shown in Table 10 below.

Table 10: Taxes Paid by Cattle Traders to Local Authorities

Tax Item	Amount in K.shs.
Licence fee	74.6
Market fee (per head animal)	4.7
Export fee (per head animal)	4.7
S.S.U. fee	5.0
Education fee	2.4
Poll tax	28.0
Total	119.4

Cattle traders pay other fees to individuals such as auctioneers, cattle guarantors etc. The traders pay the above taxes in return for no services. There are no holding grounds, water dips, cattle routes etc. organized by the local councils or the government. Taxes collected from cattle markets should be used in the development of cattle marketing to provide such services.

Another major constraint on cattle trade as reported by the traders was the variation in retail meat prices and financial limitations among butchers. The prices of meat in supply areas in Bahr el Ghazal varied from 2.4 - 4 shillings at the time of field work (January to May ,1979). Meat was sold by the kilo in Bahr el Ghazal. This contrasted with the system in Equatoria Province where meat was sold to customers at

7 shillings per rottle. Retail meat prices were low in Bahr el Ghazal because of control by the local administration. The local authorities in Bahr el Ghazal argued that their areas were rich in livestock and for that reason the price of meat should not be expensive. The local butchers in Bahr el Ghazal argued on the other hand that the prices of cattle were high. The reason was that they compete in public auctions with itinerant traders who trek cattle to distant markets where prices are high.

The general impact of variations of retail meat prices has been that cattle traders trek the best bulls which have the best beef to distant markets. The meat consumed in supply areas, except provincial towns, is poor in quality. Secondly, butchers have not accepted price control measures. They sell meat to different customers at different prices. Our field observations indicate that butchers in supply areas have very little working capital. One evidence which confirmed this observation was that about one-half of the butchers in Wau town did not buy their slaughter stock for cash. They bought from traders on credit. The payment was only made after the animal had been slaughtered and meat sold. The result of this system of purchase was that one butcher was indebted to many traders whom he was not able to pay. Lack of working capital among butchers can be a constraint on commercial off-take of cattle herds. Similarly, lack of working capital among cattle traders

can be a disincentive among the herders to sell their cattle in the markets.

There are also problems encountered by cattle traders when trekking cattle to distant markets. The traders who trek cattle to Zande land from Bahr el Ghazal alleged that there was a fatal disease which attacked animals. They nicknamed the disease Jong kur because they could not identify it. The term Jong kur simply means in Dinka, the disease of the mountains. Zande region is mountainous and the disease thus affects the animals when passing through the mountains. The traders denied that the disease was caused by tsetse fly.

Cattle traders who trek cattle to Juba and Yei via Tali post have also reported lack of water during the dry season. Cattle and human beings travel for an average of two days without drinking water. Any plan concerned with development of cattle marketing in the southern region should put the problems discussed above into consideration.

### RECOMMENDATIONS

We have touched upon many recommendations in our concluding remarks made above. The recommendations are however put here in separate section for purposes of emphasis.

### Future Research

Research is needed to determine the geographical extent of tsetse fly expansion in pastoral areas. The degree to which the tsetse infection is affecting livestock husbandry in Yirol District should also be a subject for future research.

Research is also required to identify the alleged jong kur disease. Zande region of western Equatoria is one of the main consuming areas of pastoral cattle. The traffic of trade cattle to Zande region is high. An identification of such a disease is thus important, in order to allow free use of the Zande route.

There is implicit border trade in cattle between southern Sudan and the Republics of Zaire and Central Africa. Such trade is based on the initiative of the cattle traders and the local border populations living in those countries. There is need for market research to determine the possibility of exporting livestock to Zaire and Central African Republic. A\* trade agreement was signed in 1962 between the governments of the Sudan and Central African Republic. It was agreed that Sudan would export cattle to that country while the latter would export coffee to Sudan. Such an agreement

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\* Source: Arabic letter dated January 25, 1962 in File p.v.o./B.G.P. 57.A.1. available in the office of Assistant Commissioner for Animal Resources, Wan, February 20, 1979.

is an indication of the existence of export markets for pastoral livestock.

#### POLICY RECOMMENDATIONS

The trade in cattle should be encouraged through the following measures:

- (a) Establishment of market places or zeribas - i.e. cattle enclosures where cattle are kept before sale.
- (b) Provision of credit facilities to butchers and cattle traders.
- (c) Long term planning for holding grounds, stock routes, water dips, etc.
- (d) An extension service should be established to advise and provide information on markets and prices to producers, cattle traders, butchers and all those who are concerned.

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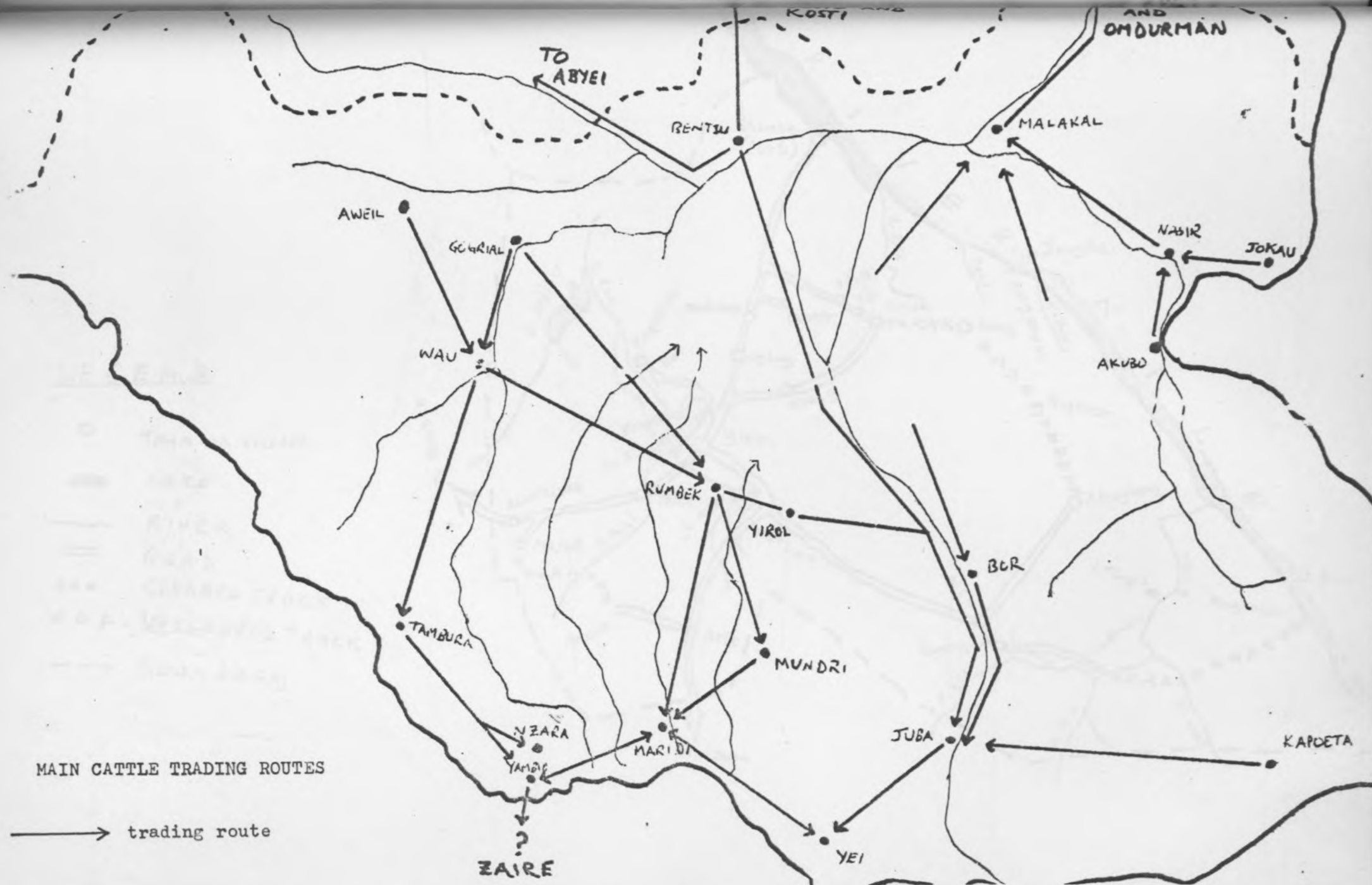
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Appendix I

Livestock Inventory, 1976 by Province

Province	Cattle	Sheep	Goats	Camels	Horse/Mules/Donkeys
Upper Nile	1,428,092	1,047,465	375,866	4,922	3,081
Jonglei	1,404,553	174,619	460,900	-	3,179
Eastern Equatoria	797,774	914,824	240,485	28,430	3,734
Western Equatoria	229	1,269	20,055	-	-
Bahr el Ghazal	1,227,707	718,238	604,099	-	1,346
Lakes	700,719	333,130	303,946	-	38
All Provinces	5,559,074	3,189,545	2,005,351	33,352	11,378

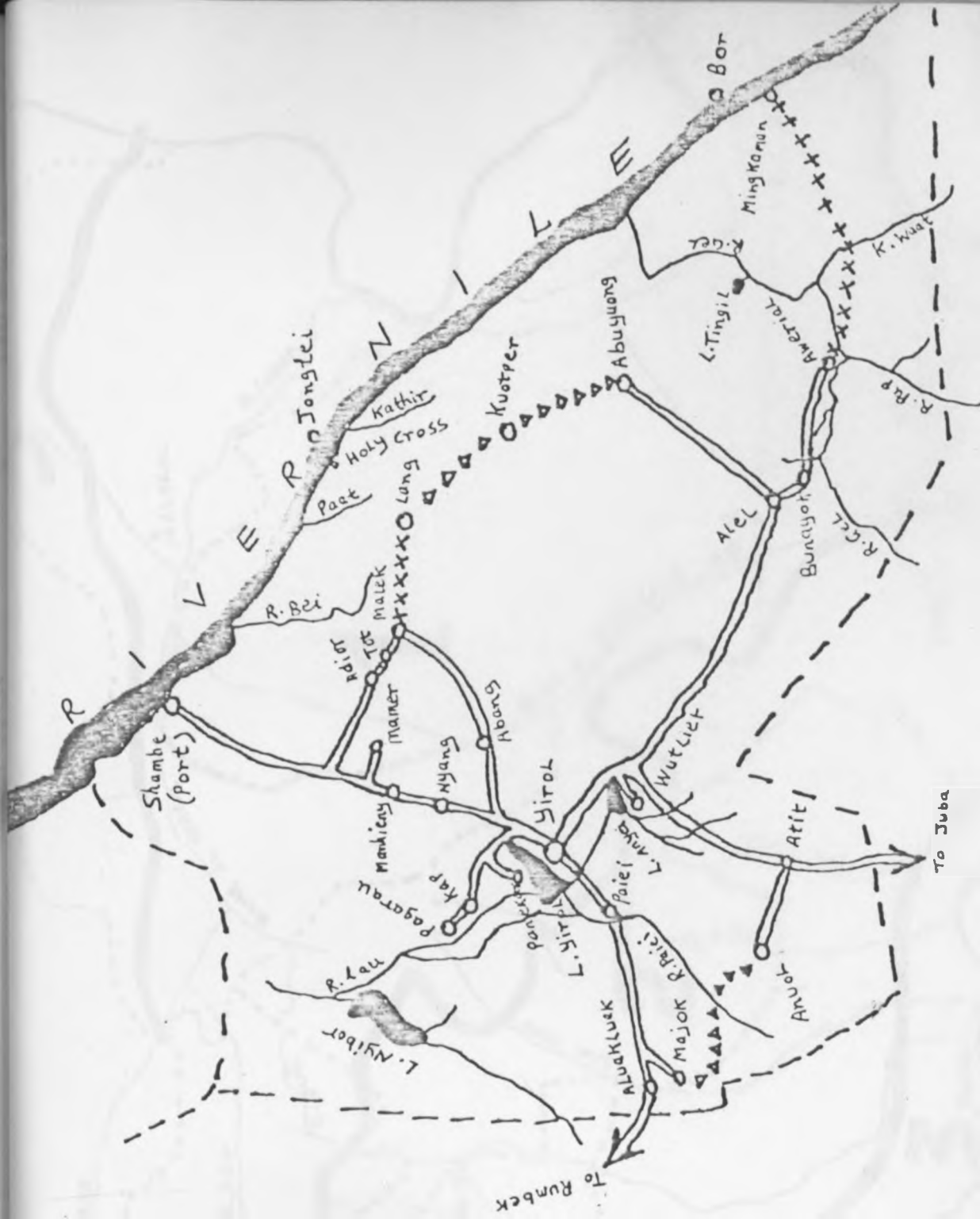
Source: Resource Management and Research "Sudan National Livestock Census and Resource Inventory, 1976". MAFNR, Khartoum, adopted from Alex Duncan: Livestock Husbandry and Agriculture Among the Dinka. PDU, Juba, 1978.



MAIN CATTLE TRADING ROUTES

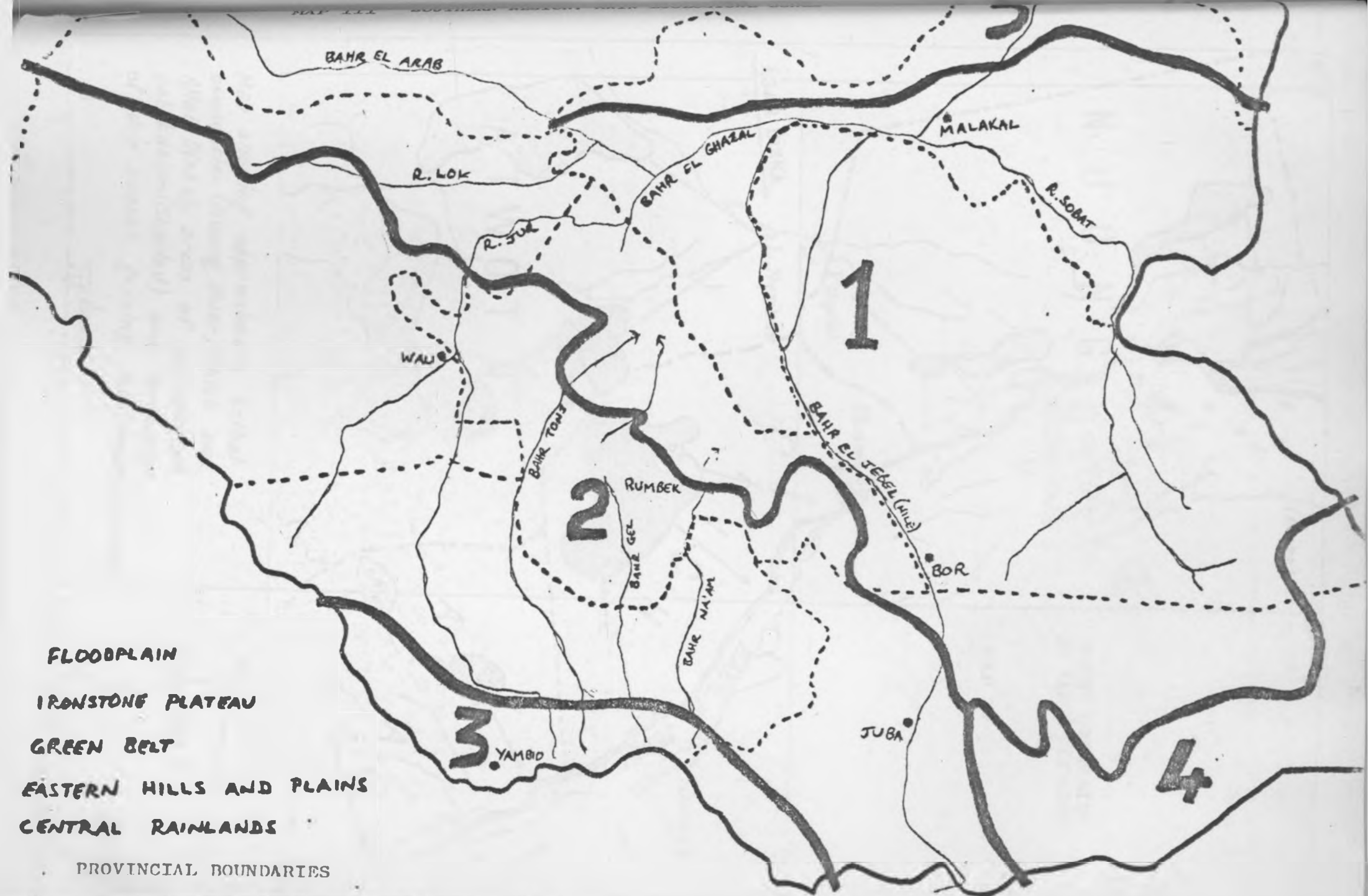
→ trading route





LEGEND

- O TOWN OR VILLAGE
- [Shaded area] LAKE
- [Wavy line] RIVER
- [Double line] ROAD
- xxx CLEARED TRACK
- aaa UNCLEARED TRACK
- BOUNDARY



BAHR EL ARAB

MALAKAL

R. LOK

BAHR EL GHAZAL

R. SOBAT

1

R. SOB

WALU

BAHR TONA

2

RUMBEK

BAHR EL JEBEL (White)

BOR

BAHR GEL

BAHR NA'AM

FLOODPLAIN

IRONSTONE PLATEAU

GREEN BELT

EASTERN HILLS AND PLAINS

CENTRAL RAINLANDS

PROVINCIAL BOUNDARIES

3

YAMBID

JUBA

4

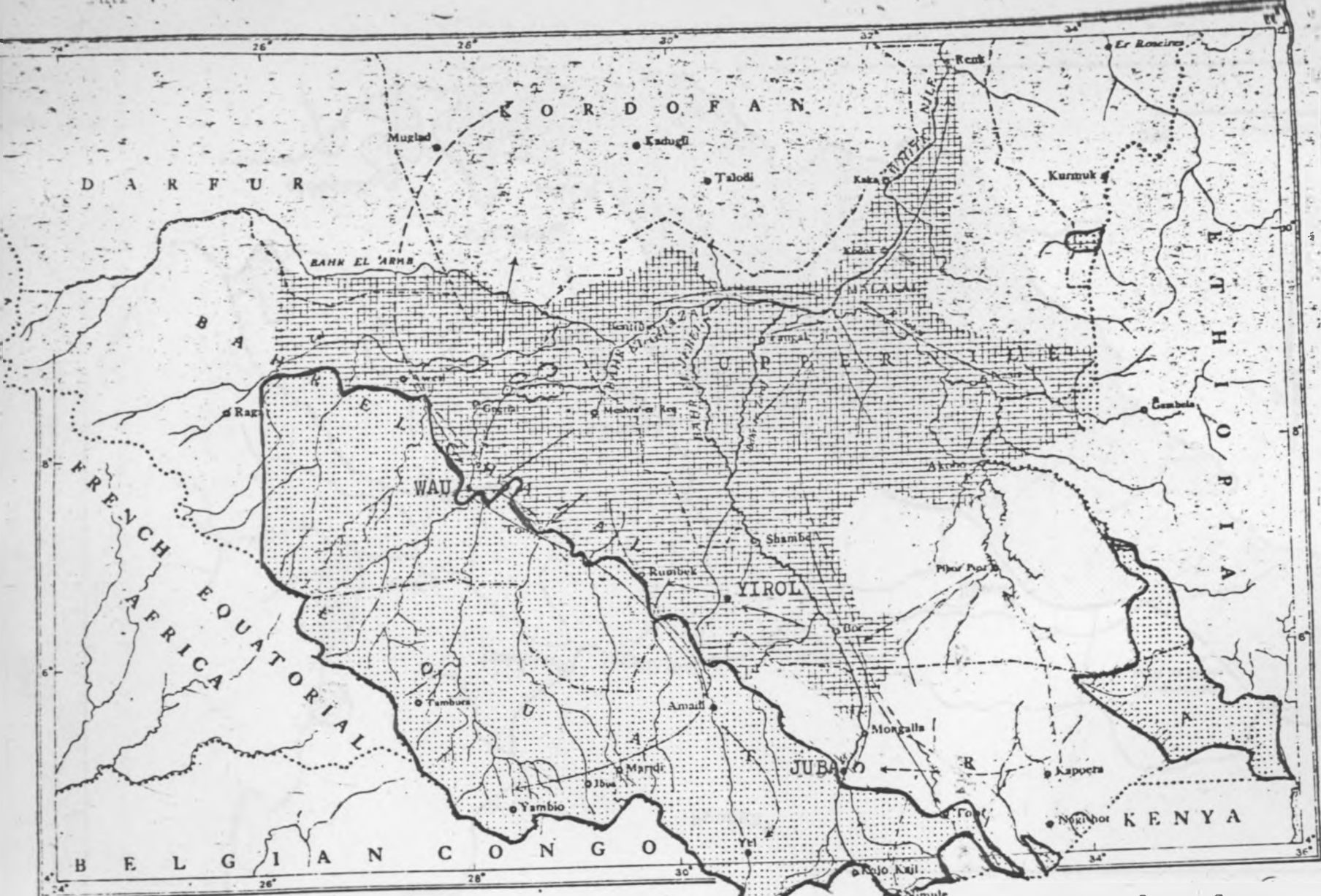


ETHNIC BOUNDARIES  
IN YIROL DISTRICT.

MAP IV

Map showing approximate tribal boundaries (Nuong Nuer, Chich and Allab Dinka), areas of permanent habitation (Shaded) and direction of dry season grazing movements (arrows)

1,000,000



Adapted from Sudan Survey Department, Nov. 1954, No. 954

Scale 1:6,000,000

DISTRIBUTION OF TSETSE FLIES IN SOUTHERN SUDAN 1977

