

INTERNATIONAL BOUNDARIES AND INTER-STATE RELATIONS IN
THE NILE BASIN

by

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ABSTRACT

The thesis examines the international boundaries of the Nile Basin and discusses them in the context of inter-state cooperation. The first aim of the study is to decide how far the boundaries have or have not been responsible for any difficulties in relations between the various states. This question is a central one in political geography. Many writers have noted that the rapid and arbitrary nature of boundary-making by European colonial powers in Africa has left independent African states with serious and intractable problems associated with their unsatisfactory colonial boundaries, drawn up with little or no reference to the geographical realities - both physical and human - in an area. While some writers suggest that the international boundaries can actually cause inter-state conflict - others argue that such conflict is unlikely ever to result from the nature of the boundary itself. The present study aims to examine the evidence about this issue in a specific geographical area in Africa - the Nile Basin - where the circumstances, both physical and human, surrounding the international boundaries are very varied and where there are several classic instances of so-called 'bad' boundaries which ignore natural and human considerations and so create tension between states.

The second aim of the thesis is to place the evidence and conclusions about the significance of international boundaries in the context of inter-state relations and cooperation in the Nile Basin. How can governments ensure that their boundaries function solely as the territorial limits of administration and not as barriers to all movement and contact between states? This question is examined with reference to attempts at inter-state cooperation for the use of the Nile waters and, more generally, within the context of regional and supra-regional organizations, notably the Organization of African Unity.

'aghlab al-duwal al-jadīda qabilat al-ḥudūd al-lati faraḡaha
 'l-isti^cmār, wa-tamassakat bihā ka-mā law kānat irthan muqaddasan,
 al-amr al-ladhī a^cṭa 'l-a^cdā' al-furṣa li'ttihām al-waṭaniyya^c -
 fiḥā bi-annahā laysat akthar min mujarrad radd fi^cl li'l-isti^cmār
 la'nbithāqan ṭabi^cīyyian ḥamīman'.

Translation: 'Most of the new states accepted the boundaries imposed by colonialism, and they hold them as if they were a sacred heritage. This enables their enemies to accuse them of the kind of patriotism that is no more than a mere reaction to colonialism and not a natural and sincere emergence of national feeling'.

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INTRODUCTION

Aims of Thesis This thesis examines the international boundaries that occur within the Nile Basin and discusses them in the context of inter-state cooperation. The first aim of the study is to decide how far they have or have not been responsible for any difficulties in relations between the various states. This question is a central one in political geography. Many writers have noted that the rapid and arbitrary nature of boundary-making by European colonial powers in Africa has left independent African states with serious and intractable problems associated with their unsatisfactory colonial boundaries, drawn up with little or no reference to the geographical realities - both physical and human - in an area. Associated with this view is the belief that international boundaries are always intrinsically critical phenomena of central significance to inter-state relations. On the other hand, some writers argue that the cause of any problems that have arisen or are likely to arise between African states is rarely, if ever, the nature of the international boundary itself. This view suggests that an international boundary is simply the 'frame' of a state and, by itself, is unlikely ever to be the cause of inter-state friction: that all such friction is caused by much more fundamental differences of opinion between nations.

The present study aims to examine the evidence about this issue in a specific geographical area in Africa - the Nile Basin - where the circumstances, both physical and human, surrounding the international boundaries are very varied and where there appear to be blatant examples of 'bad' boundaries which ignore natural and human considerations and so create tension between states.

The second aim of the thesis is to place the evidence and conclusions about the significance of international boundaries in the context of inter-state relations and cooperation in the Nile Basin. If it is true that the international boundaries are not by themselves major causes of inter-state friction, is it possible to suggest that these boundaries can be used as bases for inter-state cooperation? How can governments ensure that boundaries between their states function solely as the territorial limits of administration and not as barriers to all movement and contact between states? These questions are examined with reference to attempts at inter-state cooperation for the allocation and utilisation of the Nile waters and, more generally, within the context of regional and supra-regional organizations, notably the Organization of African Unity.

This thesis does not claim originality in the sense of presenting many new facts. From the nature of the material this would have involved a careful examination of the historical evidence, sifting through the primary sources relating to the allocation, delimitation and demarcation of the specific international boundaries - something that has been done, mostly very adequately, by other scholars, particularly historians. Rather is the present study concerned to attempt an original interpretation of facts that are already known. This seems especially relevant at a time when the gap between the perception of European scholars and the perception of African peoples themselves is so wide. While European analysts still focus on the negative effects of the international boundaries they imposed on African societies - and a sense of guilt or a particular political ideological stance are common causes of this 'European' view - the view of most Africans, expressed so eloquently through the Organization of African Unity, is much more positive and realistic: that the boundaries exist and can and must be made to work by independent African governments.

Sources The bibliography at the end of this thesis contains all the written (English and Arabic) sources used in the study. Primary sources of particular importance to the discussion are best consulted in Hertslet (1909 and 1967) and Brownlie (1979). Maps have been taken from various sources, the most important and easily available being found in Hertslet, Brownlie and McEwen (1971). As for the distribution and classification of ethnic, tribal, ethno-linguistic or linguistic groups in relation to the international boundaries, several sources have been used and cited where appropriate. Dalby's (1977) work is a generally accepted source, though the necessarily purely linguistic criteria pose some difficulties for his work in the present study. Another especially important source is the series of relevant Ethnographic Monographs published (with maps) by the International African Institute and referred to in the bibliography.

Much of the source material is unsatisfactory, especially that relating to the tribes, ethnic groups, ethno-linguistic groups and linguistic groups; it is often very confused and contradictory so that for comparative purposes its value is limited, both spatially and temporally. This is to be expected, of course. Information about the various groups of people in the Nile Basin has increased dramatically since Europeans first made contact, and the names, classifications, judgements and criteria differ markedly from one authority to another. Moreover, it is now becoming almost fashionable to suggest that to describe groups of people in terms of their tribe, ethnic group, or culture is unacceptable as it possesses derogatory connotations. It is difficult to find any two authorities who agree on any of these matters. There is therefore inevitably a good deal of subjective judgement in the choice of names and communities, tribes, ethnic groups or linguistic groups to be found in the present thesis; and this must be borne in mind throughout. Wherever possible, the author has preferred names and interpretations given to him

by people on the ground in the area concerned.

Finally, it is necessary to point out that during the writing of this thesis the author has been an Attaché at the Egyptian Embassy in London. He was born and has lived most of his life in Egypt and has travelled extensively, both professionally and privately, in most parts of the Nile Basin.

Definitions In these pages an international boundary is defined as a line representing the legal territorial limits of a state. It is sometimes distinguished from a frontier, defined as a zone of varying width separating the effective territories occupied by adjacent states (Fawcett, 1918); but this distinction between boundary and frontier seems now to be of little value, and Allott (1969, p.9) is probably justified in refusing to distinguish between them on the grounds that all boundaries involve drawing imaginary lines rather than zones. In this thesis the terms 'boundary' and 'frontier' are used synonymously, except where the context demands otherwise. A clear distinction, however, is and must be made between boundary delimitation, which refers to the selection of a boundary and its definition by treaty or otherwise, and boundary demarcation, which refers to the actual laying down of a boundary line in the landscape by boundary pillars or other physical means (McMahon, 1897; Curzon, 1907; Holdich, 1916).

Hypothesis and Plan of Thesis The argument in the present thesis is focussed on an hypothesis which may be stated as follows: 'The international boundaries of the Nile Basin are unsatisfactory in that they do not accord with geographical realities. For this reason they are a cause of tension between the states and so militate against effective inter-state cooperation in the region'.

After a discussion on several relevant conceptual issues, the study

turns to a brief review of the main relevant geographical features of the Nile Basin. The various international boundaries of the region are then examined in turn. The study then faces up to the hypothesis stated above and reaches some conclusions about its validity in terms of the evidence provided in the earlier chapters. The thesis concludes with a discussion on the implications of these findings: first for inter-state arrangements for the effective utilisation of the water resources of the Basin; and finally for international cooperation at different levels and scales.

CHAPTER ONE

SOME CONCEPTUAL ISSUES

To some extent it seems inappropriate to talk of theory in political geography, especially in the field of international boundaries. For, as many writers have noted (Lapradelle, 1928; Siegfried, in Ancel, 1938; Prescott, 1978) this is essentially a practical rather than a theoretical area of study, where subjective judgements are common and where objectivity is difficult if not impossible to achieve. The points of view presented in this thesis are certainly no exception to this statement. All one can hope to do is, on the basis of the evidence examined, to reach conclusions which seem to arise from one's own interpretation of the material available. In the case of the present writer, these interpretations are necessarily affected by the fact that he is an Egyptian working for the Egyptian government as an embassy official, though he is putting forward what are strictly his own views on all the matters discussed in subsequent chapters. Yet both the conclusions and the interpretations of the evidence are more likely to be sensible and credible if they are written against the background of an awareness of the relevant literature in the field. The purpose of the present chapter, therefore, is to provide a brief review of the literature - whether by geographers, statesmen, international lawyers, historians or political scientists - bearing on the study of international boundaries where such literature is relevant to the general argument pursued in later chapters. Some attention is also given to the discussion in the literature of other major concepts of particular relevance to the present study.

Boundary Disputes and Inter-State Conflicts First, however, it might be useful to expand a little on exactly what question is being addressed in this thesis. As its simplest the question is: 'to what extent are the international boundaries of the Nile Basin in Africa the cause of disputes or conflict between the constituent states of the region'? In the literature review that follows attention will be focussed on those authors who have expressed an opinion on this question, ranging from those who believe that boundaries in Africa are mostly 'bad' boundaries and the cause of much inter-state conflict to those who believe that boundaries are never the root cause of inter-state difficulties of any moment. Much of the discussion on this point, however, is confused by problems of terminology. Thus frontiers, defined as zones having territorial breadth, and boundaries, defined only as lines, and therefore largely abstractions, are frequently used differently. More importantly, there is some confusion over what is meant by an international dispute. One author (Prescott, 1978) has suggested a useful classification of boundary disputes. Prescott (1978, pp.90-131) identifies four types. First, there are those disputes which may be called territorial boundary disputes which result from 'some quality of the neighbouring borderland which makes it attractive to the country initiating the dispute' (*ibid*, p.90). And, as all boundaries are to some degree compromises between strategic, economic, ethnic and other requirements of neighbouring states it is always possible for a state to make a territorial claim by 'emphasising some pattern in the borderland that was discounted during the boundary's construction' (*ibid*, p.94). Secondly, there is the type called the positional boundary dispute, referring to differences in the exact interpretation of the boundary line in the relevant documentation. Both these types of disputes can only be

'solved' by changing the location of the boundary. The third type of boundary dispute is the functional boundary dispute which arises over state functions applied at the boundary - to customs control and the like. Finally, there is the resource development boundary dispute, which is usually directed at trying to govern the use of a particular resource, notably water bodies, water resources or mineral resources.

The problem with this kind of classification is that it does not direct attention to the true cause of a dispute and fails to recognise that any of these types may be artificially manipulated in order to express a quite different kind or degree of disagreement between two neighbouring states.

Similar objections can also be made about Allott's view that one should distinguish between at least two types of disputes - boundary disputes (about exactly where the line should be drawn) and territorial disputes (about which piece of territory should be allocated to which country) (Allott, 1969, p.13). This seems an unreal distinction, because trying to decide where to place a boundary (as an abstraction) is exactly the same as trying to decide which country has which piece of territory (as reality). In the present thesis, therefore, no such distinction is made.

Brief Review of the Relevant Literature The present section is not designed to examine the literature written specifically with Africa - especially north-east Africa - in mind (for example Widstrand, 1969; Touval, 1972; McEwen, 1971; Hertslet, 1909; Brownlie, 1979). The work of these and other authors will be incorporated into the discussion in later chapters as appropriate. The purpose of the present section is rather an attempt to give a succinct account of some of the more important and relevant ideas expressed by various authors about international boundaries.

It seems appropriate to begin with Lord Curzon, a statesman with a strong professional interest in boundaries, especially in the Indian sub-continent. Curzon uses the terms 'frontier' and 'boundary' interchangeably, as is done in the present thesis. But he also believed strongly that boundaries are critical in the relations between states: his most famous phrase - indeed perhaps the most well-known phrase in the political geography of boundaries - is that 'frontiers are indeed the razor's edge on which hang suspended the modern issues of war and peace, the life and death to nations' (Curzon, 1907, p.7). Understandably, therefore, for him some boundaries are 'good', especially if they are 'natural

boundaries' such as defensible mountain ranges or deserts; and some are 'bad', especially those that are artificial, like lines of latitude, longitude or straight lines. His views on 'good' and 'bad' boundaries were subsequently criticised on the grounds that such value judgements depend on the times and circumstances of each particular case; and many authors have refused to accept Curzon's distinction between 'natural' and 'artificial' boundaries - all boundaries, it is argued, are artificial in that a line has to be drawn somewhere by man on a map and if possible demarcated on the ground.¹ Holdich was also a practical man - a soldier and a member of several boundary commissions - and he placed great stress on the need for boundaries to be strong in the defensive sense. Boundaries, for Holdich, are so critical in international relations that they had, if possible, to be barriers (like mountain ranges and deserts): if not, then they must be made as 'strong as military device can make them' (Holdich, 1916, p.46). Curzon and Holdich represent perhaps the extreme end of the continuum between those, like these writers, who give priority to the boundary as an important cause of inter-state strife and so should be as far as possible 'natural' and defensible, and those who, at the other extreme, view boundaries solely as the territorial limits to administration of states and never as the cause of international conflict.

At the other end of the continuum perhaps the most significant name is still that of Ancel who was responsible for the statement - 'There are no problems of boundaries. There are only problems of Nations' (Ancel, 1938, p.196). Ancel, then, attributed very little significance to the boundary per se and much more to the state itself. In this he followed Febvre: 'The bound frame or margin, matters little. The inside is the important part, and must remain the chief

1. 'All boundaries are artificial, even those which are linked to natural features, or so far as they represent a transcendental and invisible expression of power' (Allott, 1969, p.12).

consideration' (Febvre, 1932, p.309). It is the relationships between neighbouring groups (defined by boundaries) that matter and on which depend conflict or cooperation. Ancel's writings are clearly central to the main thrust of the argument examined in the present thesis. He concentrates on 'the boundaries of types of states rather than types of boundaries' (Prescott, 1978, p.23). Of special interest to the present study of the Nile Basin are two types of amorphous states - molecular societies and nomadic societies - both of which are widespread in our region. For Ancel, boundaries are lines of equilibrium, reflecting the relative pressures exerted from either side of a boundary; Ancel rejected the concept of a static, linear boundary.

In between these two widely divergent views of, on the one hand, Curzon and Holdich and, on the other, Ancel, there are many other writers who represent a wide spectrum of views. Ancel himself was very much concerned to rebut the views of Ratzel, who viewed the state as a living organism and its boundary as governing the strength or weakness of a state. Unlike the situation in most parts of our region in the Nile Basin, for Ratzel the boundary represented the expanding or contracting frontier of growing or declining 'organic' states, whereas in most parts of Africa the boundaries were imposed from outside and states were expected to grow and adapt and fuse within these boundaries. For Ratzel the border fringe was the reality 'and the border line the abstraction thereof' (Ratzel, 1897, p.538). For Ratzel, then, borders were dynamic features, reflecting the expansion or retraction of state power. The reality for Ratzel was therefore the 'border fringe' which consists of three zones - the two peripheries of adjoining states and the central zone through which the boundary is drawn. Like Ratzel, Lapradelle (1928) - an international lawyer - agreed that the boundary 'cannot be considered out of the

context of the borderland, and to allow this he distinguishes clearly between frontiers and boundaries' (Prescott, 1978, p.20). Fawcett (1918) makes the same distinction and concludes that one should distinguish between frontiers of 'separation' and frontiers of 'contact'; like Curzon, Fawcett used the threefold system of artificial boundaries proposed earlier by Curzon, but of particular interest here was his view that there was an increasing coincidence between political boundaries and linguistic limits, drawing on evidence from Europe where there was a tendency to place boundaries within 'frontiers of separation'. Lyde (1915) expressed much the same view, arguing that boundaries giving states maximum ethnic homogeneity were the most likely to be 'good' boundaries. Boggs (1940) made valiant attempts to make international comparisons and generalizations about international boundaries, but the chief importance of his work for us here is the seminal work he accomplished on boundaries in relation to water bodies. Jones (1945) was particularly concerned to consider the stages of boundary evolution and the techniques of boundary making. The importance of his work is that Jones emphasised the idiographic as distinct from the nomothetic nature of boundary studies in political geography - 'each boundary is almost unique and therefore many generalizations are of doubtful validity' (Jones, 1945, p.vi.). For this reason Jones eschews any attempt to classify boundaries.

Other writers who take a middle road through the widely divergent views of Curzon/Holdich and Ancel include T#gil (1969, p.25). T#gil accepts that a government may use a boundary question as a pretext for starting a conflict, when the primary reasons are perhaps on a quite different level. A boundary dispute exists, he argues, 'when the territorial ambitions of at least two parties are irreconcilable' (p.24). But T#gil rejects Ancel's notion that all boundary disputes are caused by state interests and disagreements over something other than the boundary. T#gil believes that Ancel's theory 'cannot be upheld...Empirical investigations show clearly that boundaries can in themselves give rise to conflict'. Perhaps significantly, however, T#gil does not offer any empirical evidence to support his viewpoint

Many of the authors mentioned above have clearly been interested in the origins of boundaries, and in their evolution as an expression of the relative growth and decline of state territorial limits. In this they were clearly influenced by their choice of boundaries for study, by their own experience and focus, and more especially by their interest in the evolution of boundaries in Europe. The point that must be made about the boundaries of most

of Africa - and certainly of the Nile Basin area with which the present study is most particularly concerned - is that the international boundaries there were, at least according to conventional wisdom, drawn without reference to the patterns, genesis or evolution of indigenous states but were imposed arbitrarily upon existing state patterns by European colonial powers towards the end of the nineteenth century and in the early years of the twentieth century.

Problems of Specific Types of Boundaries It will be necessary in the chapters that follow to make qualitative and evaluative judgments about specific types of boundaries, especially in so far as they refer to inter-state relations. The purpose of the present section is to introduce briefly some of the ideas, principles and views about the different types of boundaries. To avoid too lengthy a discussion, only those types of boundaries which figure significantly in later chapters will be mentioned.

1. Physical Features

(i) Mountain and Hill Boundaries It has already been noted that according to some authorities, such as Curzon and Holdich, conspicuous natural features such as mountains, mountain ranges or hills provide the most efficient type of boundary. They are mutually recognizable, relatively permanent and defensible or, to use Holdich's term, they are 'barriers'. In practice, however, the zonal nature of such features means that the boundary has still to be demarcated by a line, and this line is most commonly the watershed. But not only is the watershed often difficult to discern on the ground - and at the time of delimitation in Africa there was often no accurate idea of where

the watershed actually lay - but exactly what is meant by a watershed is by no means clear (Ward, 1932). There are two generally accepted definitions. The first refers to the line separating the headstreams of waters that flow into different rivers or river basins, and this is the common interpretation in boundary making. The second meaning of watershed - common in America and in United Nations agencies - includes the entire catchment basin of rivers or lakes. But even excluding this second meaning of the term, a watershed is certainly an ambiguous concept. The line joining the highest peaks or crests is commonly not the same as the watershed (or what McEwen, 1971, p66 suggests should perhaps best be called the waterparting). Many international disputes - Argentina-Chile and Cambodia-Thailand - have arisen over this problem. Then there are difficulties in deciding exactly where the watershed is, both in theory and in practice. Adami (1927), as an international lawyer, identifies three ways of defining the watershed - the true topographic watershed, the true watershed, and the apparent topographic watershed. In any one area, he points out, each of these three interpretations could produce different results on the ground or on a map, though in practice the last - the apparent topographic watershed - is usually the most acceptable to boundary commissioners (McEwen, 1971, p.70).

The use of the term crest or, more commonly, a line joining several crests, is common in African boundary definitions but again there are several problems associated with the term. Exactly where the crest is thought to be depends to some extent on the angle from which it is viewed, even if the definition is used to describe a crest as the general line formed by joining the summits of the main ridge of a chain of mountains (Adami, op.cit.). In Africa, too, delimitation sometimes avoided the difficulties by describing a boundary as a series of straight lines joining the summits of named peaks or, in some cases,

isolated hills or rocks. In other cases, as McEwen (op.cit. p.73) points out, surveying problems even justify the practice of using the terms crest and watershed interchangeably.

A third type of mountain boundary appears particularly vague - the drawing of a boundary line along a foothill. There is, after all, no way of defining the foothill precisely as a line - it is clearly a zone. Yet, as we shall see, there are many examples of the use of foothills to define boundaries in our study area.

(ii) Rivers The use of a river as a boundary line has obvious attractions but numerous disadvantages; nevertheless rivers are very commonly referred to in descriptions of boundaries. Early penetration and exploration in Africa was commonly along rivers or by reference to rivers: they were often the only reasonably accurate topographical lines to be found on early maps. As Holdich (op.cit., p.156) put it, a river 'is a God-sent feature for boundary making, and requires no assistance from man'. On the other hand, the sociological and ethnological difficulties raised by using rivers as boundaries are many and obvious, especially perhaps in Africa, for rivers are frequently the magnet for peoples, transport, trade and economic life; moreover, a river basin is commonly the home of the same group of people or tribes who occupy both banks of the river (Boggs, op.cit., Jones, 1945). But there are other, more technical, problems relating to the river itself, over exactly what line is to be chosen as representing the international boundary in a legal sense. Again, it is partly a matter of terminology, for many of the possible river boundary lines are incapable of precise definition.

A commonly used term in boundary definition - of particular significance to our study area - is the thalweg, which may be defined as the line of greatest depth of the main channel of a river or stream. This, however, is an imprecise definition, covering both the line of

deepest soundings of a river and the axis of the safest and most accessible channel for the largest ships (Lapradelle, op.cit., p.202). In Africa it is particularly imprecise because the term is used for small, unnavigable streams as well as for navigable rivers. At the same time, some documents refer to the 'median line' of a river or stream, or to a river's 'centre line'. Clearly the centre or median line of a river is not the same as the thalweg and in a strict legal sense the median of a navigable river should be termed the thalweg.

Another term used in connection with river boundaries is the bank. Apart from the problems associated with accurate bank identification, especially where there is high and low water, or severe erosion, the major issue concerns the mutual enjoyment of the river's economic benefits by states on both banks of the river: this is why the thalweg is deemed to be more satisfactory as a boundary line. Similar objections apply to the use of a river mouth in defining a boundary line, for it does not always have a precise or permanent location, especially where swamps or deltas occur. Where such river mouths are used, however, the thalweg of the main stream is commonly adopted (Jones, op.cit.). In the study area this last problem does not seem to arise, though the river mouth is used in boundary delimitation. Vagueness and imprecision are also characteristic of those boundaries which use (in some cases as tripoints) the source of a river or rivers. This is a very difficult point to determine - indeed it is often quite impossible - especially where there are dramatic seasonal changes, where the source lies in a swamp, or where the main stream of a river is a matter of opinion. Any significant river may have several sources. Similarly, there are difficulties arising from a river changing its course - either dramatically, as when an ox-bow lake is formed, or more slowly by erosion and accretion. As

Schwarzenberger (1957) points out, however, international law accepts the right of a state to include areas of accretion. But in the case of a dramatic change in a river's course then the thalweg of the original course remains the legal boundary.

Finally, there is the problem arising from islands in rivers - and there are several instances of this in our study area. Strictly speaking the ownership of such an island should reflect the thalweg or median line of the river referred to earlier. But in practice the island may simply be between two branches of the same river, and the difficulty is to determine which of these is the major course (Boggs, op.cit.).

(iii) Lakes The problems of international boundaries and lakes are very important for our purposes here. As to what exactly constitutes a lake is not easy to define, because of the fluctuations in size and shape that occur over time, and especially between seasons - a matter of real significance in a continent like Africa where seasonality of rainfall is often so marked. Moreover, lakes may merge into swamps and it is difficult to determine the edge of any dry land there may be. Together with this problem is the difficulty of defining a lake shore or shore line. For even though a lake may be non-tidal, it commonly has periodic rises and falls affecting the location of the water's edge; in practice, however, the low water line tends to be accepted in international law as the fairest line to use as a boundary. A further problem is how to draw an international boundary through a lake where markers cannot be laid down. The concept of the 'median line' can be used in some cases - as in some of the lakes in the study area - but equitable sharing of a lake's resources is never an easy task (Boggs, op.cit.). McEwen (1971) believes that an 'arbitrary mathematical median' - such as that adopted in Lake Albert - is probably better than

a simple median line. The case of Lake Victoria is a special one and will be dealt with as part of the detailed study of the Nile Basin in a later chapter.

2. Mathematical Lines

Little need be said here about this group of international boundaries, though they are very common indeed and may be divided into four types - lines of longitude, lines of latitude, straight lines between specified points, and other lines (such as arcs) drawn geometrically in relation to specified points. The difficulty with such lines is that originally they were often decided upon without knowing much about the territory through which they passed and without having any certain knowledge that the line chosen was accurately described - for instance without scientific proof of the exact location of a specified line of longitude. A further difficulty with other straight lines and geometrically determined arcs is that they have to be determined by reference to specified points which normally have to be physical features and so possess some of the difficulties of physical features as boundary lines referred to above. But perhaps the greatest objection commonly made of boundaries of this type is that they are 'arbitrary', ignoring all other features of the physical and, especially, of the human geography of an area. It may be that this judgement is wrong, and that straight lines of this kind are the 'best' kind of boundary in our study area. More will be said on this point in a later chapter.

3. Non-Physical Features

It will be apparent that human, social, political and economic problems of many kinds arise from the use of physical features as international boundaries. To take the last case of mathematical lines, the literature

is full of criticisms of such boundaries, arguing that they cut arbitrarily and ruthlessly through, for instance, homogeneous ethnic groups. Similar criticisms can to varying degrees be levelled at most physical feature boundaries. Mineral, forest, agricultural or human resources and groups may be split by watershed, crest or foothill boundaries, either permanently or seasonally. Rivers and lakes are commonly magnets for populations, agriculture, stock, transport and commerce and many examples are cited in the literature documenting the hardship caused by the use of such features as international boundaries. These comments will be tested in the context of the study area in a later chapter. The present section, however, must confine itself to noting a few of the non-physical features that are used for international boundary-making. The distribution and density of population appears on the surface of it to be a useful basis for boundary drawing: after all an 'empty area', such as a desert, is likely to prove unobjectionable. The problem is that even desert fringes are hard to define permanently, partly for ecological reasons and because of the movements of nomadic or semi-nomadic pastoralists who may use such lands whether seasonally or in relatively moist years. The problem is even more difficult when attempts are made to determine the limits of a particular group, or tribe, for the purposes of boundary delimitation. The notion of a 'homogenous tribal group' is commonly little more than an abstraction and has little geographical validity. Internal divisions and mixings, both from within and from without, are common, and even where groups are not pastoralists the difficulty of trying to decide on the ground where group A finishes and group B starts is very great, if not impossible (Hodder, 1968). Yet even this may be easier than trying to define exactly what is meant by group A - how to determine the criteria on which the identifi-

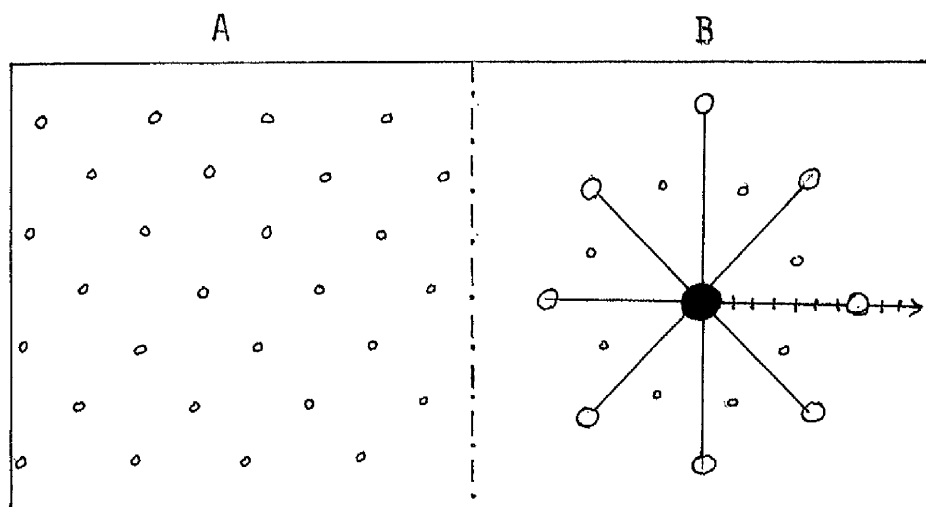
TABLE I

K.M.Barbour's List of Tribes whose territories are cut
through by international boundaries

<u>Boundary</u>	<u>Tribes Cut</u>
Egypt-Sudan	Kharga Barabra Ababda
Sudan-Zaire	Mundu Azande
Sudan-Uganda	Madi
Sudan-Ethiopia	Berta Koma Anuak Murle Suri Resniat
Sudan-Kenya	Turkana
Uganda-Kenya	Karamojong Sabei Wanga
Kenya-Tanzania	Luo Masai
Uganda-Zaire and Rwanda-Burundi	Mundu Nyoro Toro Nkole Chiga

Source: Barbour, 1961.

cation of group A should be based. Then migration introduces formidable problems into the use of human population distributions and composition as bases for determining boundary locations. Nevertheless, it is important to note - in contradiction to opposite views expressed so widely in the literature - that in drawing up their original colonial boundaries in Africa, Europeans did frequently try to consider non-physical features - especially tribal affiliations, historical traditions and agricultural practices - in delimiting their respective territories. The difficulty - as will be apparent from our case study area - was not that negotiators ruthlessly ignored human groups, but that their knowledge of human distributions and characteristics was, at the time of drawing up the boundaries, even less accurate than their knowledge of the physical features of their territories. Moreover, names, criteria and distributions in relation to boundaries have varied greatly over the last twenty-five years. Thus Barbour (1961) shows twenty-two 'tribal' groups cut through by the international boundaries in the study area (Table 1); but subsequent writings and maps by geographers, anthropologists and others all differ in some respects from Barbour's early list. Each scholar prefers his own classification and nomenclature, which make comparison between them exceedingly difficult.



<u>History</u>	Colonial Power A	Colonial Power B
<u>Population</u>	Entirely rural, dispersed villages, little increase, some emigration	Trading centres developing, one town, increase in number of people, some immigration
<u>Transport</u>	Tracks and local paths	Some tarred roads, rail link to national centre (eastwards)
<u>Economy</u>	Pastoralism and some subsistence farming, only very local exchange, no markets	Increased sedentarization, cash crops and trade with other areas, rural and urban markets
<u>Investment</u>	Virtually non-existent	Considerable investment from national centre
<u>Political</u>	Left on the periphery, no integration with 'centre'	Well integrated with 'centre', considerable politicization

Diagram I. Model of Geographical Effects of International Boundary.

Geographical Effects of International Boundaries

One of the most powerful arguments for emphasising the role of international boundaries in creating inter-state conflict is believed by many writers to arise from the wide range of geographical effects the drawing of such boundaries has on the landscape, peoples, ways of life on either side of the boundary. And it is certainly true that international boundaries in Africa, as elsewhere, may well represent lines across which very great differences in economic, social and political geography occur. Looking at this issue theoretically, Diagram I (A and B) assumes two adjacent areas, with identical physical environmental conditions and only one ethnic group occupying both areas. Yet the differences summarized in the diagram and the descriptions underneath reveal startling contrasts between A and B. This model represents of course an extreme case in which all the disadvantages are with A and all the advantages are possessed by B. In terms of the contemporary human geography it is area B that has all the investment, infrastructure, economic and social development, the growth of urban centres and a certainty of being incorporated in and integrated with the nation's space economy. Area A, on the other hand, shows no signs of any development - however defined - and remains on the rejected periphery of the national economy in every sense.

Clearly the international boundary in Diagram I does reflect great geographical differences between the areas on opposite sides of the boundary. But it is difficult to see how the argument can be sustained that the international boundary has itself caused these differences. More logically, it seems clear that it is differences in government policies that are responsible for the contrasts across the boundary.

In case A the government in which the area lies has, for whatever reason, not chosen to invest in the area nor to incorporate it into the national economy: the periphery remains poor and divorced from the 'centre'. In the case of area B, the government is clearly concerned - for whatever reason - to incorporate the area into its national development planning: the periphery is being kept in close touch with the 'centre'. Differences in the contemporary human geography across the boundary are caused, not by the international boundary, nor by the environment, nor by the people - the first is only an abstraction, the other two are identical on both sides of the boundary. The differences are the result entirely of different policies towards their peripheral areas adopted by their respective governments.

That this notion is not entirely imaginary or theoretical is evidenced by simple observation as well as by a number of students. In the field, for instance, the difference in the human and economic landscape as one crosses the international boundary between Lesotho and South Africa is immediate and dramatic. On the Lesotho side the agricultural landscape is poor, disordered and clearly suffering from lack of water; human settlements are very small and subsistence-oriented; roads are few and poor. On the western bank of the Caledon river, which forms the western boundary between Lesotho and South Africa at this point, there is an immediate change to an apparently suddenly fertile land, watered by expensive irrigation schemes, with large, ordered fields and evidence of prosperity in the farm settlements. The difference is, of course, that South Africa and its white farming community has the capital and the markets for heavy investment in farming and is supported by a strong infrastructural back-up from the

government. Exactly the opposite occurs across the boundary in Lesotho.

In West Africa studies along the Slave Coast (Newbury, 1960; Newbury and Hodder, 1962) indicate the geographical changes that have occurred along a stretch of the coastal plain lying behind the Slave Coast. Here a fairly uniform set of environmental conditions are divided by international boundaries representing the colonial territories of the British, French and Germans. All the international boundaries of what are now independent states cut through homogeneous tribal territories of one kind or another. The geographical contrasts that occur as one moves westwards from Nigeria along the Slave Coast are very striking - in crops and types of agriculture, in forms of rural and urban settlement, and in ways of life discussed in detail in Newbury and Hodder (1962). Moreover, in the case of the Ewe, lying athwart the boundary between Ghana and Togo there is an excellent example of how on one side of the border (in Ghana) the Ewe are disadvantaged and feel peripheral to the 'centre' in Ghana as far as economic, social and political development are concerned. On the other side of the international boundary (in Togo), however, the Ewe are not only fully integrated but in fact themselves form more or less the 'core' or 'centre' of Togolese economic, social and political life.

Within the Nile Basin there are many cases of the same point to be made. One of the clearest analyses of the geographical effects of an international boundary known to the author is that by Kibulya (1967) who examines the geographical contrasts on a small section of the Uganda-Zaire boundary - the home of the Amba people in the Semliki valley.

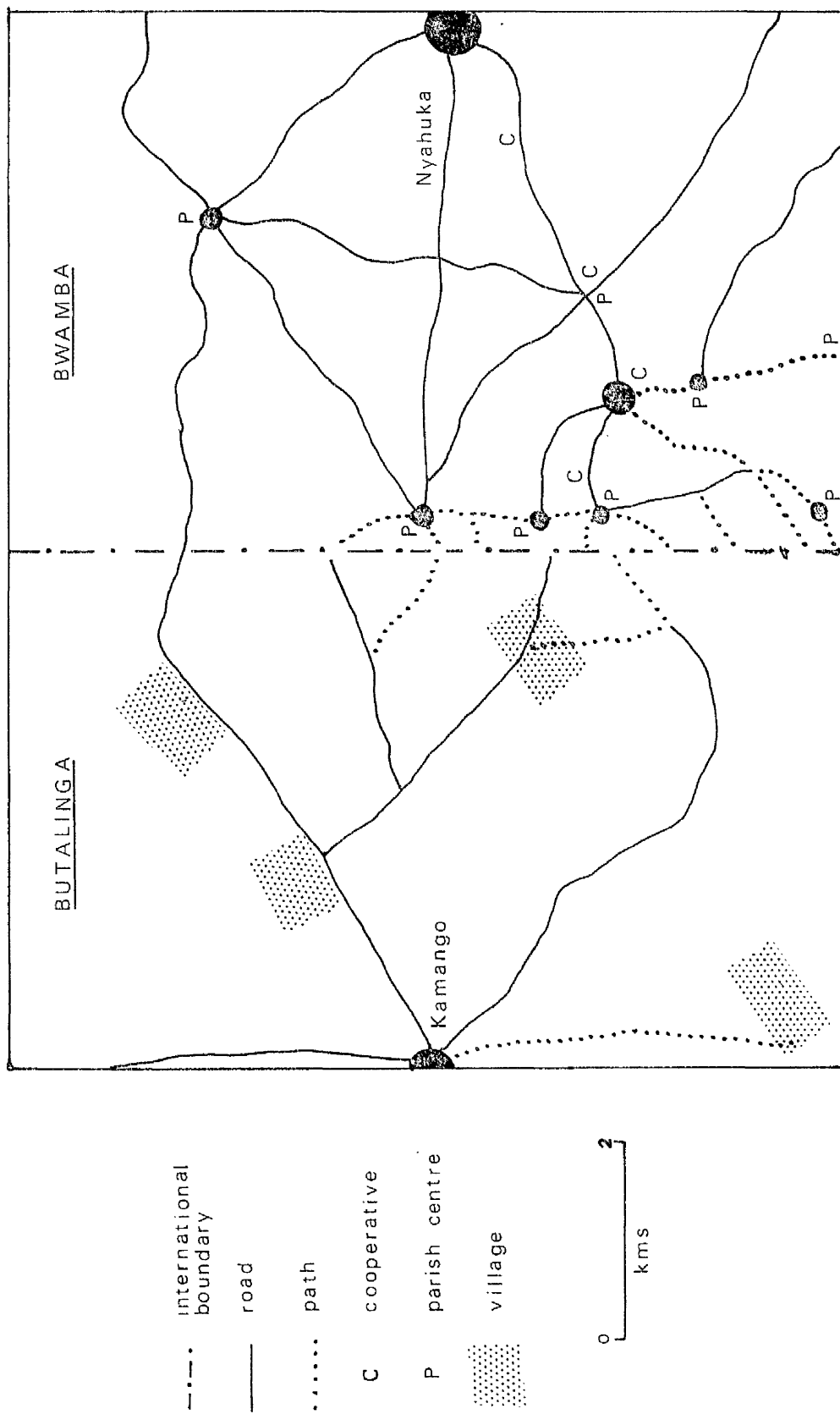


Fig.1. Butalinga and Bwamba (after Kibulya, 1967)

On the Uganda side of the boundary the name Bwamba has been retained as the name for the administrative country while the adjacent area of Zaire is now called Butalinga (Fig. I). The Amba people are isolated - to the west by the Parc National and to the east by the Ruwenzori range. The boundary line here follows the thalweg of the River Lamya, crossed by only the one road bridge, though water crossings are possible, especially during the dry season. This boundary between Zaire and Uganda has never been paid much attention by either administration and traditionally, of course, Zaire has been occupied with the development of Katanga (Shaba) and other regions of the country while Uganda was for long concerned primarily with developments in Buganda. The Amba country, then, has been and still is very peripheral to the main interests of both national governments.

However, the degree of isolation or remoteness has differed on either side of the boundary. The British introduced coffee as a cash crop into the Bwamba country in 1922 and cotton, manilla hemp and other crops followed in the 1930s. By 1953 the road from Fort Portal had reached the boundary and Bwamba became one of the richest rural areas in Uganda. On the western side of the boundary, however, no such developments took place, the Belgians being interested primarily in facilitating administration and tax collecting. The Amba of Butalinga were therefore encouraged to move into large clustered villages- in any case their traditional settlement form - and each village head was responsible for tax collection; this tax necessitated the local Amba selling part of their rice crop to make enough money to pay these taxes. To the east of the boundary, in Bwamba, the different political policy led to a different settlement pattern - dispersed farming settlements with, eventually, small urban centres developing around cooperatives and parish centres (muluka).

Communications became much better in Bwamba than in Butalinga and, together with the other improvements and opportunities provided in Bwamba, the population density is now much higher than in Butalinga (over two and a half times). Trading centres, together with markets, have attracted urban-style services and in Bwamba a completely different way of life has developed. Land-use, social services, economic infrastructure, settlement characteristics - all these show increasing contrasts, fostered by their different links with different faiths (Catholic in Butalinga, Protestant in Bwamba) and economic and political orientations.

From the point of view of the present thesis, the case of the Amba is an interesting one in that it reveals clearly how an international boundary can lead to formerly homogenous areas becoming quite startlingly different and perpetuating this difference up to the present day. Differences in the cultural landscapes on either side of the border are obvious and increasing. However, Kibulya, like most geographers making this kind of analysis, does not go beyond describing and explaining these differences to address the central question which concerns us here: does this boundary cause any problems between the two states? At the national level the answer is clearly in the negative. On the other hand, the movement of people across the boundary for trade and other visits is sometimes easy, sometimes difficult if not impossible; and this depends entirely on the relations between the two governments. Economic and political circumstances in Zaire and Uganda have of course changed frequently and dramatically over the years. The boundary itself here is not demarcated: it is simply the river across which people can often wade. It is only when one or other of the two governments tries to close this boundary that any inconvenience is caused. And, with its remoteness and

with the experience of the local people in night-time smuggling across the river, even this inconvenience is never significant.

The case of the Amba people can be replicated from almost every boundary in the Nile Basin and generally the same kind of conclusion can be drawn. This is only one of the innumerable cases where the geographically arbitrary nature of an international boundary matters little to the people living on either side of it. Certainly it appears to be as true of the Amba as of the Ewe that 'they seem content to leave the boundary where it is, and have no strong desire for Ewe unity as such' (Hodder, 1978, p.35). Not that such movements have not emerged in the past, especially during and immediately after the independence period: Pan-Ewe, Pan-Masai, Pan-Karamojong - such movements were common. The point is that after two decades or so of independence and in the context of national political realities, such movements are no longer significant - at least in the Nile Basin, where they are seen to be anachronistic and disruptive as well as pointless. The academic analysis of state boundaries by geographers can easily produce formidable lists of the 'effects' of boundaries on the life, work and movement of peoples and goods; and the usual implication is that these 'effects' are undesirable and could only be remedied by the re-drawing of boundaries. Such an implication and such an interpretation can no longer be sustained in the practical real world of today.

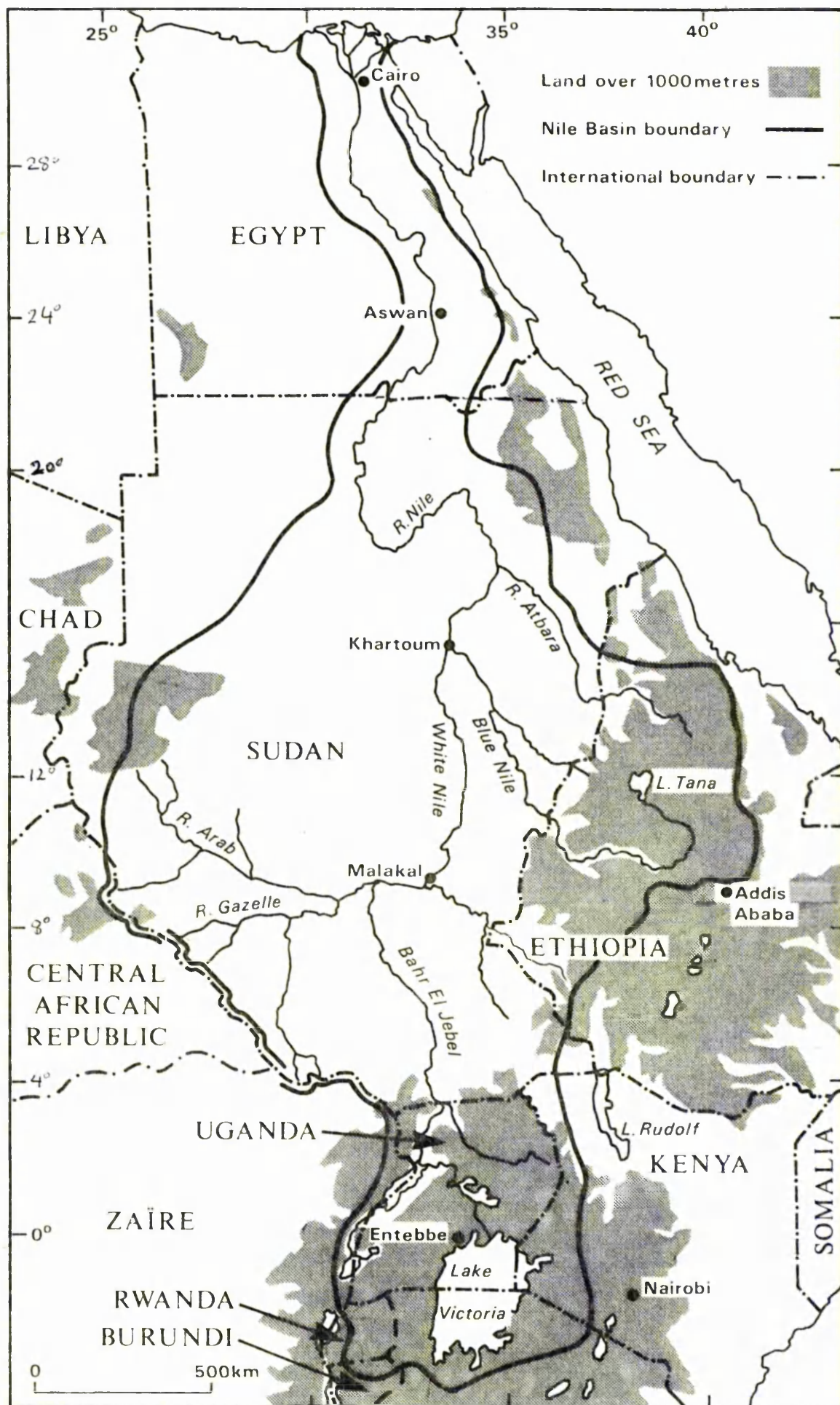


Fig.2. The Nile Basin, Relief and Drainage (After Wilcocks, in Waterbury, 1979)

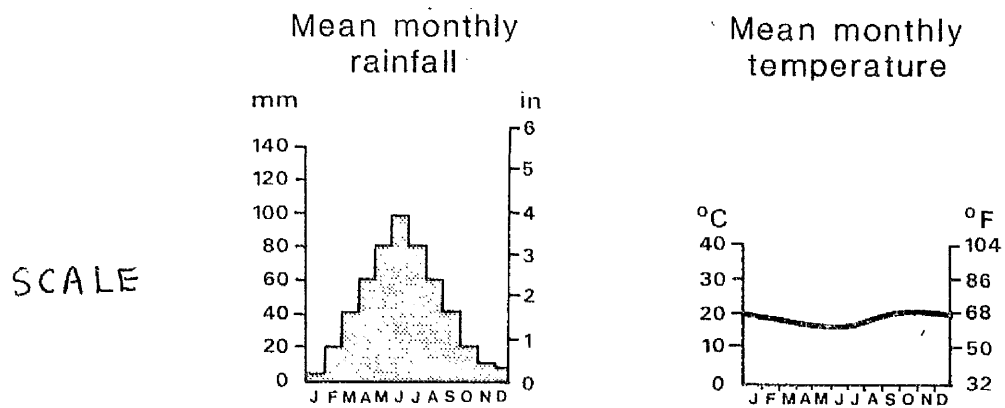
CHAPTER TWO

RELEVANT GEOGRAPHICAL FEATURES OF THE NILE BASIN STATES

Aspects of Physical and Human Geography The Nile Basin, as defined in Figure 2 (Hurst, 1944; Mohamed, 1956; Megahed, 1973; Waterbury, 1979) is the most significant geographical feature of north-eastern Africa and covers an area of some 2.9 million kms². This is roughly one-tenth of the area of the African continent. As a river basin, its central element is of course the Nile river system. From its most distant source, the Nile flows for about 6,700 kms to the Mediterranean Sea through the Nile Delta. It is the second largest river in the world and the whole system contains several lakes, including Lake Victoria, the largest freshwater lake in the continent, and lakes Albert,¹ Edward and Kioga, as well as the great man-made lake of Lake Nasser, lying athwart the Egypt-Sudan boundary.

Physically, the basin is defined by the maximum watershed limits of the whole Nile Basin, though these watersheds are often difficult to discern on the ground. Only in Ethiopia, where the Blue Nile rises in Lake Tana, and on the mountainous western and eastern rift-valley limits of the Lake Plateau, centred on Lake Victoria, are there very clear topographical watershed limits to the Nile Basin. Otherwise the Nile Basin averages up to 400 metres above sea level in Egypt and much of the Sudan, rising to an average of over 1,000 metres in Ethiopia and the Lake Plateau, though higher

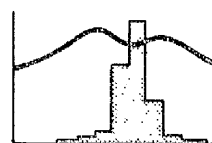
1. For the purposes of this thesis the more modern names of lakes and other features are not used unless their permanence is assured.



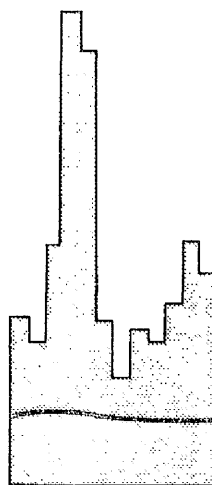
CAIRO 95m



KHARTOUM 380m



ENTEBBE 1146m



ADDIS ABABA 2450m

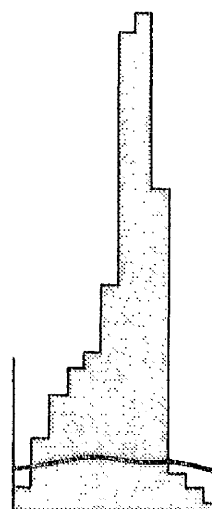


Fig.3. Climatic Data for Selected Stations
(See Fig. 2 for locations of stations)
(After Grove, 1979)

elevations are common in Ethiopia and on the edges of the rift valleys bounding the Lake Plateau to the east and west. On the Lake Plateau lie Mount Elgon (4,321 m.) and the peaks of the Ruwenzori range (Mount Margharita, 5,124 m.).

As the basin extends over such a wide range of latitude and altitude, it includes many different climatic zones, determined primarily by rainfall amounts and seasonal regimes (Fig. 3), though the higher plateau and mountain fringes reveal often startling temperature contrasts. Vegetation in the basin includes the alpine flora of the snow-capped peaks of the Ruwenzori, the tropical savannas of the Lake Plateau, limited areas of tropical forests, widespread papyrus swamps, the swamp forests of southern Sudan, and the semi-desert and desert lands of the northern part of the Nile Basin. It is here, in the northern half of the basin, that life and agriculture depend so heavily on irrigation by water from the Nile, whereas in the south it is rain-fed agriculture and pastoralism that dominate.

From north to south, the Nile Basin may be divided roughly into four regions based primarily on the main river and drainage features. In the north, to as far south as the confluence with the Atbara River, the Nile has no significant tributaries, so that the basin is contained within a relatively narrow strip of up to 750 kms wide. The second region includes the river systems, basins and lake associated with the Atbara and Blue Nile rivers, both of them having their sources in Ethiopia and producing a large eastwards bulge in the shape of the Nile Basin lands (Figure 2). West and south of this region lie the moister lands of southern Sudan, culminating in the great western bulge in the shape of the Nile Basin caused by the spreading and often indeterminate lines of

drainage fingering out from the main channel of the White Nile (Bahr el Jebel) through the sudd and such rivers as the Bahr el-Ghazal. Finally, in the south lies the source of the Nile on the Lake Plateau, with its gigantic inland lakes of Victoria, Kioga, Albert and Edward.

Neither the four drainage regions outlined above, nor indeed the Nile Basin itself, are in any way coincident with the international boundaries, which form the central interest of the present study. The states concerned - known collectively in Egypt as 'The Nile Basin States'² - are Egypt, Sudan, Uganda, and some parts of Ethiopia, Zaire, Burundi, Rwanda, Tanzania and Kenya, though the countries with the most substantial interest in the Nile waters are Egypt, Sudan, Ethiopia and Uganda, the last being the only country entirely within the Nile Basin. Otherwise, only varying proportions of the states under consideration lie within the Nile Basin, ranging from perhaps two-thirds of Rwanda, half of Burundi and a third of Ethiopia, to only narrow border strips in Kenya, Tanzania, and Zaire. On the other hand, virtually all the population of Egypt and Sudan live within the Nile Basin as defined in this thesis.

This lack of coincidence between the Nile Basin as a drainage feature, the four drainage regions identified above, and the Nile Basin states as defined in the preceding paragraph is, however, not only to be expected: it is central to the arguments about international boundaries considered in these pages.

The same lack of coincidence is found when considering the salient facts of the human geography of the Nile Basin. By far the greatest concentration of human populations, with associated high levels of urbanisation, is in the narrow belt along the banks of the -----

2. The author, in his work at the Ministry of Foreign Affairs in Egypt, is particularly concerned with 'The Nile Basin States' in the Africa Department; they are defined as stated here.

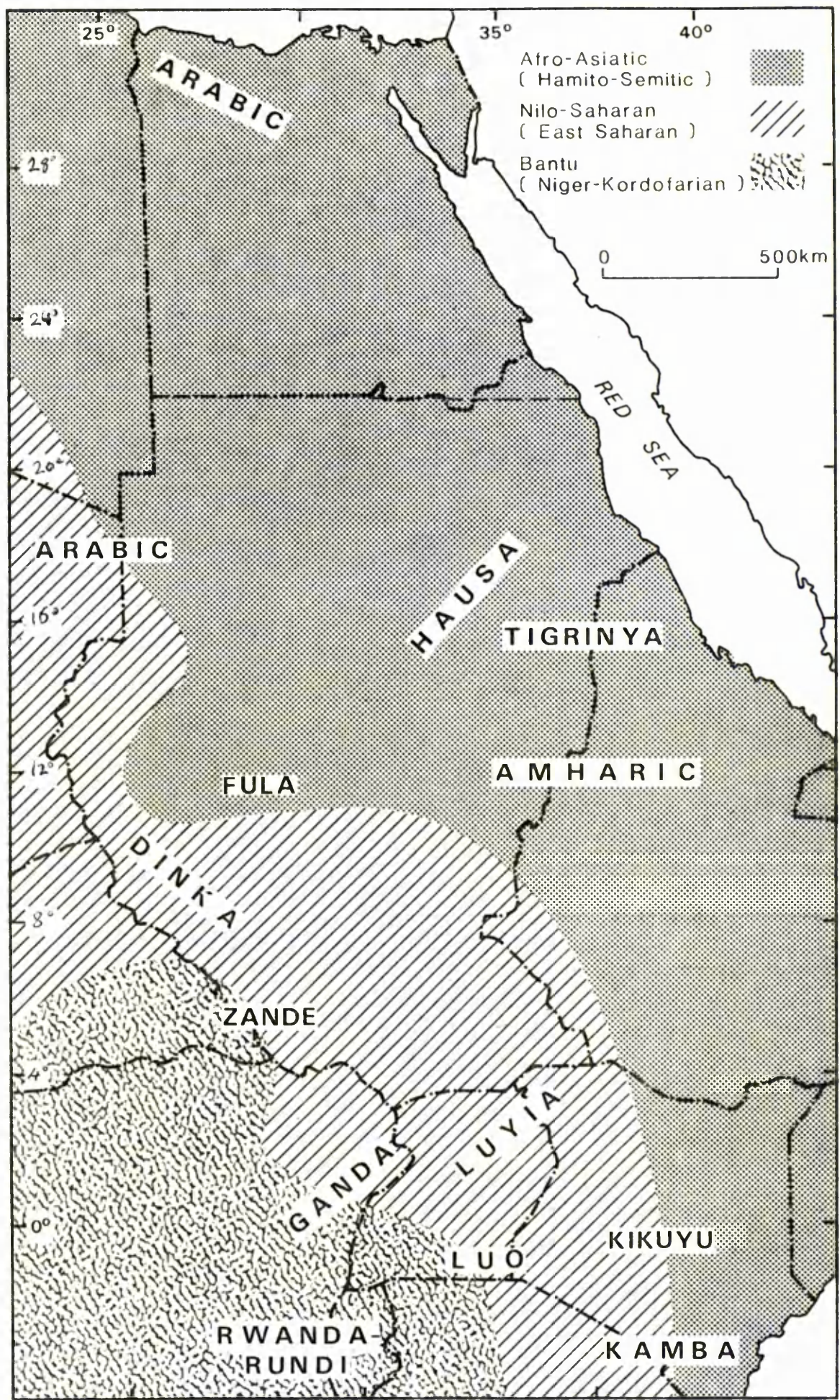


Fig.4. Major Ethnic Divisions (after Griffiths, 1984)

Nile downstream from Lake Nasser and spreading throughout the delta at the river's mouth. There are other areas of relatively high densities in Rwanda and Burundi, the northern shores of Lake Victoria, around the confluence of the Blue and White Niles and in pockets of the Ethiopian Highlands. Otherwise the Nile Basin lands are generally very sparsely populated or completely unpopulated. Economies and ways of life differ widely. But from our point of view here the most significant fact about the human geography refers to the 'tribal'³, ethnic or linguistic pattern of the area and the way in which the international boundaries are believed for the most part to ignore such a pattern. At this stage in the thesis there is no point in presenting any more detailed account of the ethno-linguistic groups than that presented in Figure 4, just as there is little point in detailing here the drainage, watershed and topographical features most relevant to the issue of international boundaries. These will be presented together with the facts on the delimitation, demarcation and problems of the international boundaries of the Nile Basin in subsequent chapters.

3. The terms 'tribal' and 'ethnic' are used synonymously in this thesis.

Nevertheless it will be convenient at this stage to say a little more about two matters. First, it is important to recognise some of the more significant groups affected by boundary delimitations in the Nile Basin. Among the Bantu, found in the south-west of the Basin, are many groups belonging to important kingdom-states around the northern, western and southern shores of Lake Victoria and in the area between Lake Victoria and the chain of lakes associated with the western rift valley system: lakes Albert, Edward, Kivu and Tanganyika (Fallers, 1960). Ethnographically the most famous of these Bantu states are Buganda, Bunyoro and Ankole, but others such as Busoga and, in the west, Toro, Rwanda, Burundi and many others are significant. The Nilo-Saharan peoples include important pastoralist groups such as the Masai, Turkana, Karamoja and Suk (Pokot) of importance to our study here, as their search for water and grazing lands as well as their whole nomadic or semi-nomadic ways of life frequently mean that they find it peculiarly difficult to keep within territorial limits based on political boundaries at the international level. Finally, in the north, are the Afro-Asiatic groups, notably the numerous Arabic groups, the Tigrinya, Amharic (in Ethiopia) and Fula.

Secondly, the whole question of migration is clearly central to our study, including as it does the movements of people across international boundaries in the region. Historically, migrations of all kinds have been an important factor in producing the present population distribution and ethnic mix in the Nile Basin. Before European colonial boundaries were imposed on the region migration - both forced and unforced, short-term and long-term - was a feature of human population movements as indigenous groups and/or states waxed

and waned in power and influence. Pastoralism, too, has always been an important - in some areas the important - economic way of life and the continuous movements in search of pasture could never be expected to operate within strictly observed territorial limits. With the drawing of colonial boundaries came restrictions on movement, though these have never been of great dimensions. More important have been the stimuli provided to migration by the new opportunities provided by European control of the lands and economies they began to control. Rwanda and Burundi, for example, were looked upon as labour reservoirs for both the former Belgian Congo (for mining and land development schemes) and for the European planters of the Usumburu Highlands and Kilimanjaro. Other opportunities for work have been provided in Uganda and at independence, according to Nyerere, 'numerous tribes now live in at least two countries or have their origins in some other area of Africa' (Nyerere, 1963, p.2).

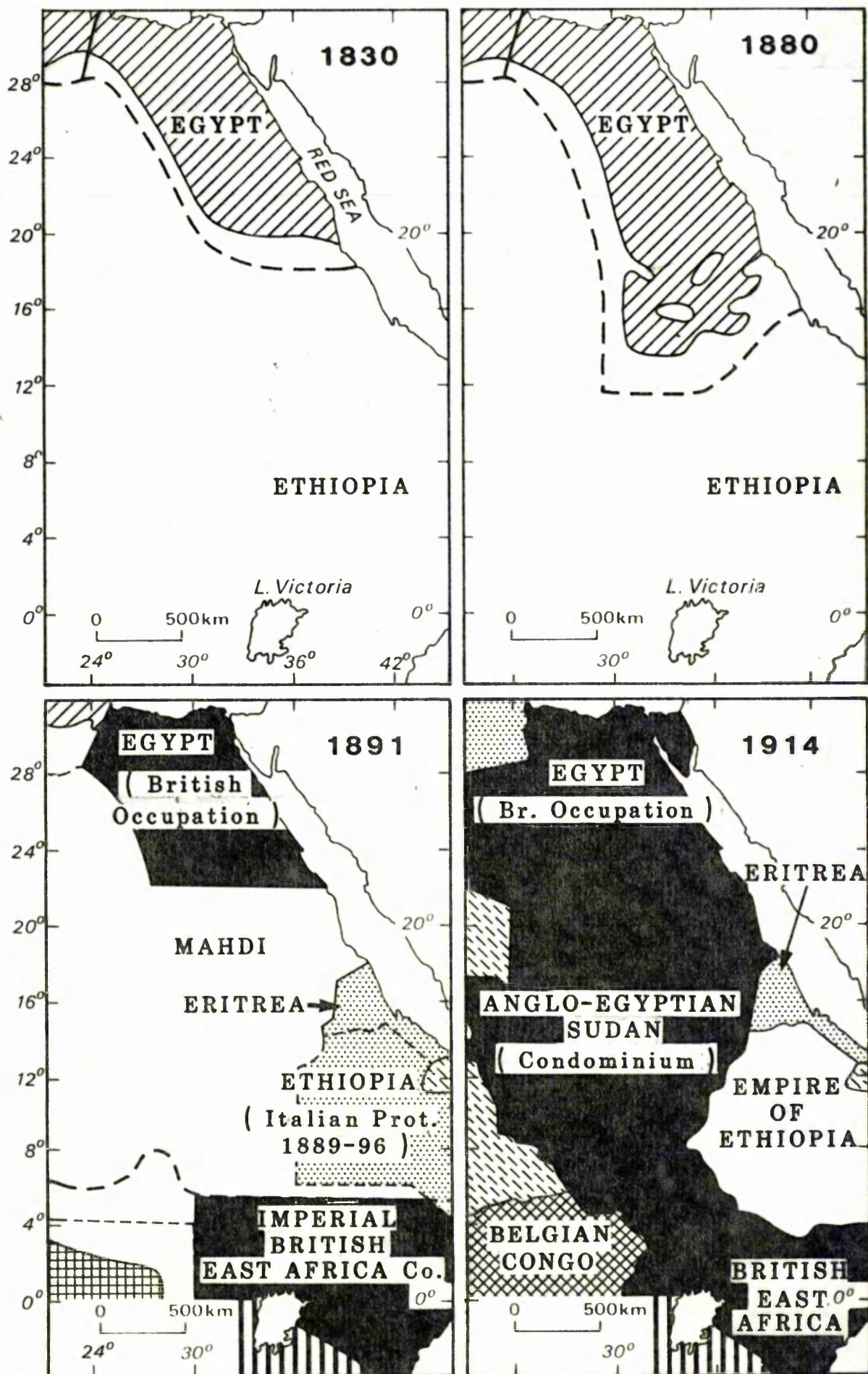


Fig. 5. History of European Contact (after Fage, 1958)

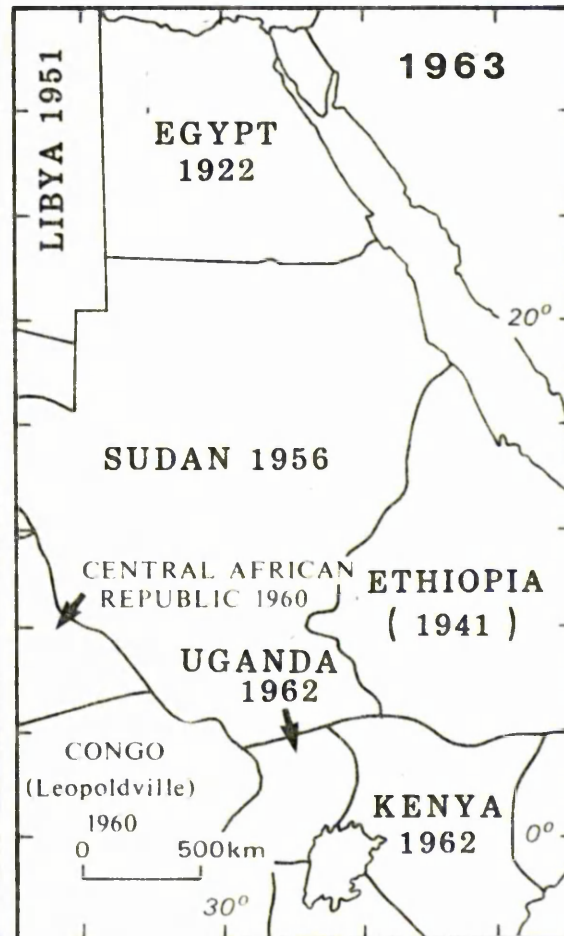
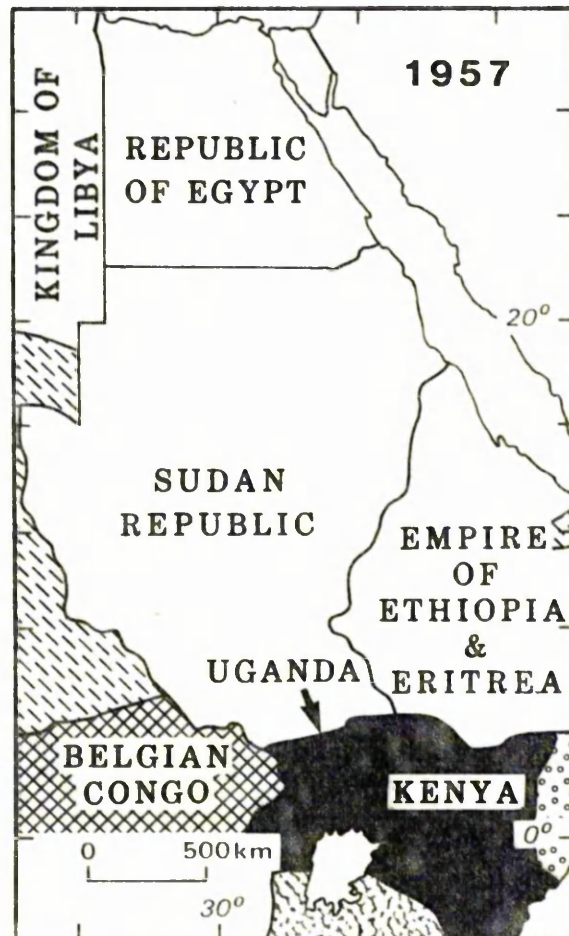
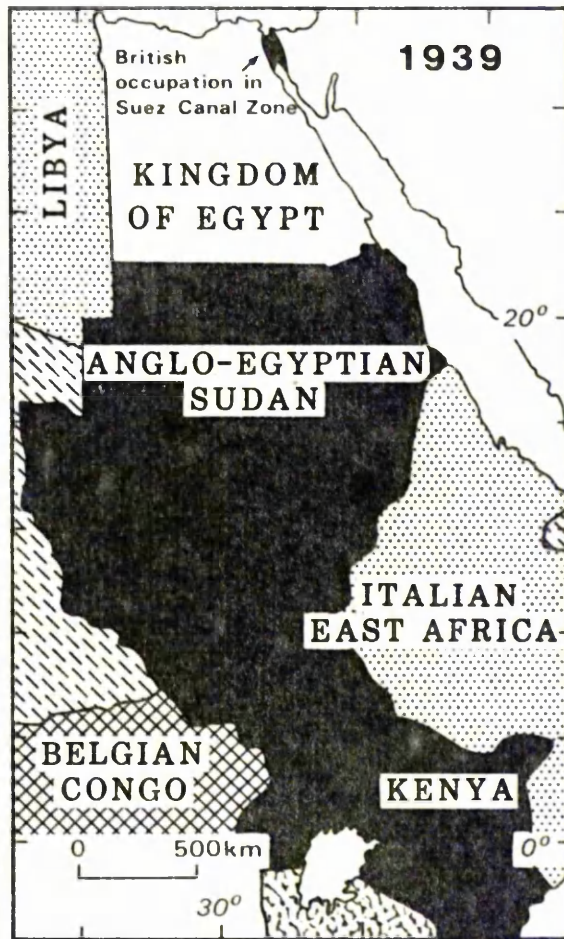


Fig. 5. (cont'd)










Turkish Suzerainty	
German	
Belgian	
Italian	
French	
British	
British mandate	
Congo Free State	
Italian trusteeship	

Fig. 5. Key.

Historical Aspects The European-imposed boundaries with which we are concerned here are in no case more than one hundred years old and in most cases the boundaries are considerably more recent (Figure 5). At the time of the Conference and Treaty of Berlin (1884-5) the only area of alien rule in the Nile Basin was Egypt (British): otherwise indigenous rule held sway, notably under the Mahdi, in what was to become the Sudan, and in Ethiopia. By 1895 Italian presence around the edges of Ethiopia had established some sort of boundary with the non-European controlled lands of Sudan; but it was in the south that the greatest changes had taken place, the Congo Free State (Belgium), British East Africa and German East Africa having made inroads into most of the southern parts of the Nile Basin. By the 1914 war the international boundaries in the region were more or less firmly drawn. The First World War resulted in changes in the extreme south, where German East Africa was mandated to Britain (Tanganyika)¹ and Belgium (Ruandi-Urundi), though the actual boundary lines were not changed. Within the Nile Basin subsequent changes in the general alignment of the international boundaries have been small and localised and these detailed changes will be referred to in the analysis of specific boundaries in later chapters. The point to be emphasised here is that in the long perspective of African history the present-day boundaries are relatively recent in origin and that they resulted initially from European imposition, often with apparently little or no knowledge of the physical and human circumstances of the areas through which these boundaries were drawn. Thus, though the boundaries were in fact often drawn initially with agreement or negotiation with local chiefs, neither their precise location nor the precise authority vested in the 'chief' chosen to make

1. Tanganyika remained the name of the country until 1964, when Tanganyika and Zanzibar were combined in a united republic called Tanzania.

TABLE II

Length and Status of Boundaries

<u>Boundary</u>	<u>Length (kms)</u>	<u>Status</u>
Egypt-Sudan (international)	1264	Delimited
(administrative)	1210	-
Sudan-Ethiopia	2336	Demarcated
Uganda-Sudan	440	Delimited
Sudan-Kenya	224	Delimited
Sudan-Zaire	624	Demarcated
Uganda-Kenya	896	Demarcated in part only
Uganda-Zaire	680	Demarcated
Uganda-Tanzania	416	Demarcated
Kenya-Tanzania	768	Demarcated
Tanzania-Rwanda	208	Demarcated
Tanzania-Burundi	448	Demarcated
Rwanda-Burundi	288	Delimited
Uganda-Rwanda	152	Demarcated

Source: Several, including Widstrand, 1969.

such agreements could be accepted with any great confidence.

The International Boundaries of the Nile Basin

The thirteen international boundaries of the Nile Basin will be examined in the next chapter in the order given below. This is in no sense in order of importance, but it seems useful simply to list the boundaries at this point in the order in which they will be treated subsequently. They are also listed in this order in Table II.

- (i) Egypt-Sudan
- (ii) Sudan-Ethiopia
- (iii) Sudan-Uganda
- (iv) Sudan-Kenya
- (v) Sudan-Zaire
- (vi) Uganda-Kenya
- (vii) Uganda-Zaire
- (viii) Uganda-Tanzania
- (ix) Kenya-Tanzania
- (x) Tanzania-Rwanda
- (xi) Tanzania-Burundi
- (xii) Rwanda-Burundi
- (xiii) Uganda-Rwanda

TABLE IIINILE BASIN STATES: Areas, Population and Densities

<u>Country</u>	<u>Area (sq.km)</u>	<u>1981 Population(000s)</u>	<u>1981 Density (persq.km)</u>
Egypt	1,001,449	43,290	43.2
Sudan	2,505,813	19,240	7.7
Ethiopia	1,221,900	31,800	26.0
Uganda	236,036	13,050	55.3
Kenya	582,645	17,360	29.8
Tanzania	945,087	19,140	20.3
Burundi	27,834	4,230	152.0
Rwanda	26,338	5,350	203.1
Zaire	2,354,409	29,780	12.6

Source: World Bank Atlas, 1983.

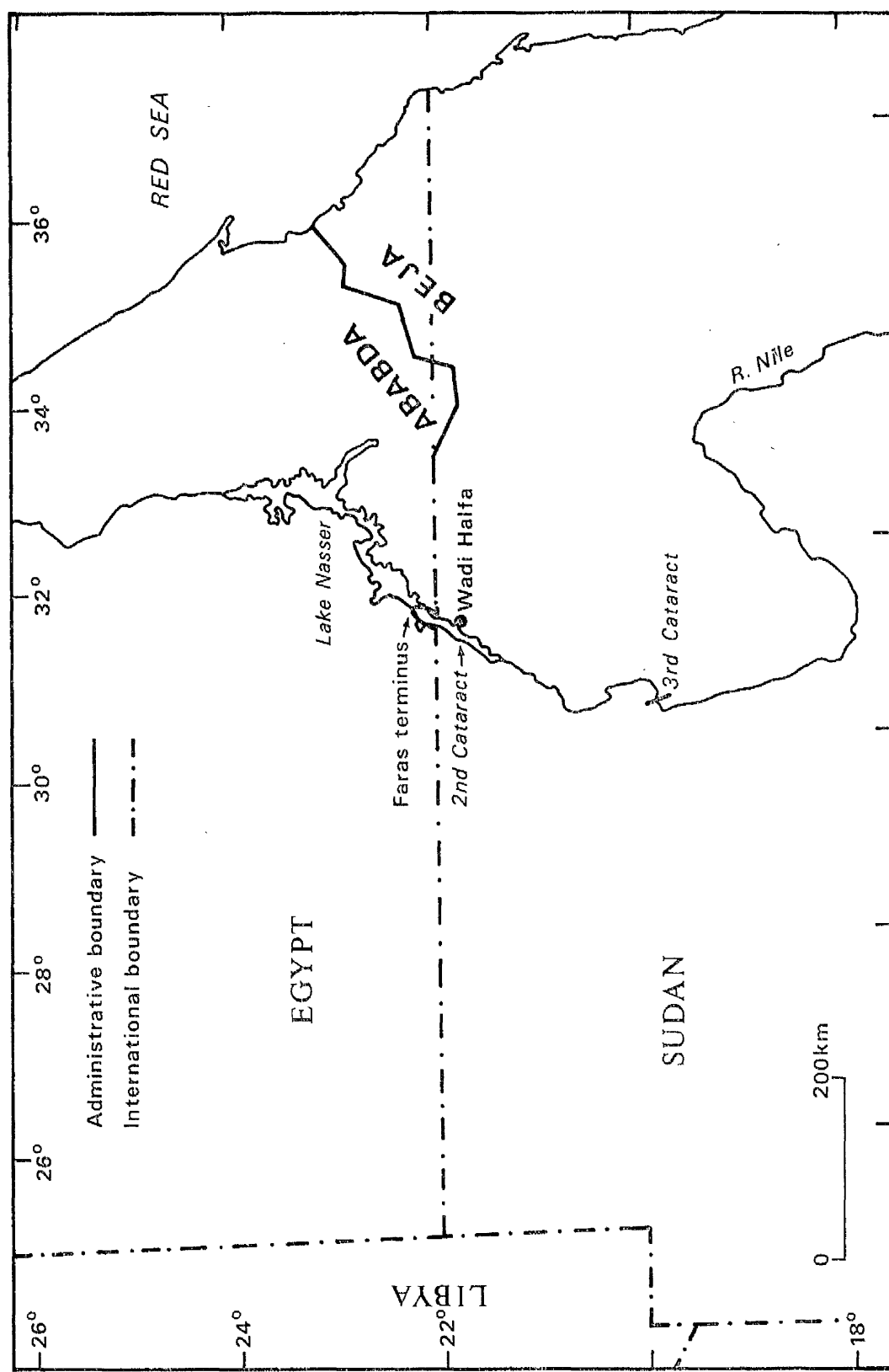


Fig. 6. The Egypt-Sudan Boundary

CHAPTER THREE

THE INTERNATIONAL BOUNDARIES

(i) THE EGYPT-SUDAN INTERNATIONAL BOUNDARY

The international boundary between Egypt and Sudan follows the 22° N. parallel more or less throughout its course (Figure 6) and would seem therefore to be very simple, clear and unambiguous, in spite of its clearly artificial character. In fact, however, the boundary has in the past been associated with a number of difficulties in relations between the two countries.

Before examining the boundary in more detail, however, it is important to note that Egypt and Sudan have not always been quite separate countries with completely separate legal identities. Originally part of the Turkish Empire (Figure 5), Egypt was occupied by Britain in 1882. In 1883, however, the Mahdi set up a state in the Sudan provinces until, in 1896-99, joint Anglo-Egyptian military operations reconquered the provinces. In 1899 an agreement between the British Government and the Khedive of Egypt created the Anglo-Egyptian Sudan. In reality this was a condominium in which Britain and Egypt had joint sovereignty. Whereas Egyptian independence was recognised quite soon, in 1922,

the Sudan did not achieve its own independence until 1956.

The first definition of the Egypt-Sudan international boundary dates back to the 1899 agreement referred to above which states that the term Soudan (sic) means all the territories south of the 22nd parallel of latitude which fulfilled three criteria:

- (i) all territories which had never been evacuated by Egyptian troops since 1882;
- (ii) all territories which, previously administered by the Khedive, were temporarily lost to Egypt and subsequently reconquered by Britain and Egypt;
- (iii) all territories which may hereafter be reconquered by Britain and Egypt acting together. Since 1956, when Sudan became independent, Egypt has always interpreted the international boundary in exactly this way.

Three specific boundary questions have arisen, however, The first refers to the Wadi Halfa salient (Figure 6), which fingers

northwards into Egypt along both sides of what is now Lake Nasser. There is some difference of interpretation over this salient, both in the 1899 agreement and in the Egyptian *arrêté* later the same year which created the salient. The *arrêté* established the salient to as far north as the Faras terminus, Faras being a village just north of Birba, and was accomplished, according to subsequent Egyptian interpretation, for purely administrative reasons; it is clear from reading the text of this *arrêté* that Egypt realised that there were no Arabs in the salient area and so to have included this area in their administrative responsibilities would have been inconvenient at that time. Some authorities have argued that the 1899 *arrêté* definitely transferred the salient area to Sudan (Brownlie, 1979), but Egypt has consistently claimed that the salient represents only an administrative line - not an international boundary (Abdalla, 1958).

The second dispute has centred on a similar ambiguity over the international boundary in the east. As Figure 6 shows, the administrative boundary here lies partly south and partly north of the parallel 22° N. The section lying south of the parallel and placed under Egyptian administration was defined as including the lands and wells of the Ababda tribe, whereas the section lying north of the parallel was defined as including the grazing grounds and wells of the Beja (Bedawye-speaking peoples) (Figure 6). This arrangement dates from an *arrêté* and decree of 1902 in which it was considered necessary 'to determine definitely the region of the bedouin tribes of Egypt and the Sudan'. Here again, then, 'tribal' or 'ethnic' distributions - this time concerning nomadic pastoralists - were explicitly given as the reason for re-drawing the boundary. In this

case, the map evidence seems to establish that the new eastern section boundary was purely administrative in character. However, there developed a clear difference of opinion on this matter.

Both of these issues - the Wadi Halfa salient and the eastern section of the international boundary - derived clearly from different interpretations of the various documents and maps on which the agreements, arrê[^]tés and decrees were based. But it was not until 1958 that these disputed areas seemed likely to damage relations between Egypt and Sudan. In 1958 - two years after independence - Sudan took steps to hold elections in the area north of the 22° N. parallel in the eastern section. Egypt replied by proposing a restoration of the respective Sudanese and Egyptian administered areas; in other words Egypt proposed and still maintains that the legal international boundary follows the 22° N. parallel throughout its length (Reyner, 1964). This dispute remains unsolved today, but is not now alluded to by either side.

The other important issue between Egypt and Sudan arose quite simply and understandably from the fact that the waters of the Nile in Egypt originate far to the south, not only beyond its own borders but also beyond the borders of Sudan with Ethiopia (the Blue Nile) and Uganda (the White or Victoria Nile). As 'the gift of the Nile', utterly dependent on its water, Egypt has perhaps the greatest vested interests in resolving any disputes with its upstream neighbour. Indeed, up to just before Sudan's independence in 1956 many writers and politicians on both sides of the border argued strongly for some form of unity between the two countries; and it was the mutuality of interests over the Nile waters that initiated and perpetuated such movements for Egyptian-Sudanese unity. As one writer put it, 'in modern times an ideology arose, inspired by the Egyptians and Sudanese,

that all people of the Nile valley are one. A transboundary river or body of water is more difficult to manage than one that falls entirely or predominantly within the frontiers of a single state' (Waterbury, 1979, p.43).

The imminence of independence in Sudan destroyed hopes of unity between these two riparian states and from 1956 friction between Egypt and Sudan - caused mainly by the question of the Nile waters - developed, often to serious levels, resulting in the breaking-off of negotiations between the two governments concerned. In November 1958, however, the Sudanese army took over the government of the country in a coup d'état and negotiations between the two governments were quickly resumed. Three ad hoc committees were set up - for trade, financial matters and the Nile waters. The question of the Nile was therefore now to be linked with trade and financial relations between the two countries - matters of urgent importance to Sudan which had suffered seriously from the disruption of trade and financial relations during its period of dispute with Egypt (Megahed, 1973). By November 1959 these agreements were successfully concluded: the Trade and Payments Agreement, the Customs Agreement and the Agreement for the Full Utilisation of the Nile Waters. The last and most important of these three agreements deserves particular attention in the context of the present study.

This 1959 Nile Waters Agreement between Egypt and Sudan provided for the formation of a Permanent Joint Technical Commission with the object of maintaining technical cooperation between the governments of Sudan and Egypt, and to continue the research work and studies required for the projects aiming at harnessing the river and increasing the available volume of its waters. Important points included in this 1959 Agreement were:

- (i) It maintained the principle of respecting established rights to the waters of the Nile (4 billion m³ for Sudan and 48 billion m³ for Egypt, amounts to be measured at Aswan.
- (ii) Egypt and Sudan agreed on the construction of a High Dam at Aswan in order to harness the river's waters. Sudan was also to construct the Roseires Dam on the Blue Nile and anywhere else where the Sudanese government saw an opportunity to exploit its share of the waters.
- (iii) The net increase (after evaporation) of water resulting from the construction of the High Dam would be distributed between the two countries (14½ billion m³ for Sudan and 7½ billion m³ for Egypt). These shares were to be added to the respective acquired rights of both parties, resulting in a total of 18½ billion m³ for Sudan and 55½ billion m³ for Egypt.
- (iv) Egypt agreed to pay the Sudan a sum amounting to LE 15m in sterling as compensation for the damage that would be done to existing Sudanese property as a result of storage on the High Dam. The Sudanese government agreed to be responsible for resettling population displaced by the High Dam waters in Halfa and elsewhere.
- (v) Sudan agreed to undertake with Egypt any necessary projects to prevent loss or wastage of water in the marshlands of southern Sudan and in the Sobat and its tributaries. Both countries will share the costs and revenues incurred.
- (iv) In the case of any country other than Egypt and Sudan requesting a share in the Nile waters, unity of opinion between the two countries must first be reached.

The Nile Waters Agreement of 1959 seemed finally to solve the question of the Nile waters and related disputes between the two

countries. It provided for full cooperation between the two countries and so initiated a new era in Egyptian-Sudanese relations.

The great success of the Nile Waters agreement has completely defused the boundary problems as matters of dispute between the two countries. And it is significant that what is certainly on all geographical grounds a wholly unsatisfactory boundary between the two states so dependent on the Nile waters has not destroyed relations between the two states concerned. Indeed it could be argued that the very serious nature of the difficulties arising from the boundary have forced a quick and permanent solution to the dispute. Yet it has not produced - and may never produce - any 'union', however defined, between the two states. After 1959 the vital interests revolving around the water supply and economic integration were safeguarded, but serious consideration of political union was not revived until ten years later, in 1969, when 'a beleaguered Nasser, an upwardly mobile Qaddafi, and a tenuously seated Nimeiry, sired the Federation of Arab Republics' (Waterbury, 1979, p.55). This federation, however, did not last.

More recently, in 1982, President Mubarak of Egypt paid a visit to Khartoum. By the time he left the Sudanese capital he had signed an agreement known as the 'Charter of Integration' with his Sudanese counterpart, Nimeiry. Among other things, the agreement calls for the establishment of an 'economic unity' between the two countries over a 10-year transitional period. Citizens of the two countries will be allowed to live and work freely in either country. Tariffs will be abolished and policies on transport, communications, industry and irrigation will be coordinated. Both currencies will be accepted in the two countries as a step towards the unification of the currency. A joint parliament composed of 30 members each, which

will meet twice a year, is formed. The agreement also calls for close coordination in foreign affairs, in national defence and in social programmes.

In short, the agreement is a step on the road to an eventual political fusion of the two Nile valley countries (Africa Mag., No.135 1982). As far as foreign policy is concerned, the Deputy Prime Minister and Minister of Foreign Affairs stated that Egypt and the Sudan will coordinate all their international relations and moves and will introduce the process of integration to diplomatic representation abroad (Egyptian Gazette, October 11, 1982). The Deputy Premier, moreover, emphasised the need to unify the policies and systems of education in the two countries so as to achieve fuller cultural unity between the two peoples (Egyptian Gazette, October 13, 1982). These new relations between Egypt and the Sudan may be expressed as a pattern of co-operation between the two Nile basin countries, or at least a step that enables the riparian states to overcome their problems, especially boundary issues.

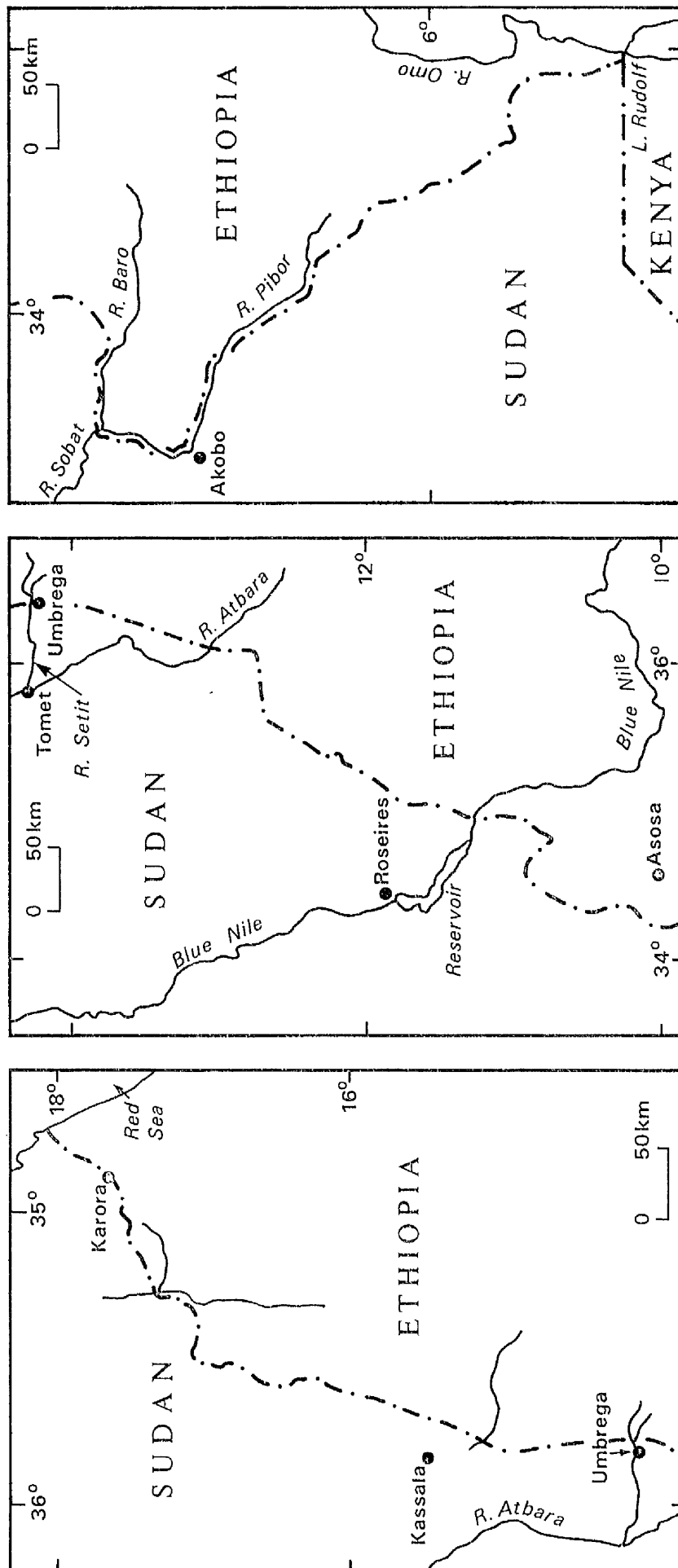


Fig. 7. The Sudan-Ethiopia Boundary (After Hertslet, 1909 & Brownlie, 1979)

(ii) THE SUDAN-ETHIOPIA BOUNDARY

This long boundary (Figure 7) tends to be given relatively little attention in the literature in English, especially considering the fact that some two-thirds of the Nile waters originate on the Ethiopian side of the boundary. One major reason for this must be the tendency to view the Nile Basin as consisting largely of the former British controlled or administered areas - notably Egypt, Sudan and Uganda. 'The Nile' still means to many people primarily that part of the Nile which rises on the Lake Plateau of East Africa. However, from the point of view of the Nile water resources, the contribution made by Ethiopia is critical and so, therefore, are the relations between Sudan and Ethiopia.

In the latter part of the nineteenth century, the ancient Empire of Ethiopia was faced with Egyptian territorial designs along its western frontiers, however imprecisely defined (Abir, 1967). In the last years of the century European colonial expansion established general areas of influence, leaving Ethiopia within the Italian sphere, making the extinction of Ethiopia apparently imminent (Brownlie, 1979, p.855). However, Italian expansion from Eritrea proved difficult, as did British expansion in the Sudan and East Africa. For this reason the British, French and Italians made a series of arrangements between 1898-1907 which recognised the existence and territorial integrity of Ethiopia. At this stage, however, the Sudan-Ethiopia boundary was described as the eastern frontier of Egypt, for at that time Britain upheld the rights of Egypt in the Nile Valley, including what is now Sudan. As noted in the section on the Egypt-Sudan international boundary, it was not until later that Sudan acquired

separate status and finally, in 1956, independence as the Republic of Sudan. The main change to the territory of Ethiopia occurred a few years earlier, in 1952, when Eritrea, formerly an Italian colony, was transferred to Ethiopia by the United Nations (Brownlie, op.cit., p.856; Al-Nur, 1971; Hussein, 1977).

The international boundary as it exists today dates back to between 1891 and 1909, depending on the section of this very long boundary, stretching as it does from 18° N. to $4\frac{1}{2}^{\circ}$ N. at the northern tip of Lake Rudolf. Treating the boundary from north to south, the following points are of interest. The first section, from the Red Sea to just south of Kassala, formerly constituted a major part of the frontier between Eritrea and the Sudan. It is a varied boundary, following natural features and straight lines, and different parts of it were established at different times. However, it is now well demarcated and has apparently never been the cause of any problem in that it is mutually recognised by all the border peoples which are certainly very numerous along much of the boundary (Brownlie, 1979, p.856). This is an important point because this section of the boundary reveals once again the trouble taken from the outset to avoid causing too many difficulties for the local populations. Hertslet (Vol.III, 1909, p.1108) refers to the Egyptian-Italian Agreement of 1895 'for regulating the dependence of the semi-nomadic tribes, and for redefining their respective frontiers'. Article II of this agreement defines these tribes who acknowledge the authority of the various sheiks and divides them accordingly into dependence on Eritrea or 'Egypt'. At the same time the two governments undertook to allow legitimate movement across the border within limits specified in the agreement.

The second section - a much shorter stretch reaching south to the River Setit near Umbrega - was for some long time the subject of confused and often technical discussion between Ethiopia, Britain and Italy: indeed it was not finally accepted as confirmed in principle until as late as 1972. By itself, however, it does not appear to raise any difficulties today.

From the Setit River southwards stretches the long third section of the boundary to as far south as 6° N. The reason for treating this section separately is that, based on the 1902 Treaty, the boundary was demarcated by Gwynn, a British Boundary Commissioner in 1903 and is still known as the 'Gwynn Line'. Ethiopia and Sudan accepted this boundary as valid in a Joint Communiqué of 1967, but an agreement of 1972 allows for the rectification of the boundary to eradicate any problems arising in the Baro Salient region. Here there are two groups - the Annuak and the Nuer - split by the international boundary. The other interesting point about this section of the boundary is that it includes the exits from Ethiopia of the Blue Nile and Sobat rivers. In the 1902 Agreement, Article III refers specifically to the importance of these water resources: Ethiopia undertook 'not to construct, or allow to be constructed, any work across the Blue Nile, Lake Tana or the Sobat which would arrest the flow of their waters into the Nile' except in agreement with the governments of Britain and Sudan.

The final section of the boundary extends to the tripoint at Lake Rudolf and was the result of the 'lack of partition between Ethiopia and the Sudan to the West and between Ethiopia and British East Africa to the South' (Brownlie, 1979, p.857). Again, this section of the boundary was left without precise definition or agreement until 1972.

In conclusion, it seems important to make further reference to the Joint Communiqué of the Ethiopia-Sudanese Border Talks (Addis Ababa, 1967) and the Joint Consultative Committee (Addis Ababa, 1972). The first refers to an agreement that 'farmers should continue farming their present land on either side of the frontier so long as they respected the laws of the Government of the side on which they live' (Brownlie, 1979, p.882). The second committee considered increased cooperation between the two countries in economic, culture, transport and communications; it also reviewed trade relations between the two countries as well as all outstanding disputes over the exact demarcation of the boundary.

This long boundary is clearly interesting from many points of view, but one of these not frequently mentioned is that here is a boundary which was not negotiated between two European powers. This is one reason why, as we shall see later, Ethiopia is a strong supporter of the status quo in African boundaries. At the time of boundary-making Ethiopia was already an independent state. For Ethiopia, all its boundaries established in the late nineteenth and early twentieth centuries are regarded as an achievement of Ethiopian diplomacy in its struggle against colonial encroachments (Touval, 1969).

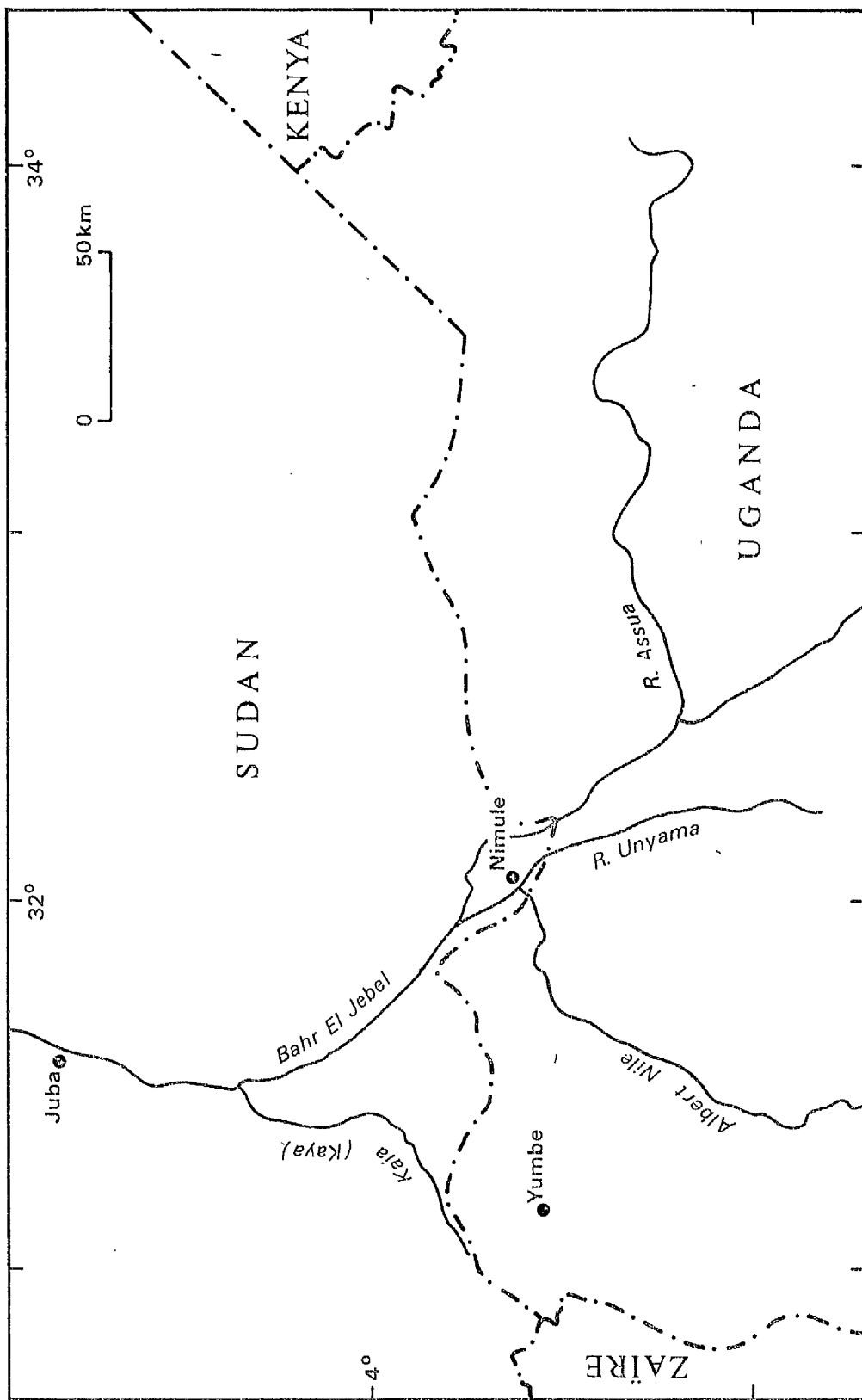


Fig. 8. The Sudan-Uganda Boundary. (After Brownlie, 1979)

(iii) THE UGANDA-SUDAN BOUNDARY

There are still many uncertainties about the Uganda-Sudan international boundary and the reason for this is that to the British a politically exact boundary between the two administrative units was of little importance - both territories being British - and that in any case the border area was a particularly difficult one to monitor successfully. Moreover, a number of changes in the allocation of territory took place between the Congo, Sudan and Uganda. In 1910 the Lado Enclave became part of Sudan, but in 1912 the southern part of this enclave was transferred to Uganda (West Nile District) while Sudan took the Bari - Lotuka area in the north east. This gave Uganda control over both banks of the Nile down to Nimule (Collins, 1968). It was not until 1914 that any clearly defined Uganda-Sudan boundary emerged, and it was 1926 before the present boundary was finally described and delimited (Figure 8) though it is still little demarcated.

West of the point where the Nile crosses the international boundary the Uganda-Sudan-Congo tripoint is on the Congo-Nile watershed nearest to the source of the River Kaia (Kaya). From there it follows the river upstream before striking out in a series of straight lines until, just before reaching the Nile, it turns south-eastwards, parallel to the Nile to Nimule.

East of the Nile, the original boundary commission in 1913 examined tribal lands and natural features, attempting to avoid as far as possible cutting across existing tribal divisions. However, in practice it was found possible only to delimit the boundary in terms of straight lines between prominent hills (jebels): 'thence following a straight line to the summit of Jebel Lanhia; thence following a straight line to the summit of Jebel Ilala; thence following a

straight line to summit of Jebel Aggu...,' (Uganda Off. Gaz. 1914). As Stigand (1923) noted, however, these 'arbitrary' straight lines severed villages from their water and cultivation as well as chiefs from their dependents. More seriously, the Acholi of Uganda were thereby - at least in theory - severed from their kinsmen in Sudan. But no change in the boundary occurred here, though a minor change in the boundary was made in 1926 when part of Uganda (Chua District) was transferred to Sudan, partly to reunite the Lango with their kinsmen in Sudan and also to facilitate the control of sleeping sickness (Collins, 1968). It must also be remembered that the eastern section of the 1914 Uganda-Sudan boundary became the Kenya-Sudan boundary, when, in 1926, Uganda's Rudolf Province was transferred from Uganda to Kenya so that the 1914 line to the east of the Kenya tri-point became the Kenya-Sudan boundary.

Since independence - Sudan in 1956 and Uganda in 1962 - there have been no boundary disputes between the two countries, though Amin made the same kind of comments about this boundary in 1976 as he did about the Uganda-Kenya boundary.

Perhaps the most important point to stress about this boundary is that its delimitation illustrates very well the dangers of retrospective value judgements about the achievements of the boundary commissioners. The commissioners were clearly anxious to avoid cutting through tribal lands. The difficulty was that they could not possibly visit all areas, their information about the peoples and their distributions was often wrong or unreliable, and among constantly moving groups living at low densities of population it was - and is - impossible to determine on the ground exactly where one tribal area stops and another starts. Indeed, perhaps no such line can ever exist in reality in all circumstances?

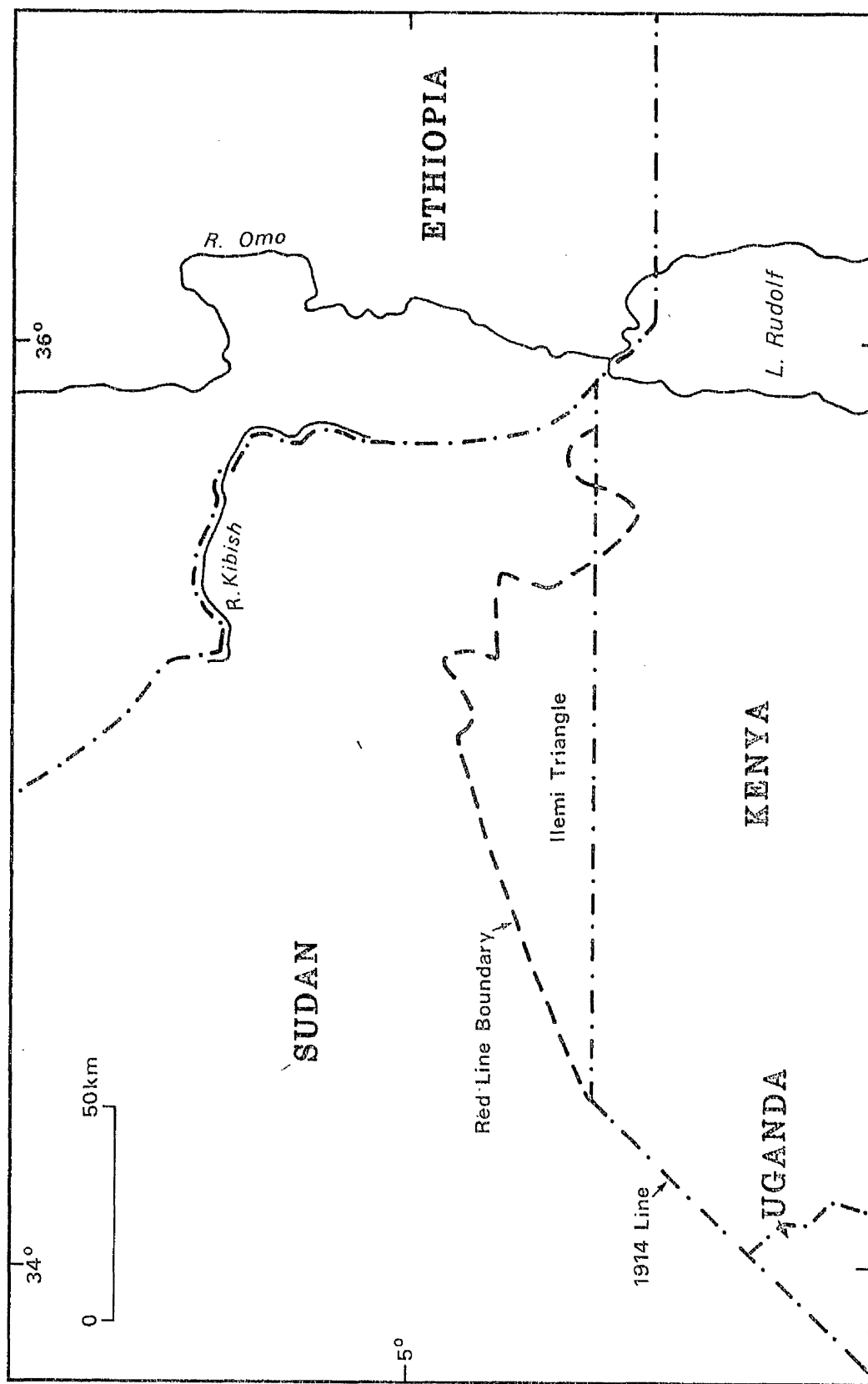


Fig. 9. The Sudan-Kenya Boundary (After Brownlie, 1979)

(iv) THE SUDAN-KENYA BOUNDARY

This boundary did not exist between Sudan and Kenya until 1926 when, as described in the sections on the Uganda-Kenya and Uganda-Sudan boundaries, the Rudolf Province of Uganda was transferred to Kenya. The present Sudan-Kenya boundary therefore dates back to 1914 and follows spurs, hills and straight lines eastwards from the northern tip of Lake Rudolf. For our purposes here the important phrase in the relevant Order in Council refers to 'a straight line, or such a line as would leave to Uganda the customary grazing grounds of the Turkana tribe'. Here again was an attempt to consider tribal interests of a pastoral people and it soon became apparent that the grazing grounds of the Turkana were some way from being capable of being expressed in a straight geometrical line. Not until 1931, in fact, were these 'customary grazing lands' delimited by what is known as the 'Red Line' (Figure 9). As Brownlie (1979, pp.917-8) points out, this Red Line involved a 'northerly intrusion of Kenyan civil administration in the area of the Ilemi (or Ilembi) Triangle'. In 1938 the Red Line, with some modifications, was established on the ground. There is now uncertainty about the exact legal status of these alternative boundaries - whether the Red Line or the straight line is the international boundary, and whether the Red Line is simply an administrative boundary (see also McEwen, 1971, p.134; Taha, 1973).

In spite of this confusion, there has been no challenging of the boundaries since independence, and the straight line boundary is now most commonly used on modern maps. After all, neither line seems to have controlled movements of people across the boundary. As McEwen (op.cit., p.134) puts it, 'The Red Line, as finally demarcated, failed to prevent tribal raids, although it did include all the grazing land

that could fairly be claimed by the Turkana to be theirs by custom'. He goes on to note that another line - the Blue Line, lying even further to the north - has been suggested, and this Blue Line offers, so it is said, 'strategic advantages' that are not possessed by the Red Line. Kenya, with the permission of the Sudan government, maintains a number of police posts between the Red and Blue lines; one post, at Kibbish, actually lies to the north of the Blue Line. Legally, however, the 1914 section of the former boundary between Uganda and Sudan is still the official international boundary between Kenya and Sudan. Experience to date indicates that no line, of whatever 'colour', can solve the 'problem' here. All that is required is that, as in many other instances, free movement of pastoral groups be allowed back and forth across the boundary where the purpose is simply to maintain a nomadic or semi-nomadic way of life. The Turkana tacitly occupy the Ilelmi Triangle which, owing to its inaccessibility, is administered by Kenya. In all things the Turkana are guided by the needs of their stock.

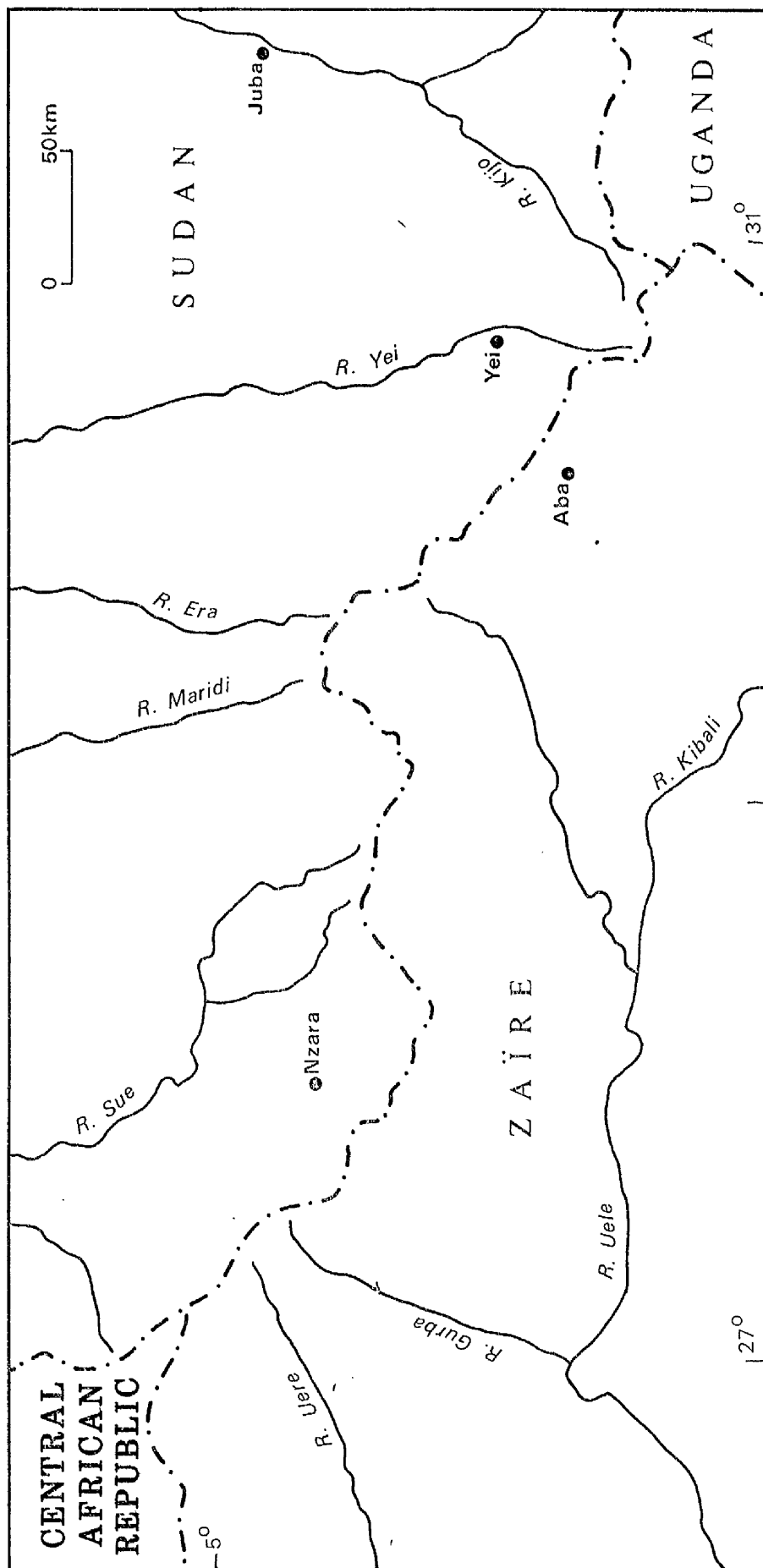


Fig. 10. The Sudan-Zaire Boundary (After Brownlie, 1979)

(v) THE SUDAN-ZAIRE BOUNDARY

It is arguable whether this particular international boundary should be considered as falling at any point within the Nile Basin, for it is defined throughout as following the watershed between the Nile and Congo River systems (Figure 10). This dates back to the 1894 Agreement between Britain and King Leopold, representing the Congo Free State, and this was followed by the 1906 Agreement which established the principle of the alignment as the line of the watershed between the Nile and the Congo basins, but provides no further description (Hertslet, Vol.II, 1909; Brownlie, 1979, p.683). Since 1906 there has been no further elaboration and no demarcation.

The problem is simple - the watershed hereabouts is difficult if not impossible to determine on the ground because of the flat and featureless nature of the countryside (Christy, 1917). This international boundary, then - and this is the justification for including it in the present study - is one which depends almost entirely upon mutual recognition and administrative practice rather than upon any clear demarcation.

Another point to make about this boundary is that it is one of those classic, oft-quoted, examples of an international boundary which cuts through the traditional lands of a particular group of people - in this case the Azande (Barbour, 1961). However, no actual dispute is known to exist.

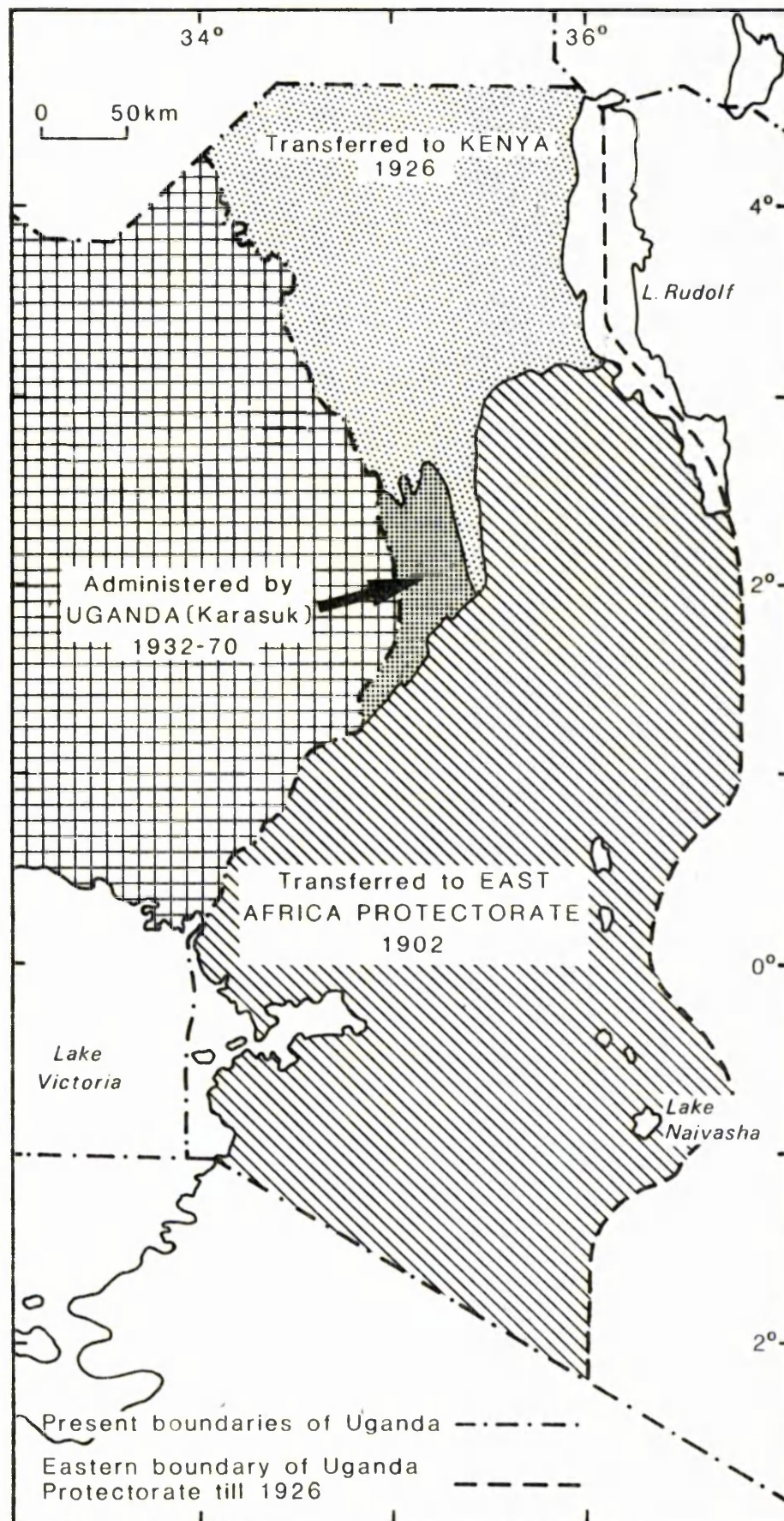


Fig. 11. The Uganda-Kenya Boundary (After Brownlie, 1979)

(vi) THE UGANDA-KENYA INTERNATIONAL BOUNDARY

The Uganda-Kenya international boundary is unusual among the cases examined in this study in that it has been subjected to substantial changes since first being delimited. As Figure 11 shows, the original eastern boundary of Uganda, or what was then the Buganda Kingdom, lay well to the east of the present boundary running northwards from near Lake Naivasha in the south to cut through Lake Rudolf in the north. This line was established in 1900 as a result of the Agreement between Britain and the Kabaka of Buganda. The alignment of this boundary was clearly influenced by topographical details for it followed the eastern wall of the Rift Valley. But Britain was indecisive, hesitant and generally tentative about establishing firm boundaries in this part of Africa (Ingham, 1958; Barber, 1968). The merger of the Uganda Protectorate and the British East Africa Protectorate was initially thought of as a distinct possibility so that the boundary between the two protectorates - termed a 'frontier' in official documents - was thought of as a matter of administrative policy rather than as a matter of really critical importance (Brownlie, 1979).

The British East Africa Protectorate was expanded westwards in 1902, however, resulting in a large part of Uganda being lost to its eastern neighbour (Figure 11). The East Africa Protectorate now had a substantial frontage on to Lake Victoria and the port facilities of Kisumu, reflecting the desire, especially of the British East Africa Company, to reach the markets and resources of the populous shores of Lake Victoria as well as the Kingdom of Buganda. This westwards shift also gave to Kenya the fertile highlands of the Nakuru-

Naivasha area and the west rift highlands, which were to become so important in subsequent agricultural developments (Ominde, 1975). The boundary running southwards from Mount Elgon has not changed since that date (1902), but from Mount Elgon the new boundary at that time followed roughly the River Turkwell down to Lake Rudolf. While the main purpose of shifting the international boundary westwards in this way was undoubtedly to widen commercial opportunities in the interior around Lake Victoria, the principle on which demarcation took place on the ground was primarily that of avoiding cutting through homogenous tribal groups and their lands. Thus it was decided that all the Kavirondo should be included within the East Africa Protectorate. Only where such a criterion was found to be impractical, as on Mount Elgon and on the islands of Berkley Bay (where the Kavirondo inhabitants were placed in Uganda) was this general principle rejected.

Apart from a very minor adjustment in the Mount Elgon region in 1910, there was no further change in the boundary until 1926, when what remained of Uganda's Rudolf Province was transferred to Kenya, although administration had in fact been transferred in practice some years earlier, in 1919. Administrative convenience was the stated reason for this change, which not only gave Kenya access to the whole western shore of Lake Rudolf, but also give it direct access to Sudan (Figure 11). But, once again, it is important for our purposes to note that this new 1926 boundary with Uganda was quite explicitly drawn with careful reference to tribal distributions - according to Brownlie (1979) this is a 'tribal boundary' - leaving the Turkana and Suk (Pokot) within Kenya and leaving the Karamojong in Uganda.

The boundary as it now stands is, with only minor changes, the 1926 boundary (Figure 11). To describe it in more detail, it begins

in the south at the tripoint in Lake Victoria at 1° south latitude. From there it runs due north to the westernmost points of Pyramid and Ilemba islands, Kiringiti Island and Mageta Island. From this point the boundary runs in a straight line northwest to Sumba Island and then by a straight line north-east to the centre of the mouth of the River Sio. The first land section of the boundary follows the centre of the River Sio upstream to its confluence with the River Sango. The boundary continues north-eastwards, following generally the centres of this river (Sango) and the River Lwakaka towards the highest point of Mount Elgon, although certain small stretches involve straight lines and a road/river intersection. From the highest point of Mount Elgon the boundary follows a straight line north-easterly to a point where the more north-westerly of the two streams forming the River Turkwell (River Suam) emerges from Mount Elgon's crater. The centre of this river's course is now followed downstream to its confluence with the River Bukwa (Kibukwa). From there the boundary swings north-north-west, defined successively by streams, rivers, rocky ridges, hills and the base of the Turkana Escarpment, finally reaching the tripoint with Sudan just north-east of Mount Zulia. This whole boundary is often loosely described and was not originally accompanied by a map. It is still only partly demarcated.

Two issues are raised by the present boundary. Just as Amin in Uganda used the historical question of the Kagera salient (see p.91) as justification for his attack on Tanzania in 1978, so he complained about the transfers of land from Uganda to Kenya during the colonial period (Guardian, 1978). As in the case of Kagera, however, it was never interpreted by either side as a critical or even very significant issue compared with the very bad relations that existed for quite other reasons between Amin in Uganda and the leaders of Kenya and

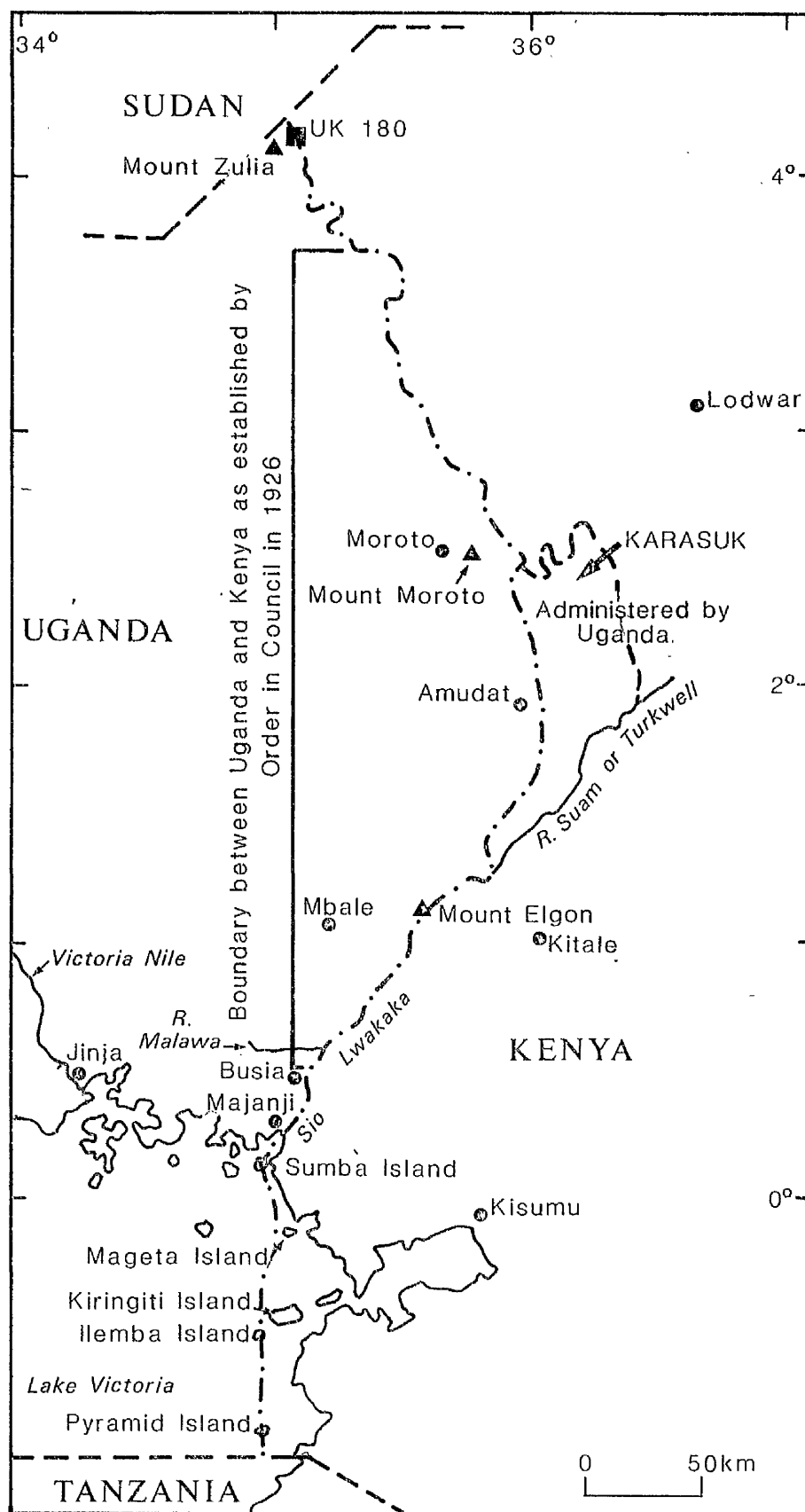


Fig. 12. Uganda-Kenya Boundary(2) (After, McEwen, 1971)

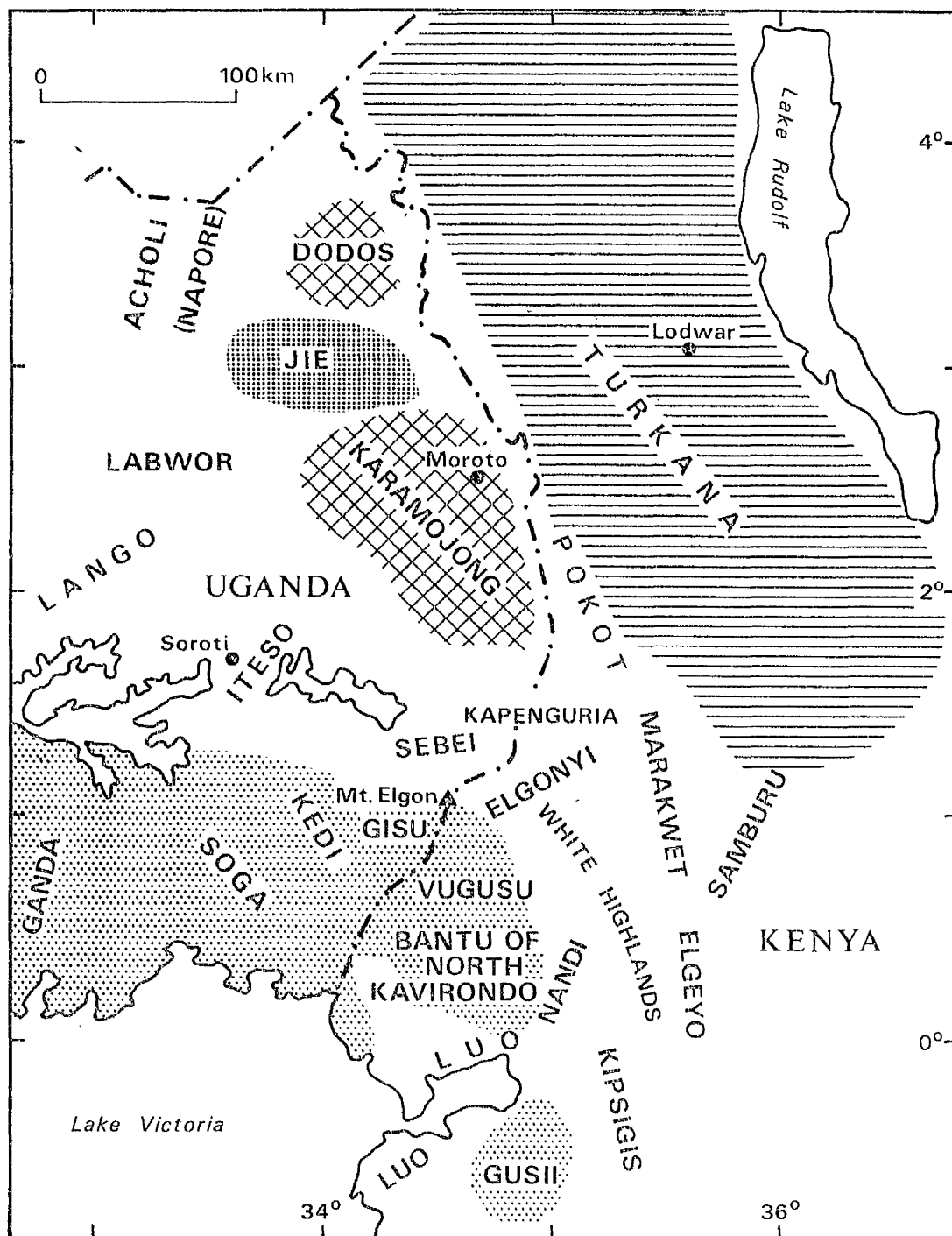


Fig. 13. Uganda-Kenya Boundary, Tribal Groups
(After La Fontaine, 1959)

Tanzania.

The second issue of note - the Karasuk salient - is of particular interest to our study, as it once again refers to ethnic distributions and includes also the important consideration of water supply for a nomadic or semi-nomadic pastoral people. Between 1932 and 1970 the mountainous Karasuk region of Kenya was under Ugandan administration (Figure 12). The inhabitants of this region, covering some 1,800 m², are known as the Suk or Pokot (Bonsnett, 1958; Dyson-Hudson, 1966). The problem revolves around conflict between the Karamojong and the Suk, as well as with other groups, like the Turkana, living on the Kenya side of the boundary. Both the Karamojong and Suk are pastoral peoples and the Karamojong felt themselves to have been pushed westwards out of their traditional dry-season grazing lands with their water holes in Karasuk by the Suk, especially as the 1926 international boundary lost them access to the Turkwell River. In their turn, the Suk have been subjected to constant pressure from the Turkana. Here is an excellent example of that common phenomenon in the Nile Basin states where the idea of a rigid boundary between nomadic groups is completely unknown, traditional territorial limits being considered to be flexible and apt to change according to ecological circumstances (Dyson-Hudson, 1966). In times of stress, such as drought, the theoretical unoccupied buffer zones between groups of peoples may quickly disappear (Figure 13).

The almost forty years of the boundary change which gave administration of Karasuk to Uganda in 1932 (though no de jure alteration was made) was designed as a purely ad hoc measure to allow the Suk access to grazing and water in Karamoja, to bring the border area under one administration, to control inter-tribal raiding and to avoid the difficulty that had been found in recognising and administer-

ing the 1926 boundary.

Here, it might at first seem, the 1926 boundary had caused and perpetuated conflict between groups whose traditional grazing lands had been cut through by an international boundary; and this boundary had to be changed to try to reduce this conflict. In fact, the 1932-70 expedient produced no improvement at all: inter-tribal conflict persisted and the problems of the area were frequently exacerbated by drought and erosion from overgrazing and stock increases, especially among the Karamojong. In its 1961 Report the Karamojong Security Committee identified three underlying causes of conflict in the area, none of which was basically a boundary problem: 'First is the high prestige associated with the possession of a large number of cattle, and the glorification of the homicide connected with their acquisition. Secondly, the fact that a man's social standing is enhanced by his having a number of wives, whose brideprice is payable only in cows, is a further incentive to cattle raiding. Thirdly, ancient disputes over grazing grounds and watering places demand the continuation of hostilities against traditional enemies and the seizure of their cattle' (Karamoja Security Committee, 1961).

Some attention was given to the possibility of making the de jure boundary coincide with the de facto boundary introduced in 1932, but there was no evidence that this would have produced any improvement in relations between the conflicting groups. In 1970, therefore, Karasuk was returned wholly to Kenya, reasserting the alignment of the 1926 boundary. Both governments - Ugandan and Kenyan - have now accepted that the only course of action is to permit the dominant tribes in the area to cross the international boundary in search of water and pasture for their cattle. The international boundary itself is now generally recognised as being in no

way the cause of local and inter-ethnic rivalries and conflicts in the area.

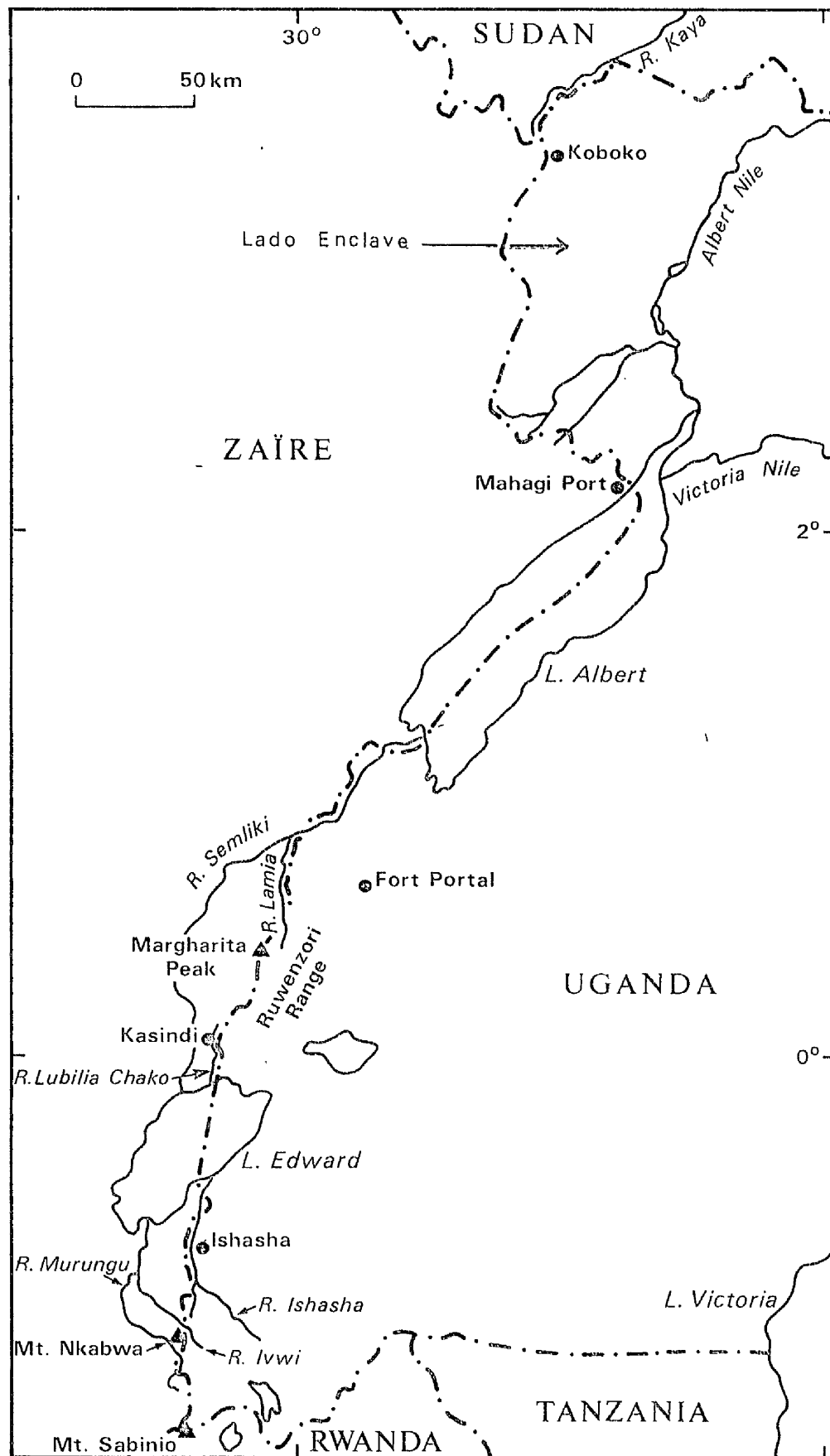


Fig. 14. The Uganda-Zaire Boundary (After Brownlie, 1979)

(vii) THE UGANDA-ZAIRE BOUNDARY

The Uganda-Zaire international boundary is long and varied, but is often referred to as a good example of a boundary which is determined mainly by well-marked natural features - two rift-valley lakes (Albert and Edward), an important watershed (between the Nile and Congo basins), a group of volcanoes (Mufumbiro) and an impressive mountain range (the Ruwenzori) (Figure 14). The boundary, however, resulted not from any careful selection of the boundary but represents 'the culmination of an evolutionary process in which power struggle, political expediency, commercial exploitation, and administrative convenience have all played their part' (McEwen, 1971, p.230). Britain, Belgium, France, Germany and King Leopold - all were involved in the evolution of the present boundary.

Starting in the north, the boundary runs due south from the Sudan, Uganda, Zaire tripoint along the Congo-Nile watershed, and this section remains as it was established by the Anglo-Congolese Agreement of May, 1894, whereas the remainder of the international boundary further south dates back to the February 1915 Anglo-Belgium Agreement, though this agreement is based largely on the Anglo-Belgian protocol of 1910, with the modifications made by the mixed commission of 1911 and 1913. South of the Congo-Nile watershed the international boundary begins in the extreme south at Mount Sabinio and runs northwards to Mount Nkabwa from where it follows the River Ishasha down to and across Lake Edward, thence follows the Lubilia River upstream before striking along the Ruwenzori Range to pass through the highest point (Margharita Peak). The international boundary then follows the River Semliki down to Lake Albert. From there the boundary follows the centre of the lake until it reaches the shore; it then strikes north-

west near Mahagi until it meets the Congo-Nile watershed section referred to above. This last watershed section has never been artificially demarcated, apparently because it is not necessary for, as Thomas and Spencer put it 'the boundary is mutually well known, for it follows for the most part the crest of a gentle treeless undulation, and the absence of monuments has given rise to no difficulty' (Thomas and Spencer, 1938, p.10).

Comprising as it does very largely a series of clear natural features, the international boundary does however raise a few points of interest to this study. First, there are the lakes. In Lake Edward the boundary consists simply of a straight line from the north of the Ishasha River on the southern shore to the mouth of the River Lubia-Chako on the northern shore. In Lake Albert the boundary is represented by a series of straight lines running roughly north-eastwards along the centre of the lake, beginning at the mouth of the River Semliki. In both cases, it should be noted, the boundary line through the lakes is based on artificial straight lines, thereby avoiding the necessity of employing the inconvenient theoretical median used elsewhere, for instance in Lake Tanganyika.

Secondly, it is worth pointing out that the Lake Albert section of the boundary was arrived at by the British foregoing their right to the north-western shorelands of the lake. Before the 1907-8 mapping of the boundary hereabouts it had been believed that the watershed north-west of the lake lay some way inland from the lake shore. But the survey disclosed that the watershed ran very close to the lake shore and that 'the much vaunted British territory on the west of Lake Albert was apparently reduced to a strip not a mile wide of rough, rocky, ground falling sheer into the Lake' (Jack, 1914, p.134). The British abandoned this cliff face to the Belgians and agreed on the

boundary line being drawn through the Lake (Hinks, 1921). This is a good example of the selection of a natural feature to delimit a boundary being proved to be unsuitable in the absence of detailed cartographic information.

Assessing the boundary today, it is difficult to find any kind of evidence of inter-state conflict resulting from the nature or precise alignment of the international boundary. To some extent this must be due to the peripheral location of the boundary vis-à-vis Zaire and Uganda as well as to the mountains and lakes of this western rift valley country on the western edge of the East African Plateau. According to Brownlie (1979) the only issue at stake along this boundary is the need for demarcation (by means of buoys) of the waters in Lake Albert off the Semliki delta, and in Lake Edward off the mouth of the Ishasha River.

And yet this international boundary is often cited as a 'bad' boundary in that it cuts through several ethnic communities. The cases of the Bwaamba and Butalinga are discussed in some detail in a later chapter, but the example of the Lugbara is perhaps the best-known. As Middleton (1965) indicates, the Lugbara, split by the international boundary today between Uganda and Zaire - and for a time partly in the Anglo-Egyptian Sudan during the Lado enclave period - seem to have been little affected by their lands being divided politically. Emigration southwards into Uganda by younger men has long been an important feature of Lugbara life and there is no evidence that this movement has ever been impeded by the international boundary. Nor is there any evidence of any 'pan-Lugbara' movement.

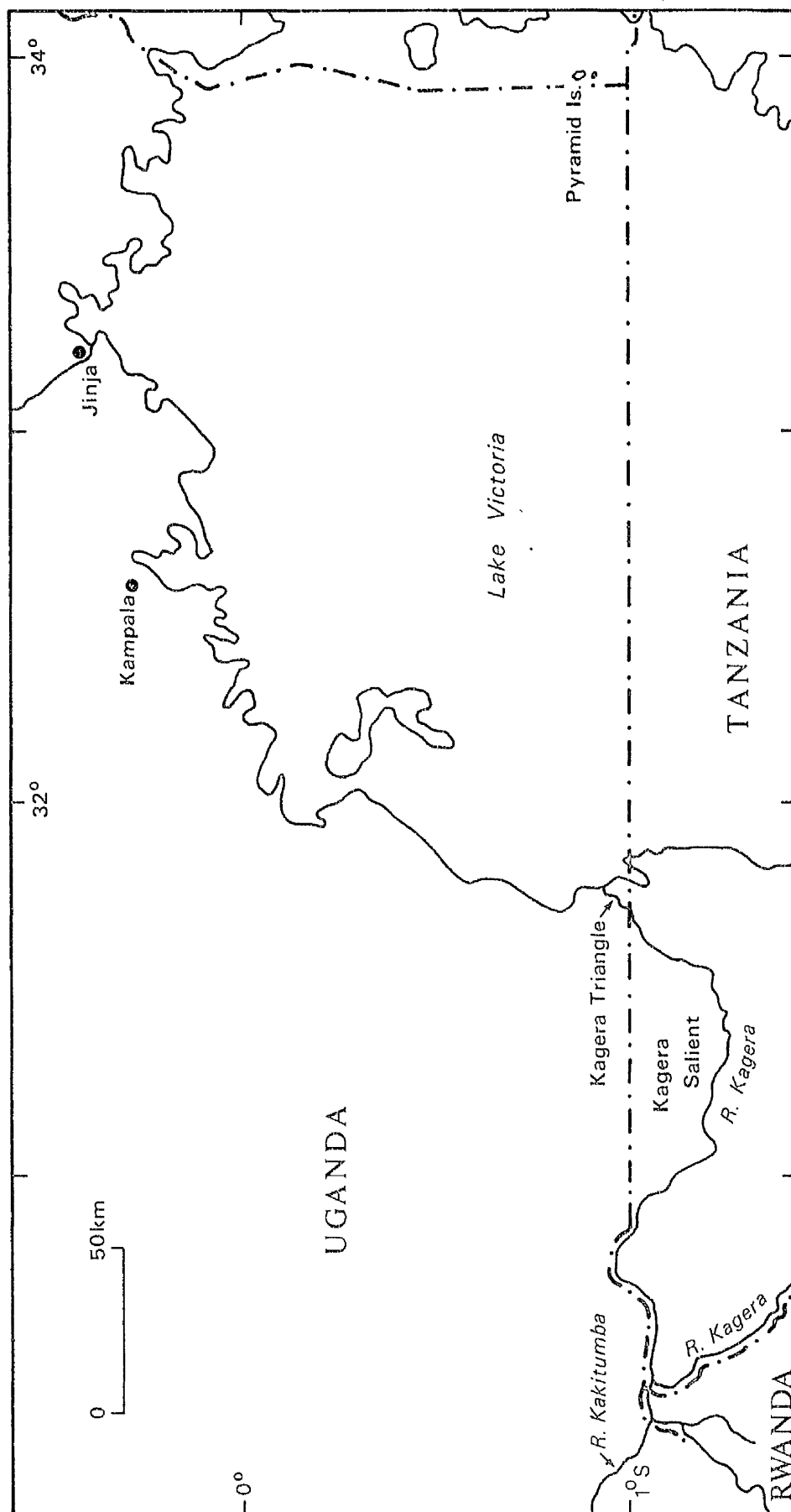


Fig. 15. The Uganda-Tanzania Boundary. (After Brownlie, 1979)

(viii) THE TANZANIA-UGANDA BOUNDARY

Just as the Tanzania-Kenya Boundary represents agreement between the Germans and the British in Kenya, so the Tanzania-Uganda boundary reflects negotiations between Germany and Britain in Uganda.

Similarly, it changed its nature, though not its alignment, when in 1914 Tanzania passed out of German hands and was mandated to Britain.

The eastern two-thirds of the Tanzania-Uganda boundary simply follows the 1° S. parallel, commencing at the tripoint between Kenya, Tanzania and Uganda near the eastern shore of Lake Victoria. Once it reaches the western shore of the lake it continues to follow the parallel to as far as the second crossing of this line by the River Kagera; from there the boundary follows the thalweg of the River Kagera, upstream, to its confluence with the River Kakitumba. This international boundary, then, is defined solely either by a line of latitude or by the thalweg of the River Kagera (Figure 15).

The line of latitude section of this boundary, both in the lake and on land, was established in the same 1914 draft agreement between Britain and Germany referred to in the Kenya-Tanzania boundary and has remained as such ever since; it was reproduced in the Ugandan Constitution of 1967.

The main issue to note in more detail here is the way in which the parallel is used for part of the land boundary rather than the thalweg of the River Kagera from its mouth to the tripoint with Uganda and Rwanda. As Figure 15 makes clear, this use of the straight line parallel created the 'Kagera Triangle' and 'Kagera Salient', about which a good deal has been written. Mackay (in Stanley, 1890, p.392) noted the absurdity of using the parallel of 1° S. latitude

because it cut the Buganda kingdom into two halves - in other words it was yet another case of dividing an ethnic group. In fact, however, this was not really so. The Kagera Salient is traditionally a part of Ankole country, as well as of Buganda. On the other hand, the Kagera Triangle includes part of the country traditionally belonging to the Uhaga group in Tanzania. Stanley, like Mackay, believed that the 'natural' boundary between the Buganda kingdom in the north and the peoples to the south was the Kagera river. Delmé-Radcliffe argued that the Kagera Triangle should be given to Germany in exchange for the Kagera Salient. This, he argued, would have produced a 'practical boundary'. Britain would have acquired a larger area of territory - even though much of it is 'a pitiless swamp, an expanse of virgin forest, and tsetse-infested waterless, uninhabited jungle (Delmé-Radcliffe, 1905, p. 76) - but this advantage would have been balanced by Tanganyika acquiring Mizinda, the only British harbour on the western shore of Lake Victoria. Moreover, 'administration would be facilitated, since neither government would have to cross the Kagera river. Each state would control one bank of the river up to the mouth of the Kakitumba and would thus have full use of the river as a means of communication. Also the Kagera itself formed a natural obstacle, impossible to cross without boats, and would therefore provide a strong boundary tending to reduce raids and other border incidents' (Brownlie, 1979, p. 906). But all this advice, like many subsequent suggestions, was rejected and the parallel has remained the international boundary in this section.

Just as the Kenya-Tanzania boundary is often cited as a classic example of a boundary cutting through a homogeneous ethnic group, so this Tanzania-Uganda boundary is often cited as a classic example of bad delimitation which has resulted in a boundary 'which is not only anomalous but approaches the absurd' (McEwen, 1971, p.265). As we have seen, it divides several ethnic groups. It may well be that had the area to the south of the 1914 Anglo-German line not subsequently been part of British mandated territory, then this boundary might not have remained as it has. Nevertheless, and in spite of the theoretical objections to this boundary, there is no evidence that in practice it has created any conflict between the two states.

The one possible argument against such a conclusion is the invasion of Uganda by Tanzania in October, 1978. Earlier that year Uganda troops had invaded Tanzania and occupied part of the Kagera salient which Amin proclaimed as a 'new' province of Uganda. There is no doubt, however, that this boundary infringement was in no way a major cause of the subsequent massive invasion of Uganda by Nyerere's troops. As Aluko (1981) has pointed out, there were other compelling political, moral and military reasons behind Tanzania's intervention. While it could be argued that Amin had some justification for laying claim to the Kagera Salient on 'historic grounds' (Guardian, Sept.28,1972); and while the years of tension along this border suggests that the technical problems of the straight-line geometrical boundary in difficult country provides a basis for 'more or less accidental border incursions by military patrols and consequent threats of piece' (Brownlie, 1979,p.1016); the Amin case is probably very much a special case.

After all, Amin simply used the Kagera Salient issue as a pretext for invading this 710 square mile salient. His army ravaged the whole area; over 40,000 people disappeared into the bush; 10,000 were unaccounted for; and 12,000 cattle were stolen. The Organization of African Unity recommended a ceasefire and a return to the original borders. Subsequently, when Tanzania invaded Ugandan territory there was very little public criticism of Tanzania. This is significant, since this was the first time in Africa that a regime had been overthrown largely through the intervention of a neighbouring state.

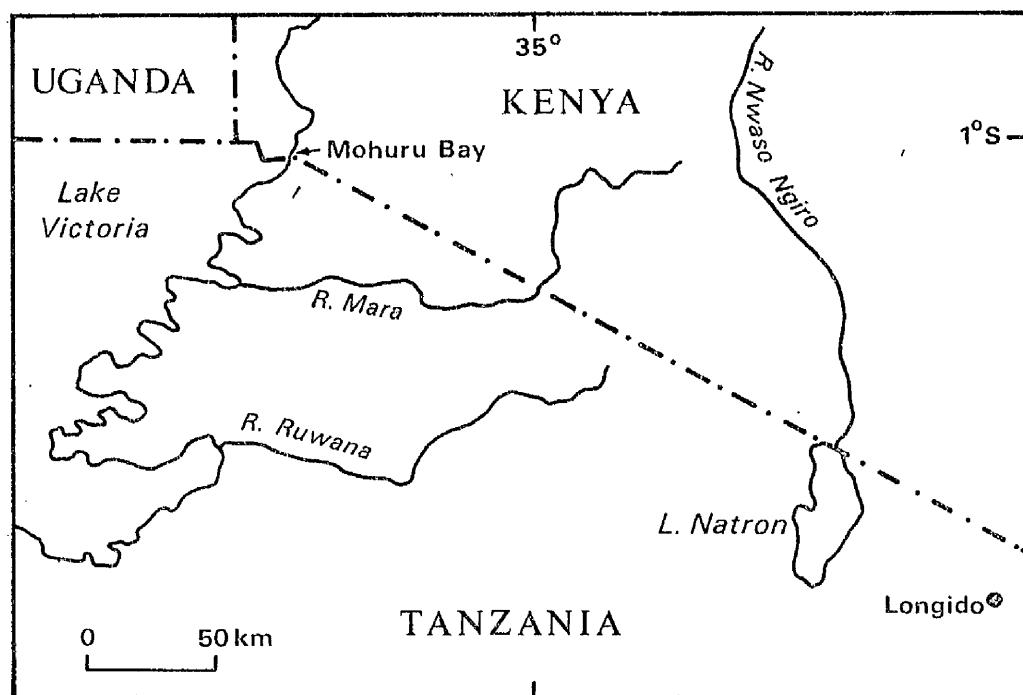


Fig. 16. Kenya-Tanzania Boundary
(After McEwen, 1971 & Brownlie, 1979)

(ix) THE KENYA-TANZANIA BOUNDARY

The section of the international boundary between Kenya and Tanzania with which we are concerned here is that which stretches from Lake Victoria in the west to just north of Loliondo where the eastern limits of the Lake Plateau Basin run northwards along the watershed between the headwaters of the River Mara (running into Lake Victoria) and the Ewaso Ngiro River, flowing into Lake Natron (Figure 16). This section of the boundary is as described in the draft Anglo-German Agreement of 1914 - an agreement which was never signed due to the outbreak of the First World War. On the other hand, it is accepted by both Kenya and Tanzania as correct and it is well demarcated on the ground. Thus in spite of the apparently unsatisfactory nature of this boundary from a strictly legal point of view, it is not contested on the ground by either Tanzania (independent since 1961) or Kenya (independent since 1963).

This portion of the boundary was demarcated by an Anglo-German commission which began its work at Lake Victoria in April 1904. Its western end had already been delimited in 1886 and 1890 as 'the point of intersection of the eastern side of the lake with the parallel of 1° S. latitude'. This sounds more precise than it really was, because the lake shore at this point is in fact an irregularly shaped peninsula whose shoreline is cut by the 1° S. parallel at seventeen different places. The commissioners chose the most westerly of these many intersections as the firm western end of the international boundary, but this point was redefined in the 1914 agreement as standing along the parallel 1½ kms. west of the peninsula, thereby avoiding the awkwardness of the multiple intersections and the resulting confusion. The rest of the boundary was simply a straight line joining the

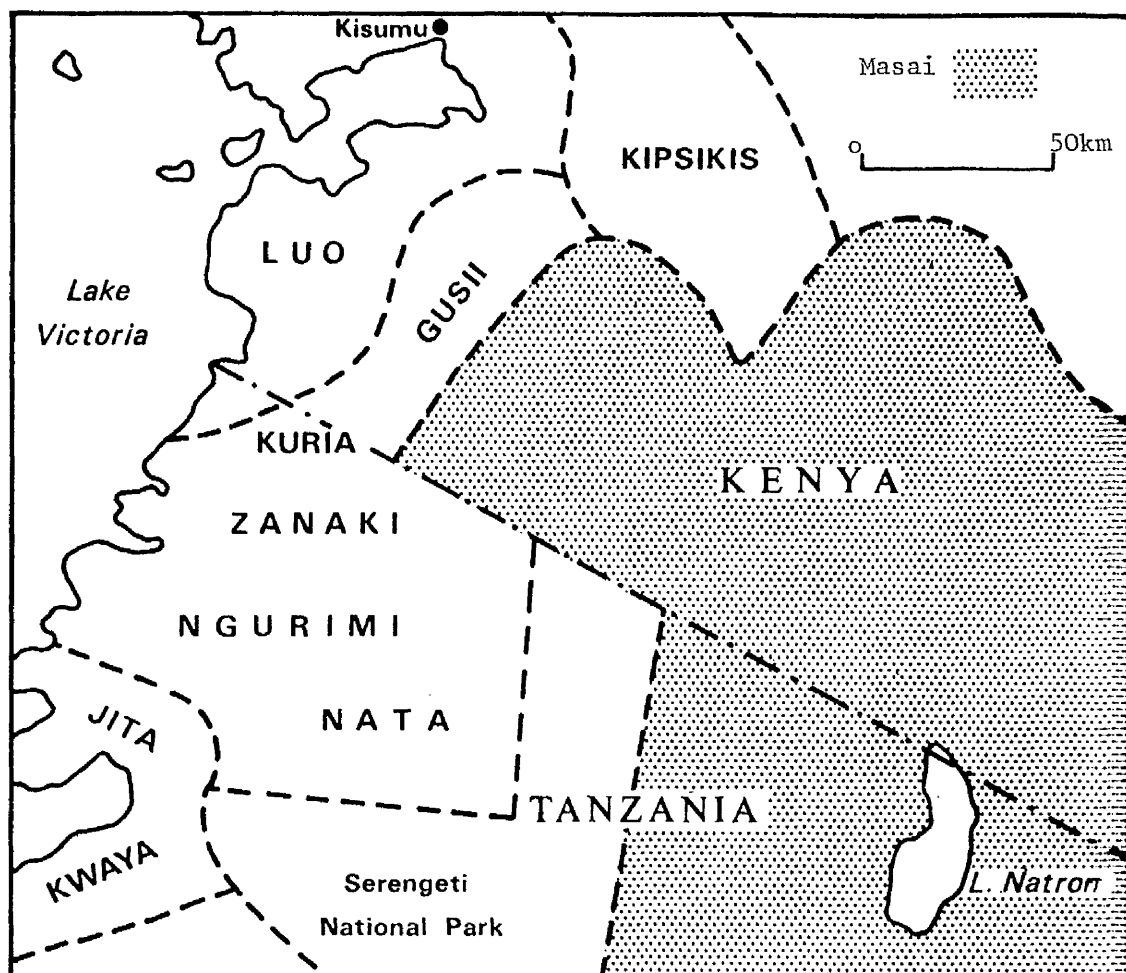


Fig. 17. Kenya-Tanzania Boundary, Tribal Groups
(Source : Several, including Dalby, 1977)

point in Lake Victoria with a place called Loitokitok, some 450 kms. to the south-east, well outside the Lake Plateau Basin. The commissioners followed the description contained in the 1893 Anglo-German agreement but faced difficulties resulting from local road and track routes having disappeared, some of them, interestingly enough, because the building of the railway through Kenya had had its impact on the traditional pattern of routes in the area. However, demarcation with pillars or piles of stones was accomplished and mapping completed by the end of 1905.

The 1914 boundary agreement was based wholly on the work done by the Anglo-German commission of 1904-5 and, as indicated above, has in practice been regarded as an issue no longer open to dispute. A glance at the detailed description and accompanying maps makes it clear that the boundary line is simply a straight line through the boundary pillars established in 1904-5.

The international boundary is therefore one of real simplicity and is not of itself an issue over which there is any legal dispute. Nor does it provide any kind of basis for potential interstate conflict with one theoretical exception - the case of the Masai people. Indeed, this particular boundary, and especially its eastern continuation beyond the section examined here, is commonly cited as an example of a European-imposed colonial boundary that cuts through a 'homogeneous tribal territory' quite arbitrarily and with disastrous effects on the people concerned. As Figure 17 shows, neither the Luo, the Kuria nor the Gusii are seriously split by the boundary. In 1929 the Hilton Young Commission referred to the Masai problem, noting that the boundary cuts the Masai people in two, 'with no more concern for their ideas or for the justice or convenience of their administration than the scythe has for a blade of grass'

(HMSO, 1929, p.300). It may have been true that the nature of the distribution of the Masai people was not known in the 1880s - especially their seasonal movements - but the harmful effects of the boundary on the Masai were certainly known by 1914. Indeed Hardinge in 1898 described an incident when a Masai warrior 'informed us that we were labouring under a misapprehension, as the land belonged, not to the Europeans, but to his own tribe; if any dispute on the point existed, it must be settled between Lenana and Sendeyo, the heirs of their great medicine man, M'batian. It was futile to quote European treaties to a primitive savage (sic) so we merely explained that, if any future question affecting his people's rights should arise, it must be referred both to us and to the Germans' (Hardinge, 1928, p.232). Certainly the Masai refused to recognise the boundary and crossed it at will. The Masai are pastoralists, living in an area with only two permanent rivers, the Ewaso Ng'iro and the Ruvu (Pangani), both of which lie outside the Lake Plateau strictly speaking. Yet while we are dealing with only the western portion of Masailand, the same general principle arises. In practice, it must be emphasised that the impracticality of controlling this long boundary in a sparsely populated, often drought-affected area has meant that it has not acted as a barrier to movement of the Masai. Thus in 1928 Ford noted that the Masai moved freely across the boundary in search of water and grazing, disclaiming 'any knowledge of the boundary's whereabouts' (Ford, 1928).

Suggestions to amalgamate the Masai under one or other administration (Kenya or the Tanganyika Mandate) were made in the 1920s, but it was argued that the 'difficulties' experienced on the boundary were not serious enough to justify amalgamation of the Masai, even if this were possible. Yet agitation continued from time to time, the Masai petitioning the British Government for unification and separate

independence. But all such proposals and petitions came to nothing and the Masai still remain today living athwart the boundary originally drawn by Britain and Germany.

This is a most interesting and important case, which relates not only to the splitting of a 'homogeneous tribal group' but also to the problem of water supply and grazing land for pastoralists. More will be said about this in a later chapter.

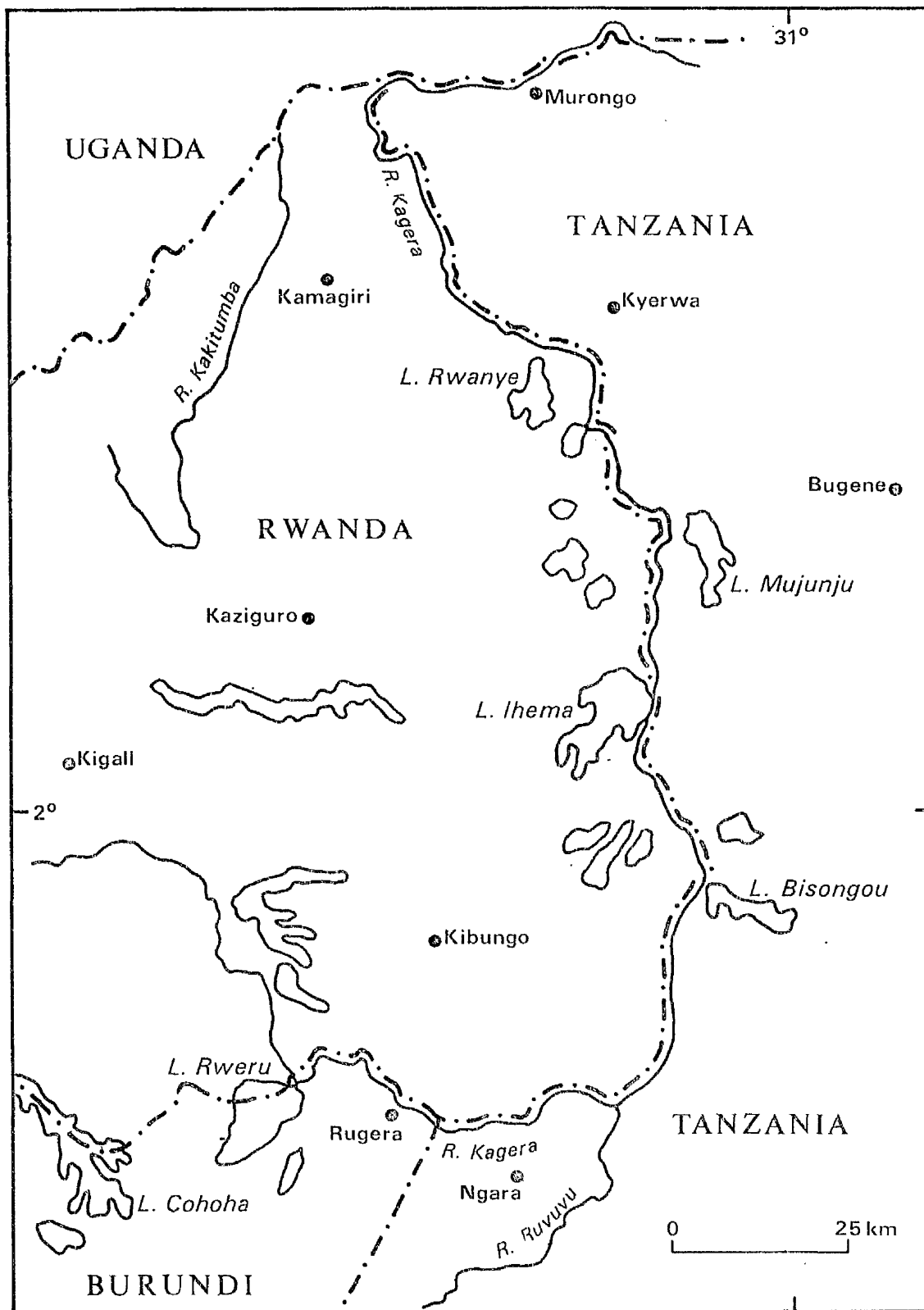


Fig. 18. The Tanzania-Rwanda Boundary (After Brownlie, 1979)

(x, xi) THE TANZANIA-RWANDA AND TANZANIA-BURUNDI BOUNDARY

These two boundaries are considered here together because, although they are today two separate boundary lines between the two small independent states and Tanzania along their eastern borders, Rwanda and Burundi before independence in 1962 were a single unit, administered by Belgium and known as Ruanda-Urundi. Until the end of the First World War Ruanda-Urundi was part of German East Africa and was then mandated to Belgium and later, after the Second World War, the territory was administered by Belgium under the United Nations Trusteeship.

The original boundary line to the east of the territory was laid down in 1919 and confirmed in 1922. This line in effect divided the Belgian and British area of mandate responsibility and lay some 50-60 kms. west of the present boundary in the northern (Rwanda) section (Figure 18). Subsequently the Belgians objected to the Permanent Mandates Commission about this boundary which, it was argued, now effectively partitioned the important and heavily populated Kingdom of Ruanda. In particular, the district of Kissaka had been excluded from the Kingdom of Ruanda and included in the British mandated territory to the east. These objections emphasised 'the social, political and economic harm caused by the imposition of this arbitrary division' and went on to urge 'the eastward extension of the boundary to the "natural frontier" of the Kagera River' (McEwen, 1971, pp.154-55). It was further suggested that the British were more interested in securing north-south railway connection through Ruanda country than in protecting one of the 'richest and most civilised tracts of the Kingdom of Ruanda' (op.cit., p.155). The Permanent Mandates Commission

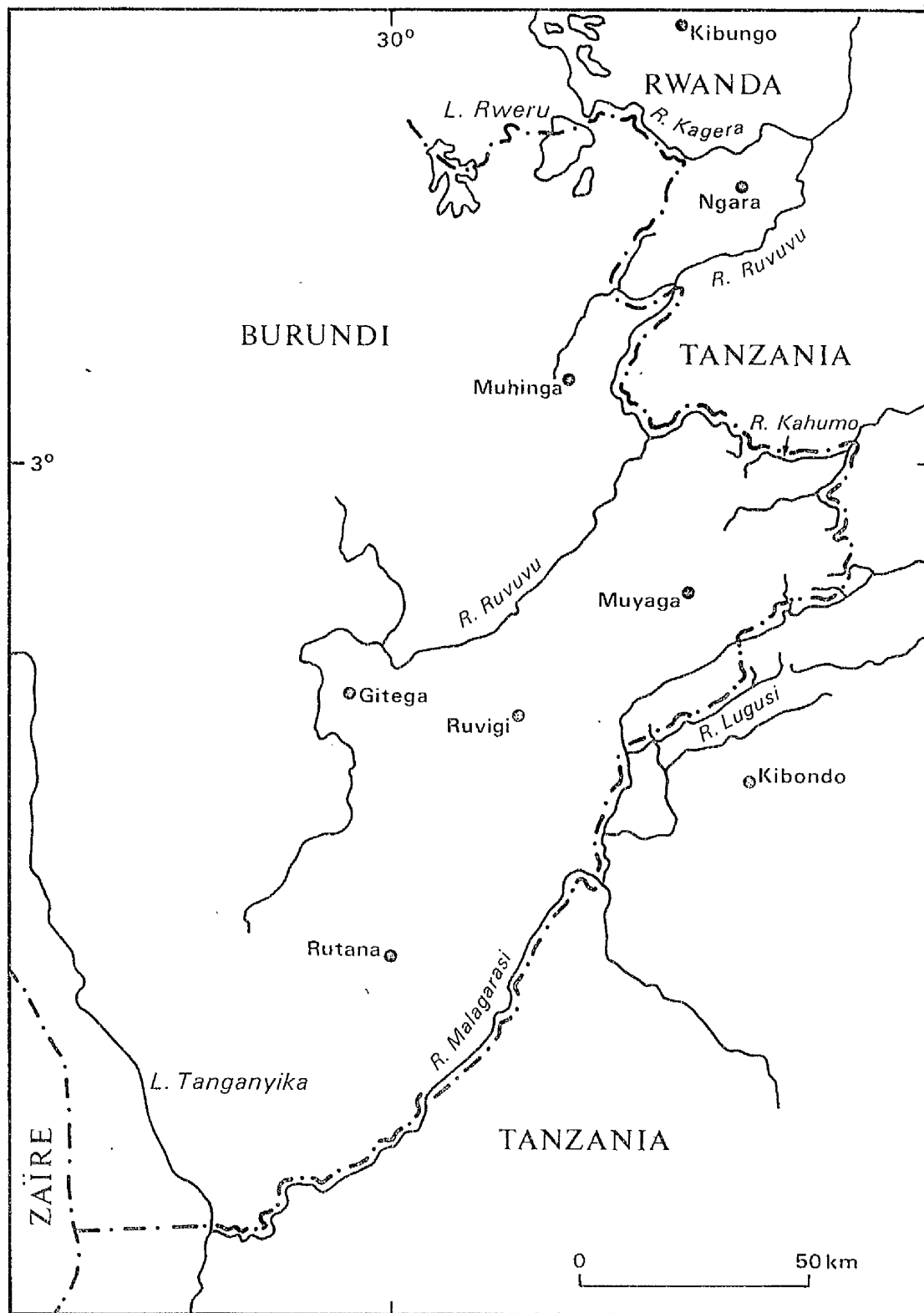


Fig. 19. The Tanzania-Burundi Boundary
(After Brownlie, 1979)

accepted these objections and a 1924 Protocol established the boundary as it is today. The Kagera River, however, turned out to be not such a clear natural boundary as had been suggested; it was found to take a winding and uncertain course through papyrus swamps. Fishing or navigation rights were far from clear. The boundary line along the Kagera was therefore redefined later on in 1934 so as to make the shore-line of the river valley the boundary of the dry land near the marking pillars, thereby placing all islands on one side or other of the boundary. Fishing and navigation rights were made free of access to the people on each bank; moreover, tin mining in the valley was now possible.

Clearly, then, the actual and potential problems of the international boundary between what were to become Ruanda and Tanzania were realised and dealt with at a fairly early stage by changing the boundary quite substantially (in Kissaka District) and along the Kagera River.

Further south, however, the Burundi-Tanzania boundary today is entirely as originally laid down in the 1924 agreement (Figure 19). It follows rivers for the most part, though the same practice was followed as with the River Kagera further north when it came to demarcation. The only matter of dispute ever raised, though not today, refers to the tract of land known as Bugufi, lying between the Kagera and Ruvuvu rivers in Tanzania. Although it may well have been administered as part of the Kingdom of Urundi during the German colonial period, the Bugufi issue is now 'a circumstance of no modern legal significance' (Brownlie, 1979, p.752). Burundi, like Rwanda, today accepts the boundaries with Tanzania as firmly established and no current boundary issue is known to exist. Even the problems arising in 1972-3 during the conflict between Tutsis and Hutus of Burundi, which

led to the flight of refugees into Tanzania and action by Burundi aircraft against Tanzanian villages was at no time nor by any party explained in terms of the alignment of the boundary (Times, July 23, 1973).

It is occasionally pointed out that in German times (pre-1914) an area lying between the Kagera and Ruvuvu rivers in what is now Tanzania was administered as part of the Urundi Kingdom. But this is assumed to be of no modern legal significance and Burundi has accepted the alignment established in 1926.

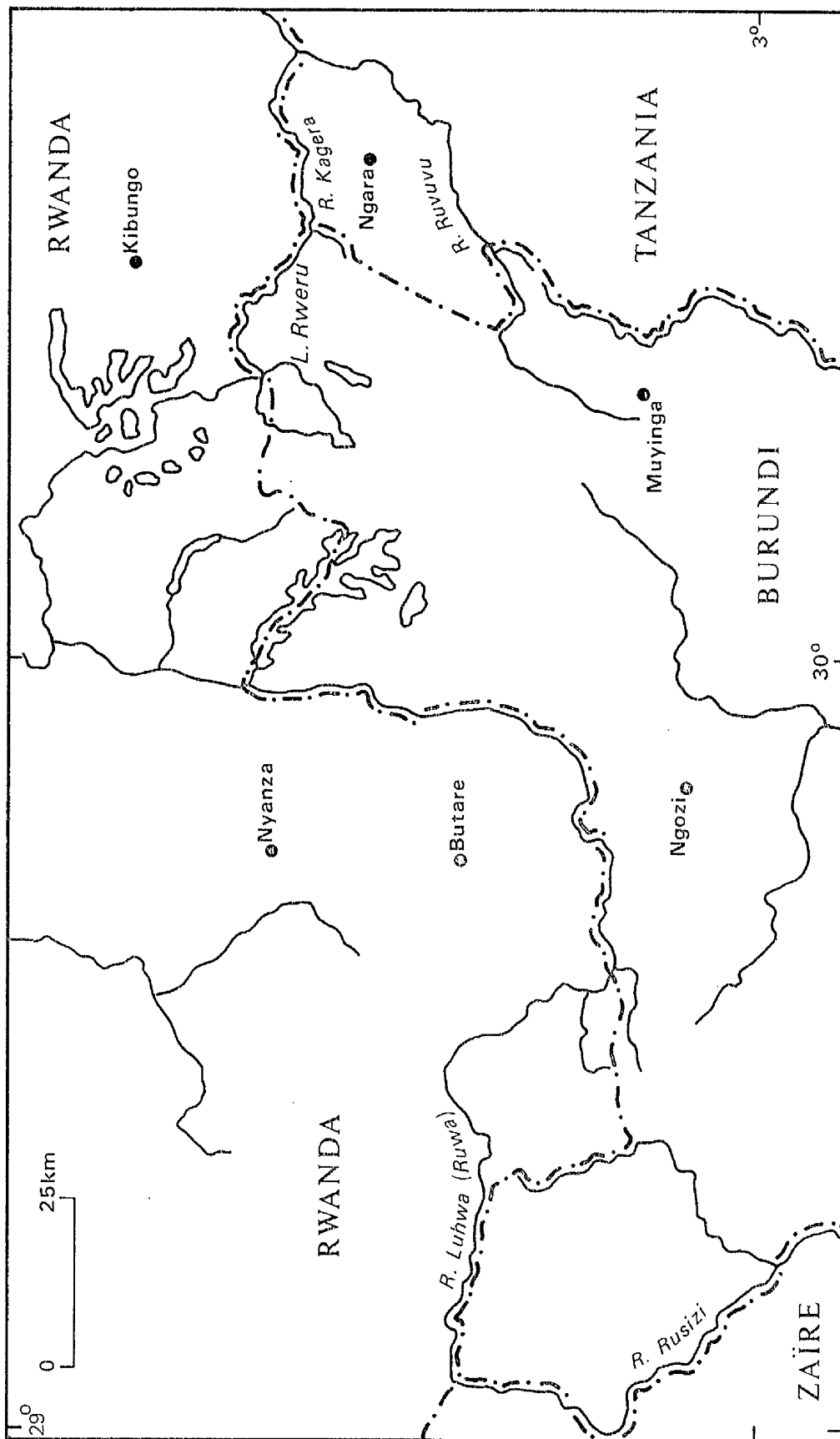


Fig. 20. Rwanda-Burundi Boundary (After Bowne, 1979)

(xii) THE RWANDA-BURUNDI BOUNDARY

This international boundary, though little mentioned in the literature, is interesting for several reasons. First, the boundary as an international boundary dates back only to 1962, when the two constituent elements of the former Ruanda-Urundi became separately independent and were renamed the Republic of Rwanda and the Kingdom of Burundi. This, then, is easily the most recent international boundary among the Nile Basin states. Secondly, even though Ruanda-Urundi had fallen under German colonial (indirect) rule by 1898, the two indigenous kingdoms were recognised by the Germans in that their two residencies were based quite simply on the existing African kingdoms. Although Ruanda-Urundi passed to Belgian mandate and later to Trusteeship status under Belgian administration after the Second World War, the boundary today remains more or less exactly as it was under the Germans. During the Belgian trusteeship period the line was formalised to some extent in the 1949 (modified 1958) Ordinance though as yet no international agreement relates to the boundary. As Figure 20 shows, the boundary line is largely along rivers, streams and lakes; there are a few straight line sections but no demarcation has occurred as yet. Finally, so far as is known this international boundary has never been the source of any conflict, however local, and this is significant in view of the heavily populated country through which much of the boundary runs (Lemarchand, 1970).

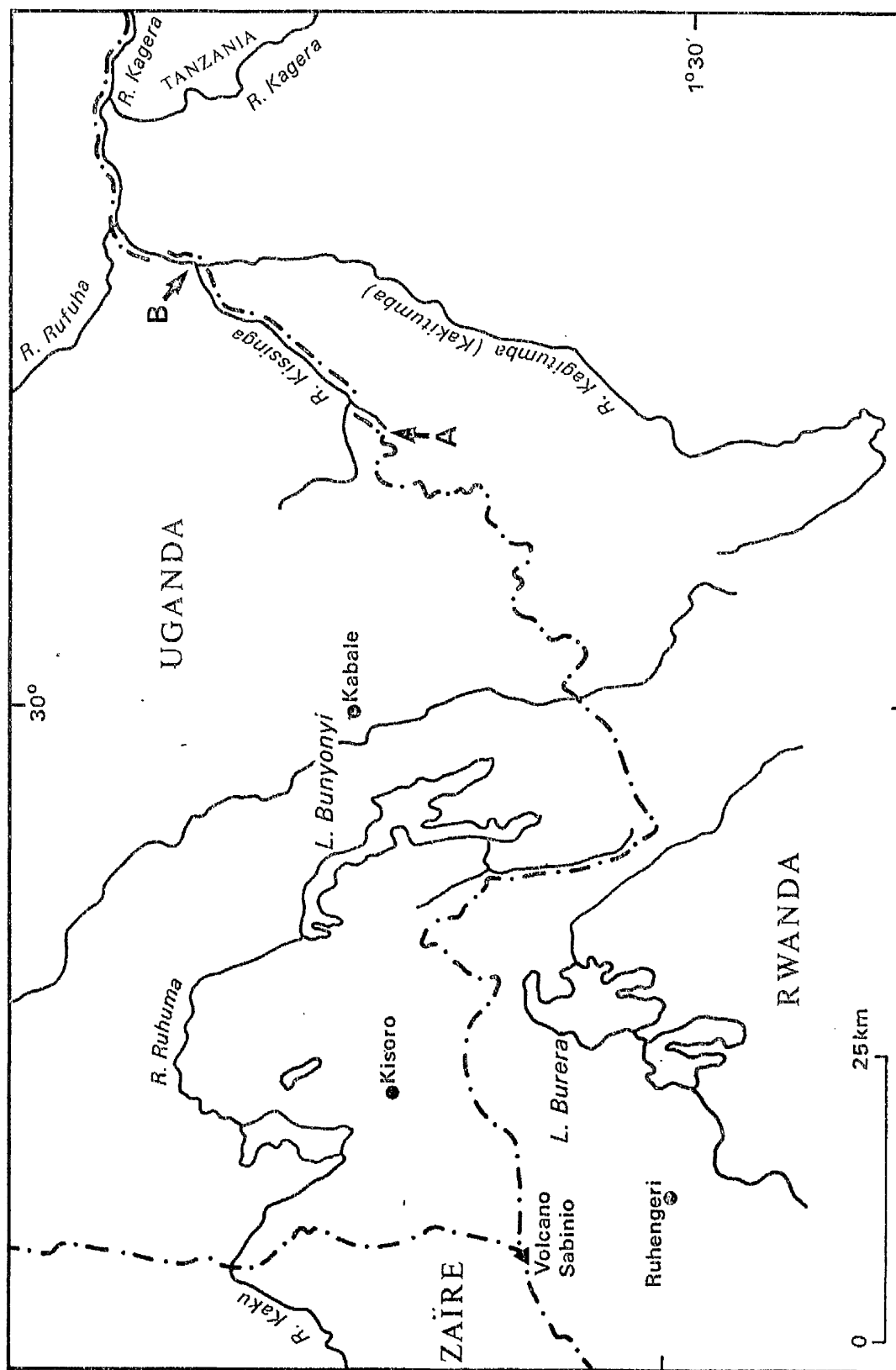


Fig. 21. The Uganda-Rwanda Boundary (After Brownlie, 1979)

(xiii) THE UGANDA-RWANDA BOUNDARY

This boundary is best thought of as the western extension of the Uganda-Tanzania boundary, for Rwanda was administered as part of German East Africa by 1898. Competition between Britain and Germany led, first, to the adoption of the 1° S. latitude line westwards to the frontier of the Congo Free State, then described as lying along the 30th meridian. Over the twenty years 1890-1910 negotiations between Britain and Germany - confused about uncertainties over the exact location of the Mfumbiro volcanic mass and even of the 30th meridian - resulted eventually in the Anglo-German Agreement of 1910, to which was added a Protocol in 1911. From this date the international boundary has remained unchanged; the boundary was described in exactly the same way in the (unsigned) Anglo-German Agreement of 1914 referred to in the section on the Uganda-Tanzania boundary,

Starting from the Uganda-Tanzania-Rwanda tripoint, at the confluence of the thalwegs of the Kagera and Kakitumba rivers, the boundary then follows the thalweg upstream along the Kakitumba, thence along the thalweg of the River Kissinga to its source. From there the boundary follows ridges, watersheds and streams until it reaches, in the west, the Uganda-Zaire-Rwanda tripoint at Mount Sabinio in the Mfumbiro group of volcanic mountains. After the First World War, Rwanda was mandated to Belgium, subsequently held by Belgium under United Nations Trusteeship, and finally achieved independence in 1962, the same year as did Uganda. Rwanda's early absorption with German East Africa, therefore, lasted only until the First World War; thereafter it was on the highland periphery of Belgium's vast colonial territory centred on the Congo Basin rather than orientated towards the east coast of Africa

at Dar es Salaam.

Examining the 1910 Anglo-German Agreement, on which the present boundary is based, several points of interest to our study emerge. First, the commissioners were given authority to deviate from the delimited straight line 'so as to make the frontier coincide with natural features where this is possible. The deviation shall not, however, exceed 5 kilometres on either side of the straight lines, and neither the total area of British territory nor the total area of German territory shall be altered thereby'. The advantages of following natural physical features in an area such as this where there are many clear, unambiguous natural features to refer to were always taken into account, especially in the demarcation exercise. This, of course, is in marked contrast to the situation further east where the Uganda-Tanzania boundary was not delimited with reference primarily to natural features.

A second point to note is that the commissioners were guided by the principle that 'districts belonging politically to Ruanda shall if possible, remain part of Ruanda'. For this reason the commissioners were encouraged to look especially at those parts of the delimited boundary which cut right across people from the same group. Thus for the section A and B on Figure 21 it was noted that districts were being cut off which belonged politically to the Chief of Katreia; these people were therefore to be given six months from the completion of demarcation to move with 'all their movable property into German territory and of harvesting even after the expiration of the six months the crops standing at the time of their removal'. The same principle was to be applied to all other portions of the 'frontier'; though, as Low (1961, p.104) points out, the demarcation of 1911 did in fact leave a segment of traditional Rwanda within the Kigezi

District of Uganda. In this case, at least, good intentions were not always fulfilled. Nevertheless there appears to be no record at any time of any dispute over at least this international boundary within the Nile Basin.

On the other hand, there have been movements of refugees across the border. In October, 1982, especially, Uganda agreed to keep Rwandan refugees on its territory in certain fixed areas after talks on the refugee problem along their border. The Ugandan authorities stated that the displaced people were for the most part Rwandans who arrived in Uganda between 1959 and 1973, fleeing from ethnic unrest there. The Rwandan Government said the fugitives were Ugandan nationals, not Rwandans (Times, October 29, 1982).

CHAPTER FOUR

SUMMARY OF THE EVIDENCE AND THE HYPOTHESIS RE-EXAMINED

The boundaries examined in the previous chapter suggest a number of summary comments of particular reference to our study. The purpose of the present study is to discuss these comments and then to go on to use this evidence to examine the hypothesis stated at the beginning of the thesis.

Summary Comments on the Evidence The study area chosen for this research covers a large area in north-eastern Africa and covers a wide range of ecological and human circumstances. Although it represents only one - albeit large - river basin, it does contain within it thirteen international boundaries which together provide a substantial body of evidence for examining the hypothesis about the present-day significance of international boundaries in inter-state relations. It is not suggested that these boundaries are necessarily typical of all international boundaries, or even of all African boundaries, but it is contended that they are sufficiently varied and representative to provide some justification for coming to some decision about the validity or otherwise of the initial hypothesis. Seven summary comments may be made:

1. The international boundaries examined include examples of almost all major types of boundaries - hills and mountains, watersheds, crests and foothills; rivers and streams; lakes; lines of latitude, other straight lines drawn between specified points, and geometrical arcs.
2. Many of these international boundaries are still only delimited and not demarcated (e.g. Sudan-Zaire).

3. The boundaries include two clear examples of the distinction to be drawn between an administrative boundary (in practice) and an international boundary (in law). Examples are the Egypt-Sudan boundary (eastern section) and the Sudan-Kenya boundary (Ilemi triangle).
4. Historically there is abundant evidence of attempts on the part of boundary commissioners to consider human groups of various kinds - traditional political kingdoms and ethnic or tribal distributions.
5. Historically there was always the problem of inadequate knowledge of the topographical features and human geography of the area being delimited. Local problems that arose at particular boundaries were in some cases dealt with by subsequent re-defining of the boundary lines as more accurate information became available. The device of 'administrative' boundaries mentioned above in (3) was also introduced to deal with such problems.
6. Even in those cases where international boundaries cut through the territories of particular groups, agreements have commonly been reached to allow the free movement of peoples and their stock back and forth in the traditional way (e.g. the Masai at the Kenya-Tanzania border).
7. There is no evidence at all of any significant current (1984) border dispute at any one of the international boundaries examined in the previous chapter.

Evidence by Types of Boundaries Before looking carefully at the hypothesis for a re-examination in the light of the evidence presented in the previous chapter it will be useful to summarise the various examples given which represent the different types of boundaries mentioned in chapter one. The order will be the same as that presented in chapter one.

Watershed boundaries are surprisingly few and often discontinuous in the Nile Basin. The western section of the Uganda-Rwanda boundary follows the watershed up to Mt. Sabinio; and northwards from this point the Uganda-Zaire follows the watershed between the westwards and eastwards drainage lines. But the most important example of the use of watersheds is certainly further north where the Congo-Nile watershed is for some 145 kms used to delimit the Uganda-Zaire boundary; and this continues along the Sudan-Zaire boundary. In many places it is not easy for a visitor to determine the watershed on the ground but according to one authority it is 'mutually well known, for it follows the crest (sic) of a gentle treeless undulation, and the absence of monuments has given rise to no difficulty' (Thomas and Spencer, 1938, p.37).

Much more common among the Nile Basin international boundaries is the use of crest lines. As the previous chapter showed, examples exist on the Uganda-Zaire, Uganda-Rwanda, Uganda-Sudan and Kenya-Sudan boundaries. Examination of the detailed descriptions shows that on the Uganda-Kenya boundary the words crest and watershed have been consciously avoided and straight lines joining named peaks have frequently been used in this last case. As McEwen points out, however, where detailed surveying took place after delimitation, then the crest is intended to be a series of straight lines

joining the prominent features referred to in the text 'rather than as a line which at every point conforms to the sinuosity of the theoretical and, at the time, unsurveyed, watershed.' On the other hand, where, as on the Uganda-Zaire and Uganda-Rwanda boundaries, careful topographical surveys preceded the final boundary agreement, 'there is more justification for interpreting the words crest and watershed strictly and separately' (McEwen, 1971, p.73).

As for foothills, probably the most vague and unreliable type of feature used for boundary delimitation, there are several examples in the Nile Basin. West of the Nile on the Uganda-Sudan boundary, for example, the boundary description refers to 'a straight line due west to the bottom of the foothills of the escarpment running north-west from Jebel Elengua' (McEwen, 1971, p.74). But the longest and clearest example of this type of boundary is on that part of the Uganda-Kenya boundary where the boundary line runs 'to the base of the Turkana Escarpment; thence the boundary follows the base of that escarpment in a generally north-westerly direction' (ibid., p.74).

Rivers provide the basis for many of the international boundaries of the Nile Basin. There are many examples in which the thalweg is used quite specifically - the Kachwamba-Kakitumba and Kagera rivers between Uganda and Tanzania; the Khor Kayu, Kaia and Unyama rivers between Uganda and Sudan; and many other examples on the Uganda-Zaire and Tanzania-Burundi boundaries. The 'course' rather than the thalweg is used more commonly between Uganda and Kenya, however (the Sio, Sango and Suam-Turkwel rivers). Of particular interest is the Tanzania-Rwanda boundary, which presents some difficult problems and is a unique riparian limit in the Nile Basin, with respect to both delimitation and demarcation. Moreover, the Kagera River boundary here takes into account quite specifically the question of water

rights affecting diversion of waters, mining and industrial operations, irrigation, fishing and other rights to be shared by inhabitants of adjacent states. The main problem of this river boundary however is that the river follows a winding course through wide papyrus swamps; it was therefore decided to define a portion of the boundary as a combination of stretches of shore-line and straight-line segments between artificial boundary pillars placed on dry land.

The use of a river bank is nowhere significant in the Nile Basin, but the 'mouth' of a river is used on a number of occasions. Nowhere does the use of the mouth appear to have caused problems, in spite of the theoretical limitations of a feature that is by nature imprecise in definition. Examples in the Nile Basin include the use of the mouths of the River Sio's mouth in Lake Victoria, used to define a 'fixed point' for the Uganda-Kenya boundary; and the mouth of the River Semliki in Lake Albert to help define the boundary between Uganda and Zaire. As for using the source of a river, usually as a fixed point, the previous chapter gives a specific example - the Uganda-Zaire boundary where the sources of the Chako and Lamia rivers are used; in this, as in most other cases, however, the use of pillars as identification points for these sources effectively dismisses the obvious theoretical objections to using the source of a river as a reference point: it does not matter whether the pillar marks the true source of a river, as long as the pillar is accepted as a valid marker. Finally, as far as rivers are concerned, the question of islands in boundary rivers is theoretically difficult but in the Nile Basin at least this has caused no serious problem. The most striking case referred to in the previous chapter is that of the River Kagera between Tanzania and Burundi.

Lakes are significant natural features as far as the drawing of boundaries in the Nile Basin are concerned. One interesting point not so far mentioned in the literature is that of Lake Nasser flooding the Nile Valley below Wadi Halfa; this creation of a lake completely solved the 'Wadi Halfa problem' at the Egypt-Sudan boundary, making it necessary to resettle the very people over whom differences of opinion had previously existed. Otherwise in the Nile Basin several examples have been mentioned in the earlier discussions on the various international boundaries. In practice, again, the theoretical difficulties do not seem to have created any serious problems. In Lakes Edward and Albert on the Uganda-Zaire border approximate centre lines are drawn - though not necessarily properly demarcated - through the lakes to give some appearance of supporting the principle of equitable distribution. Lake Victoria, as mentioned in chapter one, is a special case. It is the largest of the lakes and helps to divide Uganda, Tanzania and Kenya. But no attempt has ever been made here to ensure an equitable distribution of water. As noted in chapter two Kenya's boundaries did not extend to the lake until 1902; before that date the lake had been divided along the arbitrary 1° south line of latitude between Britain and Germany in 1890.

Turning now to mathematical or geometrical lines, these are very common in the Nile Basin - the international boundary between Egypt and Sudan; the boundary between Uganda and Tanzania; the boundary between Kenya and Tanzania; and sections of many other boundaries are well-known examples. And these examples are often cited to prove the arbitrary and unsatisfactory nature of such boundaries. The evidence from the Nile Basin, however, does not support such a criticism. Indeed, it could be argued that as all boundaries are abstractions, artificial and to some extent arbitrary, then a straight line, such as a line of latitude, is

likely to be as satisfactory as - and even more satisfactory than - any other type of boundary. This appears to be so for two reasons. First, the use of any other criteria or features for boundary drawing, as along the Uganda-Zaire boundary, raises difficulties inherent in the nature of those criteria or features. In no sense can the Tanzania-Burundi boundary along the River Kagera be said to be satisfactory either in terms of demarcation or in terms of the utilisation of the waters of the river. Secondly, in the Nile Basin those international boundaries which follow lines of latitude or are simply straight lines drawn between fixed points tend to be drawn very largely through areas where population densities are so low that there is little point in considering any physical or human factor in drawing the boundary. Even in the cases where nomadic pastoralists use land on both sides of a straight-line boundary the very precise yet entirely abstract nature of the boundary line seems to facilitate the ad hoc ignoring of the boundary line by neighbouring governments. This is certainly true of the Masai in relation to the Kenya-Tanzania boundary.

Finally, what does the evidence given in the previous chapter suggest about the use of non-physical, essentially human geographical features as criteria for boundary-drawing in the Nile Basin? Numerous instances were given of attempts on the part of European powers to take human, especially tribal, distributions into account in drawing the international boundaries in their respective areas. However, certainly at the time of initial delimitation and to some extent even today, not nearly enough has been known about the peoples, their ways of life, or their distributions for it to be possible to avoid splitting ethnic groups in one way or another. Moreover, as indicated earlier, there has always

been a great deal of confusion about human group classifications and terminology, both between officials and between academics from different disciplines, or even from the same discipline. Then there is the important point that neither the nature of a group nor its distribution can ever be static. An international boundary, however, must be fixed so that there is always the possibility of human distributions and activities ignoring or wishing to ignore boundaries. In the Nile Basin, it should be emphasised, those human groups that are split by a boundary are surprisingly few, considering the size of the area and the number of ethnic groups contained within it. As for modern economic features, it must be remembered that all such developments post-date the drawing of the boundaries, so that it can hardly be argued that the drawing of boundaries has disturbed modern economic developments and activities. The same can be said of modern population movements, distributions and urbanization. The one major and continuing difficulty in the Nile Valley arising from the pattern of states arising from the international boundaries is the land-locked nature of three states - Uganda, Rwanda and Burundi. But more will be said on this matter in chapters five and six.

The Hypothesis Re-Examined The hypothesis stated at the beginning of this thesis may now be re-stated in the form of three sentences:

- (i) The international boundaries of the Nile Basin states are arbitrary and do not accord with geographical realities.
- (ii) For this reason they are a cause of tension between states.
- (iii) The international boundaries therefore militate against effective inter-state cooperation in the region. This hypothesis is widely accepted as conventional wisdom or as a truism, and it is now time to examine it carefully and decide how valid it is on the basis of the evidence available from the Nile Basin boundaries. To begin with, each of the three sentences or statements of the hypothesis will be examined separately.

- (i) 'The international boundaries of the Nile States are arbitrary and do not accord with geographical realities'

All boundaries are artificial in that they involve the drawing of a line on a map and, in some cases, laying out visible markers on the ground; they are nevertheless all abstractions. If, therefore, the notion is accepted that states must have international boundaries between them, then it must also be accepted that these boundaries will be artificial. The first question here, however, is whether they are arbitrary, defined as 'derived from mere opinion; capricious; unrestrained' (O.E.D.). Certainly many if not most of the boundaries examined here were derived from mere opinion in that, as already pointed out, they had to be drawn at a time when little accurate information and no accurate maps were available to enable boundaries to be drawn on the basis of anything else but opinion - or at best informed opinion. During and immediately after the 'Scramble for Africa', as well as at the 1884-5 Berlin Conference there was no time to await detailed field surveys and studies of human populations and groups - their distributions, preferences and migrations. Indeed, it is probably true to say that only today - at the earliest since 1945 - has sufficient detailed survey work been accomplished to enable really

accurate information to be available. As for the terms 'capricious' and 'unrestrained', there is an implication here that the boundaries could have been better drawn at the time and that a conscious decision was taken not to use what information there was available. At least at the level or stage of demarcation there is no evidence from the cases examined that this was ever so; indeed, the instances of attempts to consider the local circumstances of physical and human geography are numerous. It seems reasonable to conclude, therefore, that the international boundaries of the Nile Basin are arbitrary, but only in the sense that they were drawn on the basis of the best opinion available at the time of delimitation and demarcation.

As for the phrase 'they do not accord with geographical realities', the same point about inadequate information at the time of delimitation must first be made - not as an excuse but as an explanation. But that said, there is no doubt that many of the boundaries do not accord with geographical realities - by which is presumably meant the features and distributions of physical and human geography. The lines of latitude and other straight lines must come into this category - notably between Egypt and Sudan, Kenya and Tanzania and part of the Tanzanian-Ugandan boundary - as most parts of the Uganda-Zaire and Tanzanian-Rwanda boundaries where rivers and straight-line sections exist. The problem here, however, is that whether, for example, a river is a 'good' or 'bad' boundary is very much a matter of opinion and depends on the kinds of considerations mentioned in chapter one. Moreover, the use of the administrative boundary device has been used to take into account the 'geographical realities' associated with the distribution of 'tribes' in the eastern sector of the Egypt-Sudan boundary and along the Sudan-Kenya boundary.

More fundamentally, perhaps, the notion of 'geographical realities' implies some objective interpretation of a set of circumstances in a particular place which would provide the basis for more satisfactory boundary drawing. To take just one example, it is often suggested that a major factor ignored by boundaries in the Nile Basin, as elsewhere in Africa, is the distribution of homogeneous ethnic or tribal or ethno-linguistic groups. But this assumes that such groups exist and that we know sufficiently accurately the nature of the community in terms of its extent, numbers, composition, dynamics or homogeneity. Yet when we come to look at any particular case - the Masai, Luo, Gisu or Pokot for example - it is impossible to arrive at any clear definition of their extent or even characteristics; even less is it possible to determine their political sphere of influence. For, as Barbour (1961) pointed out, 'the term tribe is capable of several meanings: it may be used for a group of persons who speak the same language and observe a generally similar pattern of dress and customs, or it may mean all the persons who acknowledge a common political head, whether they are culturally identical or not' (Barbour, 1961, pp.314-15). The term 'Pokot', for instance, in the context of the Uganda-Kenya boundary issue is not defined in the same way as the area over which some other single criterion, such as any one form of social organization, is found to operate. Indeed as another writer has pointed out, it is a problem of boundary studies in Africa that a great deal of dependence has to be placed on descriptions of communities and their distributions made by other scholars - ethnographers, linguists and social anthropologists - for their own specialist purposes. And none of these interpretations can be accepted uncritically as necessarily accurate in the context of boundary studies (Hodder, 1968). The same problem of subjective

interpretation surrounds most other elements of the physical and human landscape of any border region.

It seems reasonable to conclude that many of the international boundaries of the Nile Basin are arbitrary - based on opinion in the absence of fact - and that they do not accord with geographical realities in so far as such realities can be assumed to exist. And the evidence from the Nile Basin suggests that neither at the time of original boundary drawing nor in the present day, could boundaries be drawn that were any less arbitrary or any more in accord with geographical realities. All boundaries in all countries and at all times can be criticised for exactly the same reasons. If international boundaries have to exist for the sake of defining the territorial limits of a state, then whoever draws them up runs the occupational risks of all boundary makers.

(ii) 'For this reason they are a cause of tension between states'

This second statement involves two assumptions - first, that the boundaries of the Nile Basin could and should have been drawn elsewhere so as to preclude inter-state disputes; and secondly, that 'bad' boundaries can cause tension between states. The first assumption has implicitly been dealt with in the previous section. But to illustrate further from the issue of ethnic groups. Even if it were possible to define precisely the limits of particular groups, where would the boundary line be redrawn? However it is redrawn it could not avoid two problems: (i) ignoring the realities of some other perhaps equally important criterion (such as water resources or trade routes); and (ii) either creating a ridiculously large number of 'states' or simply rearranging boundaries so that a slightly different 'mix' of communities is embraced by the new boundary, thereby infringing the territorial rights of one state on the grounds of the

presumed dominance of one selected factor.

As for the second assumption - that boundaries, especially 'bad' boundaries, can be a cause of friction or tension between states - this view has been elevated in the literature to the status of a self-evident truth, though it conflicts of course with the views of writers like Ancel (1938) mentioned earlier in chapter one. But let us look first at the evidence from the Nile Basin state boundaries. Historically, there have been a number of boundary disputes and these are detailed in the previous chapter - the Wadi Halfa salient, the eastern section of the Egypt-Sudan boundary, the Ilemi triangle, the Kagera salient, the Kagera triangle, the Karasuk territory, and the Masai problem at the Kenya-Tanzania boundary. To examine the nature of such disputes, however, two examples may be look at in a little more detail. The first is the Egypt-Sudan boundary.

The Egypt-Sudan boundary is simply based on a line of latitude (22° N.), though the administrative boundary deviates substantially from the parallel in its eastern section. Geographical conditions and modes of life are almost identical on both sides of the border, including the Nile river section. Conditions have traditionally been very peaceful, the people on both sides having close racial and linguistic affinities. The Barabra - the generic term used locally - claim to have Arab affinities but historical and anthropological evidence shows that they are a mixture of Caucasians, who immigrated to the Sudan in ancient Egyptian times, and the original Negro inhabitants (Abbas, 1951, pp.2-3). Situated on the main trade routes

between Egypt and Central Africa, the rulers of the local tribes undoubtedly profited from the passage of caravans, but their subsistence depended on their agriculture, perhaps more extensive than it is today (Tothill, 1952).

Egypt, for clear reasons, has therefore long displayed ambitions towards the area now known as the Sudan, and these ambitions can be seen in the light of the historical fluctuations of Egypt's southern border, reflecting the 'millenia-old urge to control the upper Nile' (Touval, 1969, p.109).

But what exactly led to the conflict between Egypt and Sudan in 1958? A brief military confrontation occurred in February, 1958, when Egypt briefly occupied Sudanese territory and then, threatened with a United Nations' debate, withdrew. As a current report put it, a small Egyptian force crossing the border in that month provoked the Sudan government into revealing that Egypt was claiming two pockets of Sudanese territory. Sudan reported this 'aggression' to the United Nations Security Council and Egypt speedily withdrew its forces. As for the real reason for this boundary infringement, the Egyptian move was reported 'as an attempt to influence the voters in favour of those who stand for some closer relationship, if not unity, between Sudan and Egypt' (African Affairs, 1958, p.96). Another writer, however, believes that Egypt's incursion in 1958 can be interpreted in one of two ways. First it could be mainly a symptom of the fundamental tensions between the two countries, stemming from Egypt's age-long drive for influence over the upper reaches of the Nile and

her disappointment at the Sudan having opted for independence rather than union with Egypt. Secondly, and alternatively, Egyptian claims could be interpreted as a lever to extract concessions from the Sudan over two matters then being negotiated over: (i) the amount of compensation to be paid by Egypt to Sudan for the flooding of the Wadi Halfa region and the consequent resettlement of the local population resulting from the flooding of the valley there; and (ii) the request then being made by Sudan for a revision of the earlier 1929 Nile Waters Agreement. Both these issues were subsequently dealt with satisfactorily in the following year - in 1959.

A second example is afforded by the central section of the Uganda-Zaire boundary (Figure 14). Langlands (1967) notes that this boundary seems to be more satisfactory than the earlier 30° meridian east line and the abortive attempt to distinguish the Congo-Nile divide referred to earlier. But although the Ruwenzori massif appears to be a 'natural frontier', its passes are crossable and the boundary here is difficult to police; early local political movements demonstrated this fact. Politicians like Van Gotzen who argued for the establishment of river courses rather than geometric lines and watersheds as the 'natural boundaries' for the Congo may think that rivers make satisfactory boundaries; but geography demonstrates the falsity of their claims. Thus, whereas Milner in 1919 could argue that 'the logical frontier' between the Belgian and British possessions in Africa was the great lakes and their tributaries, the Ruzizi and Semliki rivers demonstrate the illogicality of river courses for boundary purposes. It is just

as "illogical" to divide the Semliki valley laterally by its thalweg as to divide it into lower and upper sections as was done by the thirtieth meridian east and by the 1910 convention.

The way in which this particular boundary has had undesirable effects on ethnic distributions can be illustrated again (Fig.1) from the ethnic groups Bwamba and Butalinga both of which lie in remote corners of their respective countries. The heart of the Bwamba country lies isolated from the rest of Uganda to the west of the Ruwenzori range. Butalinga is equally isolated in the eastern extremity of Zaire. This area of habitation is cut off from the rest of the country by the barrier of the Ituri Forest and by its extension eastwards as the Semliki Forest. The relatively higher social and economic level of the Bwamba and the generally low standard of life in Butalinga should not overshadow the two facts that the two districts are both generally less developed in their respective states and that the two are remote parts. Butalinga, which is only 411 kilometres from Kampala, is about 3,200 kilometres from Kinshasa while Bwamba is about 400 kilometres from Kampala. Whatever economic or social plans were made in each country, the Bwamba domain was always at the bottom of the receiving end and this was no fault of either government but lies in the geographical isolation of the area. The political geographer engaged in studies in this part of Africa must therefore take this isolation into account. (Kibulya, 1967).

By the 1959 Census there were 32,000 Baamba in Bwamba country, plus 17,500 Kanjo and nearly 7,000 Toro. The total population was 59,000 and would have included a few hundred Buganda and even a few Zanzibaris who were left over from the slave and ivory trade of Stanley's time. The population now must be 70,000 living in an area roughly comparable to that of Butalinga with only 13,000. Land

pressure has become so acute that settlements extend right up to the boundary on the Uganda side but the Congo government has deliberately avoided settlement within two miles of the boundary.

Since 1963, the Baamba have found themselves greatly puzzled. A few metres away lies the fertile Busegya land with its thick, loam, black soils being wasted. Before independence the Baamba used to cross into this area freely. It was not uncommon to see Baamba rice fields along the Busegya road. But since 1964, Uganda and Zaire have broken the traditional 'blind eye' approach to this boundary. Faced with civil war in that year, the state closed all its boundaries and some troops were stationed half a mile from the crossing. In retaliation, Uganda closed its borders and placed its troops about 180 metres from the crossing. In May, 1965, Ugandan troops crossed over the boundary and ambushed members of the Congolese army and killed two of them. This skirmish created hatred between the Butalinga and Bwamba and the wounds have never been healed. The boundary has remained constantly under the supervision of the army on the Uganda side, but in Butalinga the troops have left and now there is only a customs office to fill the vacuum. The Baamba who could have spilled over into Nsungu have been arrested by the new stringent rules on the boundary. They may still visit relatives in Zaire. But they must not carry anything with them. Above all, they must not cultivate any piece of land in Zaire. All along the boundary, therefore, the Baamba population is swelling. Once again the western-oriented Baamba have been stopped at the boundary by the new policies governing this arbitrary separation. The Bataalinga, on the other hand, may buy anything they need from Nyahuka and in fact can settle peacefully in Bwamba.

'The parcel of territory bearing the name of Uganda Protectorate varied considerably in extent from its establishment in

Buganda in 1894 until 1926' (Brownlie, 1979, p.691). Since the Protectorate Government solved the 1926 dispute in favour of the right of the Kingdom of Toro government in the area, and although economic prosperity increased by the 1960s, 'the Bwamba began to resent the presence of Batoro chiefs over them and became disgruntled at the apparent exclusion of key offices to them and saw themselves discriminated against in various ways. During the course of this disturbance the Baamba re-iterated the argument that they have never been part of the Kingdom of Toro and that the severance from their kingdom on the other side of the Semliki by an international boundary left them weaker vis-à-vis the Batoro than would otherwise have been the case'. One may see, therefore, the germs of the dissatisfaction of the 1960s in the international settlements occurring up till 1910 and the internal settlement up to 1926.

Clearly, then, there have been - and to some extent still are - problems at the international boundaries for particular groups of peoples and these have in some cases been dealt with by one or more devices - slight changes of the boundary, the use of the 'administrative' boundary device, agreements between the relevant governments that bona fide members (like the Masai) may cross freely when their economies and ways of life cannot be contained within any formal territorial framework. In all cases within the Nile Basin it is true to say that no significant boundary dispute of a local nature now concerns the various governments. But this is not really what we have to examine. The statement being examined is that an unsatisfactory boundary (however defined) is the cause of tension between states. In the cases examined here, however, it may have been true in the past - notably between Egypt and Sudan from 1956-1958 (see pp.55-63) - but according to the most recent authorities,

notably Brownlie, 'no disputes are known to exist' occurs frequently in his comments on the particular boundaries under review in this thesis. This is not to suggest that there are no international border problems elsewhere in Africa which are still causing tension between states - the case of Ethiopia and Somalia suggests that. But at least in the Nile Basin a stage in the development of inter-state relations has apparently been reached in which any difficulties at the boundaries are viewed solely as local problems capable of local solution. Such inter-state tension that does or has existed - for instance between Kenya and Tanzania over the closing down of the East African Community (which led to the closing of the international boundary between the two countries) and the invasion of Uganda by Tanzanian troops towards the end of the Amin regime - could not by any stretch of the imagination be seen as having been caused by the international boundaries.

The conclusion therefore seems to be clear: 'arbitrary' boundaries have caused tension between states in the past in the Nile Basin, but more frequently such boundaries cause only local, not inter-state disputes; and the major causes of inter-state tension have nothing to do with the boundaries themselves, however often they are used as excuses for conflict.

(iii) 'The international boundaries therefore militate against effective inter-state cooperation in the region'

More will be said on this matter in the final two chapters of this thesis, which look at inter-state cooperation in the Nile Basin in the context of water resources and then, more generally, in the context of regional and Pan-African Unity. At its simplest, the statement being examined here implies that if the international boundaries were 'good' - less arbitrary, and more in accordance with

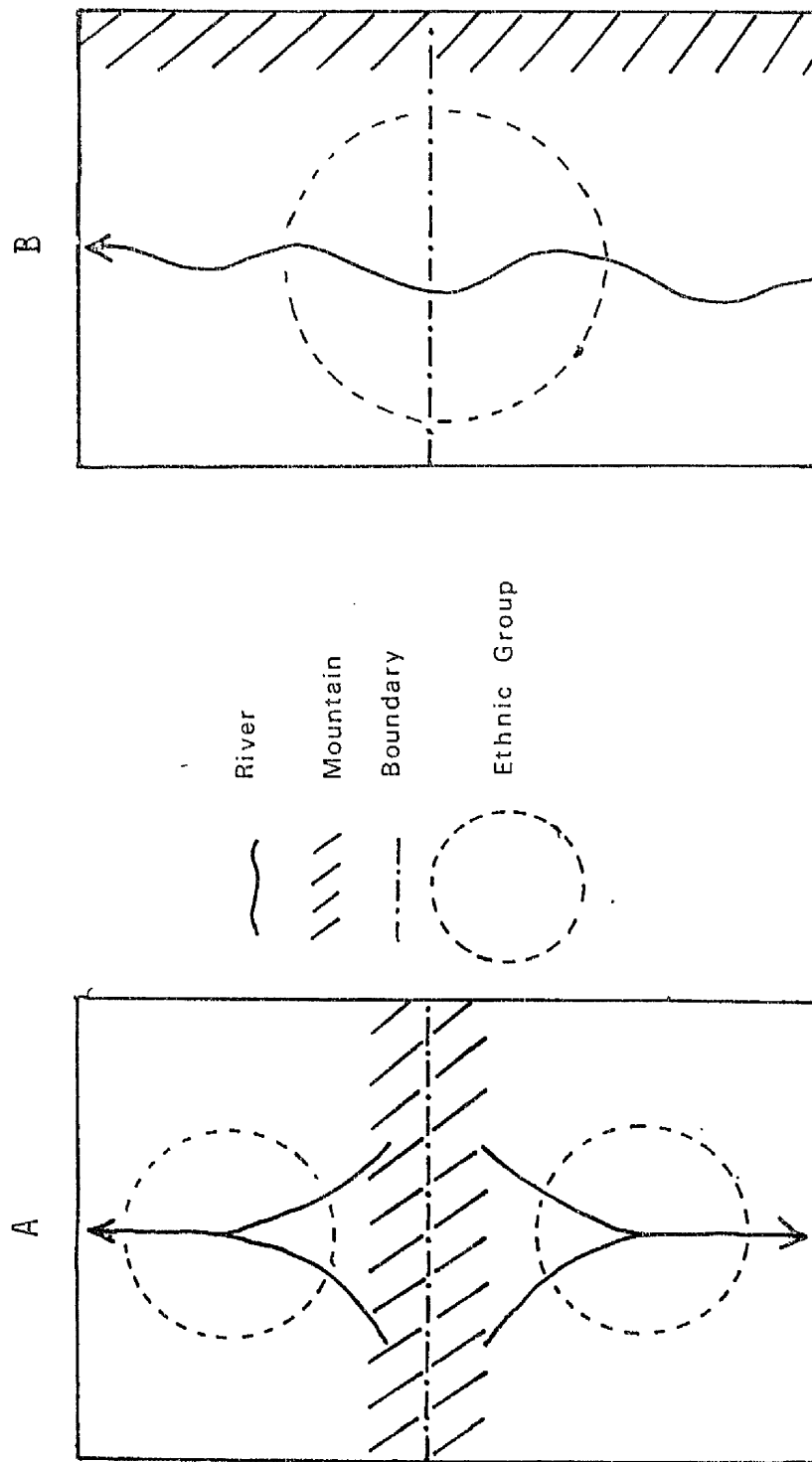


Diagram 2. Contrasting Models at The Boundary

geographical realities - then they would assist in inter-state cooperation. Putting it diagrammatically (Diagram 2) it suggests that diagram A will encourage cooperation; that diagram B will militate against cooperation. In diagram A the international boundary follows the crest of a mountain range; this forms the watershed between rivers flowing in opposite directions; and the international boundary cuts neatly between two homogeneous ethnic groups. In case B the international boundary cuts through a single river and a mountain range; it also cuts through a homogeneous tribal territory. These are not extreme, exaggerated models; in the case of B, certainly, it bears a remarkable resemblance to the case of the Egypt-Sudan international boundary.

But exactly how far is it true that diagram A is more satisfactory than diagram B in representing ideal circumstances for cooperation between states? It must first of all be remembered that cooperation between states is primarily a matter of mutual decision for mutual benefits based not on solving boundary problems but on a much wider complex of social, economic, political and, perhaps, strategic issues. But even allowing for this, it could be argued that diagram B represents a more positive basis for cooperation than does diagram A which seems to follow the 'ideal' boundary notion of authors like Holdich and Curzon discussed in chapter two - that is, that a 'good' boundary should be a barrier and have good defensive qualities. Today, however, such a line of thought seems anachronistic and negative as well as anti-cooperation. On the other hand, diagram B indicates a situation where the international boundary cuts across all natural and human features and clearly cannot operate as a barrier or defensive boundary in any way. The need for and opportunity for cooperation is therefore so great that cooperation is more likely to occur, and we shall see in the next chapter how this has in fact

operated in the case of the utilisation of the Nile waters throughout the entire basin.

It is this kind of thinking that led to the decision by the Organisation of African Unity to establish in 1964 the principle of sacrosanct boundaries in Africa: that all boundaries should remain as they are. This too will be examined later. It is also this kind of thinking that has led so many African leaders to argue for accepting existing boundaries and making them work in the cause of cooperation. As President Nyerere of Tanzania put it in 1963 (p.2) 'in the sphere of boundaries, as in all others, we must start our quest for African unity from the facts of our historical inheritance... we must use the African national states as instruments for the reunification of Africa, and not... as tools for dividing Africa'. Divided peoples, divided rivers, divided mineral resources, divided economic systems - all these can and perhaps now must be viewed not as problems but as opportunities, providing a common and realistic basis for cooperation between the neighbouring states of the Nile Basin.

CHAPTER FIVE

THE NILE WATERS AND INTER-STATE COOPERATION

The argument developed in the previous chapter was to some extent subjectively based on empirical evidence, both from examples within the Nile Basin states and from comparative analyses elsewhere. The present chapter, however, provides much more solid evidence by treating the Nile Basin as an integrated river system and focussing in some detail on the allocation of the Nile water resources among the constituent states.

International Boundaries and the Nile Basin The first point to make is clear from Figure 22: the major rivers of the Nile drainage system cross the major international boundaries at right angles (Egypt-Sudan, Sudan-Ethiopia, Sudan-Uganda) and only a few of its important rivers are actually used as international boundaries (the Kagera). The main natural drainage reservoir lake (Lake Victoria) is also cut through by international boundaries (Uganda-Tanzania especially) and other lakes in the system (Albert and Edward) are likewise divided politically. Finally, the major man-made lake (Lake Nasser) is cut by the Egypt-Sudan boundary. In other words, all the major elements (rivers, natural lakes and man-made lakes) are cut through by international boundaries. And the significance of this fact for our present discussion needs no further emphasis. It clearly provides plenty of additional justification for the opinion that the international boundaries of the Nile Basin are 'bad' boundaries. But it also gives strong support for the view, concluded in the previous chapter, that there is here a great need and opportunity for inter-state cooperation.

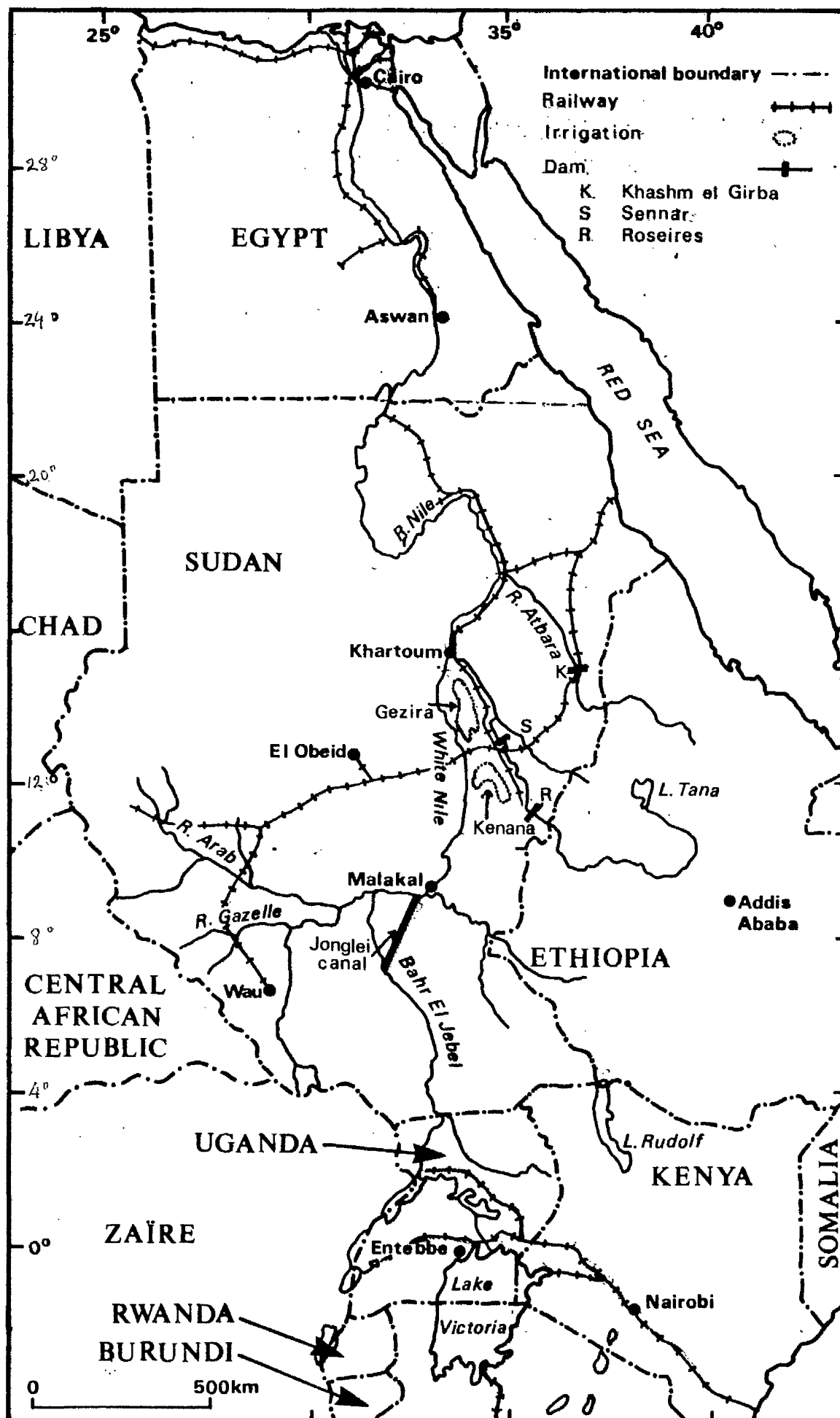


Fig. 22. The Nile Basin - Water Elements (After Griffiths, 1964)

DIAGRAM OF MAJOR NILE PROJECTS

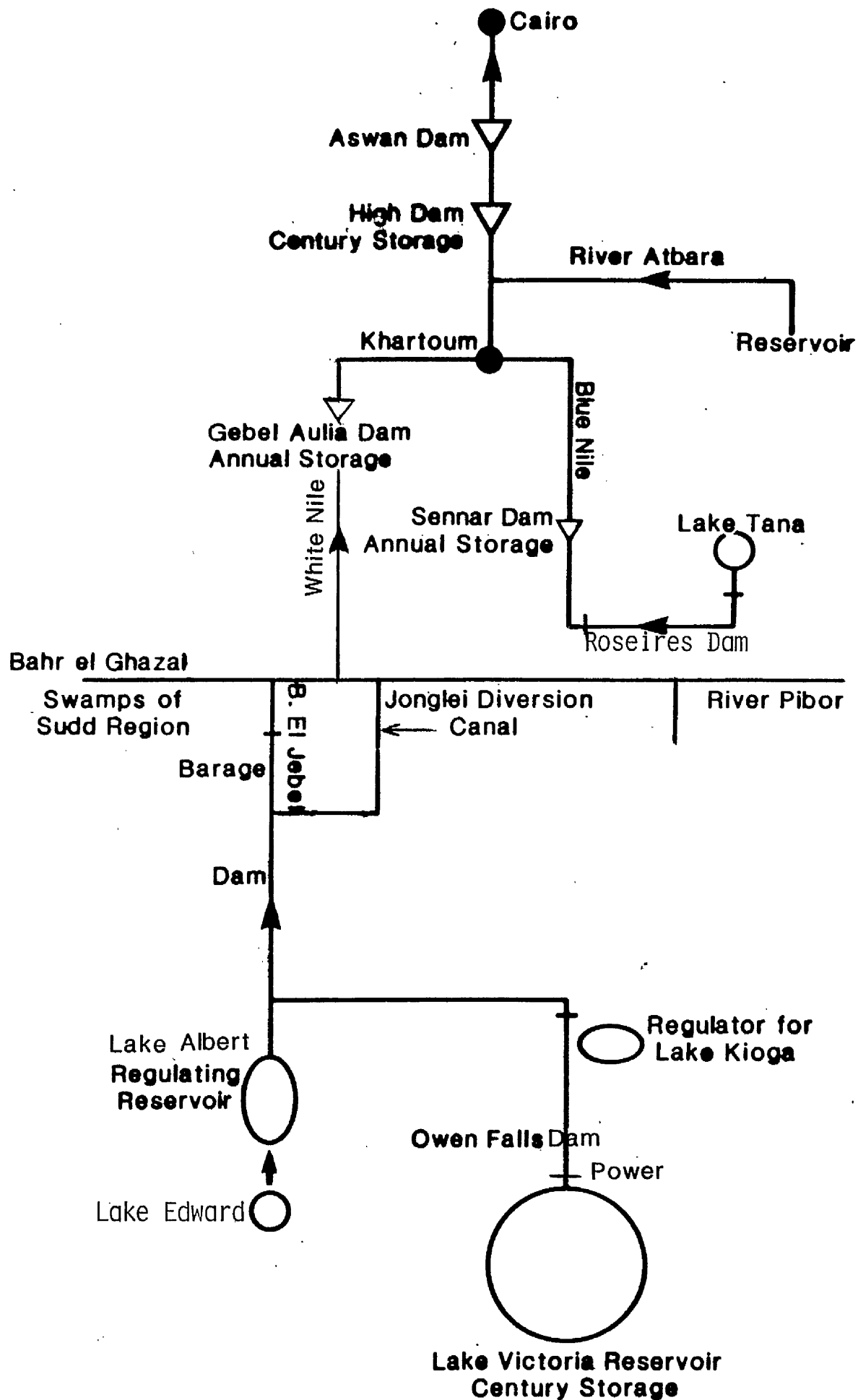


Diagram 3. Major Nile Projects (After Hurst, 1952)

The Nile Waters The main facts about the Nile Waters have already been touched upon (pp.40-2), but a summary of the river system's present-day characteristics is presented in Figure 22. In the extreme south the inland drainage basin of Lake Victoria receives its waters from the east (up to the rim of the eastern rift valley) and from the west (especially the River Kagera, which rises almost 4° S. near Lake Tanganyika, and Lakes Edward and George, via a number of indeterminate streams. In the western rift valley, Lake Edward is also connected through rivers (Semliki) to Lake Albert where it is joined by the Victoria Nile which flows northwards from Lake Victoria through Lake Kioga. Passing over the Uganda-Sudan boundary, the Bahr El-Jebel passes through the sudd region of swamps and indeterminate drainage, and receives several tributaries, notably the Sobat which rises in Ethiopia. At Khartoum the White Nile meets with the Blue Nile, which also rises in Ethiopia at Lake Tana. Some way farther north the Atbara joins the main river from Ethiopia. The Nile continues northwards to cross the Egypt-Sudan boundary at Wadi Halfa where Lake Nasser has been formed as a result of the Aswan High Dam constructed over the boundary in Egypt.

Any description of this kind - even a much more sophisticated and detailed one than seems appropriate here - does, however, fail to focus on the most important and relevant issue for our purposes - the size and allocation of the water resources, their seasonal fluctuations, and the water losses that occur in several parts of the basin. Figure 22, and Diagram 3 summarise some of the information about these issues. But from our point of view here the importance of this information is that it emphasizes the absolute necessity of integrated water control of the Nile waters, from whatever part of the basin they come.

To examine this issue in some detail, the discussion will deal with the development of schemes and projects for the integration of the Nile water resources, both historically and geographically, beginning with the northern sections of the Nile system.

The Northern Nile Basin Appendix I provides a summary of the documentation on the various agreements and commissions undertaken between Egypt and Sudan in attempts to reach effective agreements on how to control and allocate equitably the waters of the Nile in this part of the basin. It will be remembered that the main use of the Nile water in Egypt and Sudan is for irrigation waters: 'the need for artificial irrigation from the Nile River is almost exclusive to Egypt and the northern part of the Sudan' (Megahed, 1973, p.9). Concern with the control of the Nile goes back to the first half of the nineteenth century when perennial irrigation began to replace the traditional basin irrigation system. Barrages began to be built and, after British occupation and influence began in 1882, a wider series of international treaties were negotiated with interested governments in the upstream sections of the Nile system in and around the Lake Plateau. So even before the end of the nineteenth century it was recognised that the Nile Basin waters had to be seen as an integrated system and internationally agreements reached to ensure their full and reliable utilisation, more especially in the interests of Egypt and Sudan. Population increases and agricultural developments continued to make increasing demands on the Nile Waters; and as the need for irrigation within Sudan became more apparent, so a series of projects, including the Sennar dam, was built to launch agricultural development in the Gezira, lying between the White and Blue Niles.

By 1920 the Sennar Dam was incorporated into a series of projects and proposals encapsulated in the Nile Projects Commission of that year. Of particular interest is the way this commission was interested in waters even further upstream - conservation works in the sudd to avoid the swamps; storage reservoirs on the Lake Plateau, centring on Lake Victoria; and a dam on Lake Tana to save some of the Blue Nile's flood water. Another commission of 1925 was followed by the Nile Waters agreement of 1929, concerned solely with the allocation of water between Egypt and Sudan. Disagreements and disputes ensued and Egypt decided to go ahead with her High Dam project while Sudan was determined to go ahead with building the Roseires Dam for the Manquil extension to the Gezira irrigation scheme. Mention must also be made of Egypt's interest in the Lake Plateau where in 1948 construction of the Owen Falls Dam at Jinja (Uganda) was begun and completed by 1954. Egypt paid a large extra sum to enable the dam to be built one metre higher than originally planned so as to increase storage in the Lake; the main objective of the dam, however, was to regulate the discharge from the lake and to generate 150 megawatts of hydro-electricity annually for industry in Uganda and Kenya (Waterbury, 1979).

The Nile Waters Agreement of 1959 (Appendix I) led to the settlement of any water allocation dispute between the two countries. This agreement, however, was still concerned primarily with Egypt-Sudan relations and the allocation of water resources between them.

The Southern Nile Basin In southern Sudan and the rest of the Nile Basin the control of water for irrigation has not yet become so important a factor as it has for long been in Egypt and Sudan. Here in the south, of course, rainfall amounts are greater and rain-fed agriculture the norm, though it is becoming clear that the seasonal

nature and unreliability of the rainfall will increasingly necessitate the use of the Nile Waters for irrigation if substantially higher levels of productivity are to be achieved in the southern parts of the Nile Basin.

Initially, however, control of the upper Nile waters in southern Sudan and the Lake Plateau around Lake Victoria was concerned primarily with the interests of Egypt and Sudan, as the ultimate users of most of the water.

First, the most significant scheme was the Century Storage Scheme, designed to remove the unpredictable element from the Nile discharge by storing several successive annual floods: that is, by storing the annual difference between real needs and total discharge. In this manner a series of reservoirs could be used to bank water against low years or to hold excess water if the flood promised to be especially high.

The Century Storage Scheme was intended to coordinate a series of complicated engineering projects over a period of twenty years among several African states in the southern Nile Basin. The linchpin of the proposed system was Lake Victoria (today Kenya, Tanzania and Uganda are all riparian states of the lake), which was to be used as the major storage reservoir. Lake Victoria, with a surface area of $67,000 \text{ km}^2$, is the second largest lake in the world, and raising its level by just one metre would represent an increment in stored water of 67 billion m^3 - the equivalent of almost 80 per cent of the Nile system's entire annual discharge. However, only about 5 billion of the additional stored water could be delivered into the Bahr el-Jebel River at the lake's outlet each year. Supplementing the over-year storage function of Victoria would be Lake Edward in north-west Uganda, and Lake Tana, at the headwaters of

the Blue Nile. Lakes Kioga and Albert would have operated in tandem with Victoria and Edward respectively so as to regulate the discharge into the Victoria Nile and the Bahr el-Jebel River. Though nothing came of this project it demonstrated both the need and the possibilities. After all, as Hamdan (1981) notes, the resources of the lakes alone are immense. The volume of Lake Victoria is approximately 200 billion m^3 and that of Lake Albert about 155 billion m^3 . Lake Victoria derives advantage from its great surface area and the need for only a low dam, both in structure and cost; while Lake Albert, by its tremendous depth in the rift valley, can be treated like a moat and loses relatively little water from evaporation.

Later, in 1939, Egypt submitted to Sudan a proposal involving storage in the equatorial lakes and the building of dams at the outlets of Lakes Victoria, Kioga and Albert. The main objectives of this proposal - known as the 'Equatorial Nile Project' - was to provide more water for irrigation in Egypt at the time of the year when the Nile's natural flow was inadequate. During that period, the stored water could be released, thus ensuring for Egypt an increased and reliable source of supply throughout the year. The major part of the water would be transmitted through twin canals carrying 55 million cubic metres a day during the dry season and 17 million cubic metres a day when Egypt had adequate water supplies. This project, if implemented, would have lead to a complete reversal of natural seasonal fluctuations with flooding of the grazing areas of the sudd during the dry season, bringing serious hardship to the cattle-owning people of the area. Regulating and reducing the flow of the White Nile when the river was normally in flood would also have resulted in a serious diminution of the main swamps and a reduction of the sudd's fishery resources.

The Equatorial Nile Project (ENP) was subjected to detailed study from 1946 to 1954 by the Jonglei Investigation Team appointed by the Sudanese Government, and their counter-proposals, contained in four volumes, have since been described as 'perhaps the Third World's first environmental impact study'. While accepting the need for storage in the great lakes of East Africa, the investigation team suggested a modification of the original project to maintain the natural regime of the Nile and thereby avoid many of the ENP's dangers. It was further suggested that the discharge capacity of the canals be reduced to a constant flow of 35 million cubic metres a day during normal operations.

These plans, however, went no further. Following the 1959 signing of the Nile Waters Agreement, Egypt constructed the Aswan High Dam for storage purposes and the entire project was dropped for some time (Awuol, 1982).

The next important proposal involved the Hydrometeorological Survey of the Catchments of Lakes Victoria, Kioga and Albert. This project was inaugurated on the 22nd March, 1968 and was one of the largest of its kind, intended to arrange for the collection of data for a comprehensive study of the Upper Nile Basin in East Africa (Appendix II).

Lake Victoria lies in an open trough running from north to south. The hills to the north and the south are quite low and the watersheds are ill-defined; whilst to the east and the west the land rises to mountainous heights along the edges of the two arms of the rift valley system. Mean annual precipitation is extremely varied over the catchment. Although based on rather limited information, particularly on the central portion of the lake itself, rainfall over the lake proper seems to vary from more than 2000mm along the western edge to less than 750mm near the eastern shore.

These variations in topographical and meteorological conditions produce corresponding variations in hydrological characteristics. The Kagera on the west in Tanzania and the Nyando in the east in Kenya are perennial rivers; whereas the streams in the semi-arid lake shores in Sukumaland in Tanzania are seasonal and flashy and the northern lake shore and the Katonga basin in Uganda are swampy. Mean annual runoff varies from about five to six hundred cubic metres per second for some of the smaller rivers. Swift and steep rivers in the vicinity of Mt. Elgon in Kenya are in sharp contrast to the sinuous meanders in the lower reaches and extensive swamps in the lacustrine ends of tributary streams.

Hydrometeorology has a vital role to play in water resources development, involving the development of irrigation, hydropower, flood control and navigation. Schemes for the conservation and utilization of river water for irrigation involve a detailed understanding of the variations in river runoff from season to season within a year; and, year to year in a succession of years. Schemes for power development require a knowledge of the quantum of continuous flow than can be expected in a river and the periods for which flows above and below the normal would occur in order to evolve a suitable pattern for power generation. All schemes involving storage entail provision for surplussing devices as adjuncts to the storage structures so that works for disposal of flood waters have to be suitably designed. The design of spillways makes necessary a detailed study of the behaviour of storms, their depths, durations and frequencies over the catchment area upstream. Flood control structures require a study of the behaviour and pattern of floods in the basin which in turn are caused by meteorological phenomena.

Inland navigation, swamp reclamation, urban, rural and industrial water supplies, fisheries, recreational facilities and

tourism are often combined with irrigation and power development and flood control in plans for comprehensive and integrated multiple purpose river basin development. In the particular instance of the equatorial lakes it is all the more important in view of the fact that the three lakes, Victoria, Kioga and Albert, are inter-connected by the Victoria Nile, apart from their own independent tributaries; any scheme for regulation of the lakes must therefore be based on a determination of the water balance of the lake system in which hydrometeorology plays a significant part. Particularly in international river basins, the feasibility of a project may sometimes depend upon its effect on the streamflow at some downstream point.

In the case of Lake Victoria, there have also been proposals under consideration from time to time for a fuller utilization of the potential storage by adopting commonly acceptable regulation procedures. A scientific consideration of these various proposals for regulation of the lake system and possible future negotiations on the allocation of waters amongst the riparian states needs a comprehensive determination of the water balance of the lake system and the hydrometeorological analysis of the several involved parameters like rainfall, evaporation, inflows and outflows on a commonly acceptable basis.

While the data for such a scientific determination is adequate in some parts of the Upper Nile Basin in East Africa, it is notably inadequate in most locations. It is estimated that, at the present time, streams draining a third of the land area of the Lake Victoria catchment are gauged (less than two-thirds of the estimated total surface flow).

The Objectives of the Project: Therefore, the major objectives of the Project undertaken by the Governments of Kenya, Sudan, Tanzania, Egypt

and Uganda with the assistance of the UNDP and the WMO are "the collection and analysis of hydrometeorological data of the catchments" of the lakes "in order to study the water balance of the Upper Nile. The data collected and the study are expected to assist the countries in the planning of the water conservation and development and to provide the ground work for inter-governmental co-operation in the storage, regulation and use of the Nile."

The proposal additions to the stream gauging network are expected to increase the gauged areas to about 90% of the total. The following specific tasks are assigned to the Project:

- (i) setting up additional data-collecting stations (24 hydro-meteorological, 156 rainfall, 67 hydrological and 14 lake level recording), and up-grading some of the existing stations, in order to complete an adequate network from which basic hydrometeorological data can be collected and analysed.
- (ii) establishing seven small index catchments for intensive studies of rainfall-runoff relationships for application to other parts of the catchment areas;
- (iii) aerial photography and ground survey of those sections of the lake shore areas which are flat and which will be most subject to change with variations in the levels; and a hydrographic survey of Lake Kioga;
- (iv) analysis and interpretation of data collected; and,
- (v) training staff of the participating Governments in hydrometeorological work.

The Project¹ thus represents one of the largest and most outstanding examples of inter-regional co-operation in the sphere of

1. The Headquarters of this project was located at Entebbe from 1968 till 1978, then transferred to Nairobi when the War between Uganda and Tanzania took place.

economic resources for the common benefit. The valuable data collected and the findings of the scientific analysis will be accessible to the professionals of the participating countries to assist them in the planning of water conservation and development not only for the good of the peoples of the country concerned, but in a manner which would not jeopardize the aspirations and interests of the other sister countries.

Another satisfactory aspect of the Project is that the professional and other staff drawn from the participating countries are working together in full co-operation and harmony. It is not only the training in the field of hydrometeorology which these staff would gain but, by the mere fact that they are working and living together, they would get to know each other much better than before and that in itself will bring these countries into even closer contact.

Thus by virtue of their geographical position, 'the peoples of the Nile, by their free will, are now wielding the Nile and Victoria to fulfil their historic mission of serving and unifying the countries on their banks.' (UNDP and WMO, 1968, p.71).

In the late sixties of this century Rwanda, Burundi and Zaire joined this Hydrometeorological Survey, and in the meantime Ethiopia accepted the invitation of the Nile States - as an observer, as it is out of the Lake Plateau - to attend the sessions of the works of the Hydrometeorological Survey. Thus, the meeting of all nine Nile Basin states has been realised, and the Hydrometeorological Survey has been extended several times. In April, 1983, the Egyptian Minister of Irrigation and his Sudanese counterpart declared 'that they have contacted with the Nile States to realise the co-operation between all of them, and all the Nile States have agreed to extend the project of the Hydrometeorological Survey for another

five years starting from this year, and the technical committees are preparing the projects suggested by the Nile States.' (Al-Ahram, April 10, 1983).

Organisation for the Establishment and Development of the Kagera River Basin

A study of the development potential of the Kagera river basin has been jointly undertaken by the United Republic of Tanzania, Rwanda and Burundi, and, more recently, joint arrangements were worked out between the States concerned for a study of the water resources and developmental problems of Lakes Tanganyika and Kivu (UNWC, 1977).

The main objective of the project was to assist the Governments of Burundi, Rwanda and Tanzania in elaborating a plan for the development of land and water resources of the Kagera River Basin, in the training of personnel who would secure the implementation of such an organisation, and in the elaboration of an institutional system for that evaluation. (KRBO, 1979).

With a view to preparing a work programme, evaluating the required inputs, examining secretarial institutional needs, and preparing the donors' Conference, the UNDP sent on site two missions of short-term consultants. The main objectives of the studies included the preparation of an optimal plan for the development of land and water resources in the Basin, taking into account the National Development Plans of the three countries and the statement of propositions to the Member States for the creation of an institutional system to implement that plan.

With this in view, the project had adequately to evaluate all ecological and socio-economic conditions, to review existing development projects and to evaluate the advantages that would result

for the peoples of the three countries from a rational development of land, water and other resources of the Basin. To be considered were the socio-economic advantages and drawbacks that would result from various development projects as well as the ecological changes that would result.

The main objective of the study was to define the changes in ecological systems resulting from variations in swamps' water levels caused by projected hydraulic variations without degrading the ecological system; and to evaluate the economic losses due to the changes in ecological systems.

The report analyses the available meteorological and hydrological data of the Basin; checks their validity; fills the gaps by various statistical methods; establishes correlations between different series and types of data; and, finally, uses the study results to establish a mathematical model for the generation of deliveries at the different points of the river.

Jonglei Canal: The Jonglei Canal is yet another project - this time in Sudan - which is a link in a chain of projects which started around the turn of this century and is aimed at harnessing the River Nile and increasing its water yield for agriculture and other areas throughout the Nile Basin.

With accelerating population growth and economic development, the demand for water by Egypt and the Sudan also accelerated. In order to increase the supply of water, the control system was planned to develop from a simple localized flood protection mechanism to a more elaborate system encompassing damming for annual storage and, more recently, with the completion of the High Dam to century storage.

However, with the beginning of the decade of the 1980s, both Egypt and Sudan reached full utilization of their respective shares of the Nile waters, estimated to average 84 billion M^3 per annum at Aswan. On the other hand, they plan to increase their arable land area by over 50% over the next 25 years, that is, in addition to reaching higher intensity rates in the currently cultivated areas. Accordingly, means of increasing the Nile waters yield to both countries over and above its current 84 billion M^3 level must be urgently sought.

The needed increase in Nile water yield could be ascertained from two main sources which are in fact interrelated. One, through reduction of water losses of the river and its main tributaries, particularly in the Southern Sudan (sudd region); and the other through storage schemes on the Lake Plateau. Needless to say, implementing the latter without the former would be rather futile - if not useless - since the bulk of the stored water would be lost in the sudd region.

The Jonglei Canal Project aims at reducing the heavy water losses in the sudd region which is estimated to reach a level of two-thirds or more of the river's total water discharges passing Mongalla during flood periods (the annual average is 50%). This is to be achieved through the construction of a diversion canal from Bahr El Jebel (near the village of Jonglei) to carry the water discharges in excess of Bahr El Jebel's conveyance capacity without undue loss (Montasser, 1980).

Just what all this will do for and to the people of the Nile - especially the Nuer, Dinka, and Shilluk tribesmen of the southern Sudan - has become a matter of extended debate. Supporters of the overall project - the Nile Waters Agreement - promise that millions

of acres of desert and swampland will become arable and that dozens of new industries will spring up once the Nile is tamed. Opponents charge that a tragic environmental débâcle is in the making. They say that the region's fragile ecosystem will be destroyed, the tribesmen of the southern Sudan will be driven from their traditional homelands, and hundreds of endangered species of wildlife will be threatened.

The Jonglei Canal, currently being excavated, is a project to conserve the waters of the White Nile which are otherwise lost in the sudd. It is estimated, for example, that of the water that flows into the sudd, only about half emerges again at the other end, the other half disappearing through evaporation and a limited amount of seepage. Hydrological studies indicate that approximately 15 billion cubic metres of water are lost annually in this way.

Resulting from this project will be an increased annual yield of 3.8 billion cubic metres of Nile waters at Aswan - 4.7 billion at Malakal - to be divided equally between Egypt and Sudan. The two countries will also share the project costs for the excavation of a canal to divert a quarter of the flow of the White Nile from the sudd to Lower Sudan, and the construction of head and tail regulators as well as navigation locks. Substantial funds will also be allocated for research and development.

Originally, it was decided that the canal would be dug from the mouth of the Sobat River near Malakal to Jonglei, a village on the River Atem, a distance of 280 kilometres. Now, however, the Jonglei Canal has been aligned well to the east of Jonglei, joining the main flow of the White Nile, or Bahr El Jebel, just north of the provincial centre, Bor. The new length of the canal is estimated at 360 kilometres. Fully navigable, the average width will be 52 metres

and the depth 4 metres and, when completed, it will divert 20 million cubic metres of Nile waters a day from the sudd and so contribute significantly to the available water resources of the Nile downstream.

The Nile Basin Board Finally, mentioned must be made of the proposal to establish a Board for the Nile Basin. This initiative justifies much of the argument presented in this thesis - that cooperation between the Nile Basin States is nowhere seriously hindered by the location of international boundaries; that in any case the OAU decision of 1964 means that the present international boundaries should be made to work; and that there are immense opportunities for cooperation between the nine states of the Nile Basin. The invitation to the Nile Basin states came initially from Egypt and Sudan, inviting the other seven states - Ethiopia, Uganda, Zaire, Kenya, Tanzania, Rwanda and Burundi - to participate in establishing the Nile Basin Board (Al-Akhbar, August 19, 1981, p.5; Al-Ahram, June 26, 1983, p.6). The nine states are still studying this proposal as a positive initiative for practical cooperation and 'unification' (sic). Such cooperation, it is argued, would put an end to inter-state disputes of all kinds and enable steps to be taken towards ensuring the welfare of all the peoples of the Nile Basin.

More recently, the Egyptian Gazette (April 29, 1984) has given further details on these proposals: 'The importance of conferring between the countries of the Nile Basin on the establishment of projects

or dams on the Nile course was stated in the initial report of the committee of Arab and Foreign Affairs and National Security. The report, that centred round fields of cooperation between countries of the Nile Basin, was discussed yesterday (28 April, 1984) at a session of the Shura Council. As for concurrence regarding regional security between these countries, the report stressed the necessity of achieving Nile Basin security as the foundation of Egyptian and Sudanese national security. Such security is not confined to the course of the Nile in Egypt and Sudan but extends to the Ethiopian and tropical sources of the Nile.

Concerning economic cooperation, the report stressed that the Nile Basin countries should seek effective solutions for their economic problems. Among such solutions is the establishment of funds to secure the prices of exportable outputs and diversification of these exports to avoid the dangers resulting from the exporting of one single commodity.

Moreover the report recommended the formation of economic bodies between the Nile Basin countries. These would integrate the fields of economy, commercial exchange, means of increasing production, and the exchange of technical expertise.

Relating to foreign affairs, the report also urged the bodies concerned to study the possibility of establishing a regional organization comprising the nine countries of the Nile Basin in order to coordinate their efforts and strengthen relations between them.' Written after the present thesis had been written, such comments justify both the line of argument pursued and the region covered in this thesis.

CHAPTER SIX

INTERNATIONAL BOUNDARIES AND INTER-STATE COOPERATION

The case for some kind of inter-state arrangements for maximising and rationalising the Nile Waters resources, their allocation and utilisation, has long been appreciated among the various states of the Nile Basin. And, as the last chapter demonstrated, a series of bilateral and multi-lateral agreements or arrangements has developed over the years, culminating in the Nile Basin proposal mentioned at the end of the previous chapter. This kind of proposal has a long way to go, but it is clearly indicative of the need for inter-state cooperation determined by the nature and distribution of the basin's water resources. But there is a great deal of difference between ad hoc water-resource arrangements of this relatively simple kind - where mutuality of interests is so obvious and clear-cut - and the more wide-ranging economic or political cooperation between states where the complexities and often apparent conflict of interests pose formidable difficulties, if not obstacles, to even the desire for cooperation. Nevertheless, the existence of boundaries and real or supposed boundary problems is now frequently invoked in support of policies of closer cooperation or unification, especially where traditional migration and trade continues to take place across a boundary line. Such fundamental regional economic and, perhaps eventually, political cooperation or unity is now commonly argued as the necessary end to which all states should aspire. Clearly, if the conclusions reached in the chapter four of this thesis are valid, then the existence of international boundaries is not the chief or even the important cause of failure to achieve inter-state cooperation. It is therefore on the geography of the areas being bounded (i.e. the

states) rather than on the geography of their boundaries that our major attention should be focussed. Yet the sheer size and complexity of the issue of regional economic cooperation deters analysis of any depth - even leaving aside the difficulty of adequate data. The problems are numerous, related to a host of interrelated physical, positional, social, economic and political factors.

Take for instance, the economic issues on the question of international boundaries and inter-state cooperation in the Nile Basin. Balkanisation by the imposition of European colonial boundaries, which have become firmer and more like barriers since independence, has led to economies which are generally in no sense complementary: they are essentially artificially contrived national economies operating within former colonial boundaries. There are obvious pressures, therefore, to loosen these international boundaries, for in varying degrees they are obstacles to the free movement of goods, persons and capital between states. The state boundaries of the Nile Basin have created a series of relatively small, underdeveloped economies. 'There are, therefore, strong theoretical arguments - assuming economic development as a desirable goal - for an economic loosening of the boundaries' (Svendsen, 1969, p.59). Again, theoretically, internal markets must for long remain too small - both in size and more especially in purchasing power - if they are to continue to be confined solely within existing international boundaries.

This point can be eloquently demonstrated by the example of the transport problems of the three landlocked states of the Nile Basin - Uganda, Rwanda and Burundi. No study of these states comparable to the detailed study of the West African land-locked states by Hilling (1968) has yet been attempted, and this is not the place to make such an attempt. But most of Hilling's comments about the land-

TABLE IVAccess Routes for Land-Locked States

<u>State</u>	<u>Capital</u>	<u>Port</u>	<u>Mode of Transport</u>	<u>Distance (kms)</u>
Burundi	Bujumbura	Dar es Salaam	lake/rail	1440
		Matadi	road/river/rail	2920
Rwanda	Kigali	Mombasa	road	1655
Uganda	Kampala	Mombasa	rail	1160

locked states of West Africa are highly relevant to the East African case. At present the only practicable transport route for Uganda's exports and imports is through Kenya. As for Rwanda and Burundi, they possess no rail link and only poor quality road links which again, for obvious logistical reasons, look eastwards to the Indian Ocean coast through Uganda and Kenya - sometimes including the Lake Victoria steamer route from Bukoba to Kisumu - or through Tanzania (Figure 22), joining the Tanzanian railway or road system, both of which are far from reliable in this area.

Throughout the Nile Basin, as Figure 22 shows there is only one cross-boundary railway - that between Kenya and Uganda - though there is another rail link across the Kenya-Tanzania boundary outside the Nile Basin region just beyond Mt. Kilimanjaro. Otherwise, the Egyptian and Sudanese railway systems are not linked, the former finishing at Aswan High Dam, the latter at Wadi Halfa at the southern tip of Lake Nasser. On the other hand the potential for further rail links across international boundaries is considerable. Plans are already being made to link Egypt and Sudan with a rail line around Lake Nasser. The western branch of the Sudan railway system is planned to link up with the Zairean system, while the eastern branch at two points - Roseires and Kassala - is very close to the Ethiopian boundary. Further south, Uganda's sole link with Kenya could be supplemented by building an extension southwards from the Ugandan railway east of Lake Victoria to meet a northwards extension of the Tanzanian railway from Mwanza. The Mwanza line extension and an extension northwards of the line presently terminating at Kigoma on Lake Tanganyika could also serve admirably the land-locked states of Rwanda and Burundi.

A further illustration of the problems of inter-state co-

operation can be taken from the political field, notably the widely differing political systems, philosophies and ideologies existing among the constituent states of the Nile Basin. Using Young's (1982) taxonomy, Ethiopia is an 'Afro-Marxist' state, Tanzania and Egypt are 'Populist-Socialist' states, and Kenya is an 'African Capitalist' state. This means that aims, priorities, attitudes and criteria of 'success' differ markedly from state to state.

Clearly many of these wider questions - whether economic, political or anything else - raise issues and problems which lie outside the central focus of the present thesis. But some attempt, however selective, must be made to identify some of the most relevant issues. The present chapter examines first a well-known case of an attempt at regional unity - the now defunct East African Community; discusses wider regional groupings; relates the whole question of inter-state cooperation across existing international boundaries to the issue of nationalism and national unity; and, finally, places the whole discussion within the context of the aims, functions and operations of the Organization of African Unity.

The East African Community This is perhaps the best-known of attempts of any group of members in the Nile Basin States to achieve any substantial degree of cooperation for wide-ranging economic development. The East African Community, now defunct, had relatively early origins in that its earliest progenitor was the East African Common Market, established in the 1920s when the purpose of uniting Kenya, and Tanganyika behind a common tariff wall was primarily to protect the then 'White Highlands' agriculture of Kenya and the emerging industrialisation of the Nairobi and Mombasa areas - also in Kenya and also dominated by European settlers and companies. After the war,

in 1948, the East African High Commission was established specifically for joint transport and communication facilities between the three countries; this move resulted in a substantial rise in trade within the three countries across international boundaries - so substantial (by African standards) that it accounted for some 20 per cent of all external trade for the three countries involved. In 1961 the East African High Commission was replaced by the East African Common Services Organisation (EACSO). Its functions were widened and specified to cover more than only common transport and communications, together with common external tariffs. EACSO also involved a common monetary, banking and financial system; common research, administrative operations and consultations; and the setting up in 1962 of the joint University of East Africa. Centrifugal strains, however, developed, partly because of the increasing emphasis on individual and divergent state interests, plans and policies; and partly because of the inequitable distribution of the gains, Kenya benefitting at the expense of Uganda and, particularly, of Tanzania. Major developments, investments and industries were increasingly being concentrated in Kenya and, in 1964, the Kampala Agreement, amended at Mbale in 1965, provided for the relocation of some industries (beer, shoes, cement); the allocation of some new industries to Tanzania and Uganda; and jointly agreed quotas to protect new industries in Uganda and Tanzania against competition from Kenya. Individual state interests, however, made progress difficult and it was recognised that political union of some kind was a necessary concomitant of effective economic cooperation in the region - a realisation which recalls the Casablanca-Monrovia argument to be raised later in this chapter. The East African Community of 1965 was therefore constituted within a formal treaty framework (Green and Seidman, 1968). This lasted until 1977 when it broke down, directly as a result of Tanzania's closing of the

boundary with Kenya and the grounding of East African Airways (EAA). The EAC has now been replaced by a Preferential Trade Area (PTA) which covers several countries outside the former EAC in East, Central and Southern Africa.

The case of East Africa shows very clearly the difficulties of maintaining cooperation between states 'even where some tradition of it has already been established between areas formerly under the rule of a single imperial power, and where its economic advantages have already been clearly demonstrated' (Fisher, 1968, p.9). Langlands identifies the intrinsic conflicts between national, regional and federal interests, putting much of the blame on 'the essentially arbitrary political units' imposed by the British who, in drawing their colonial boundaries, seldom took into account the interests of the indigenous people' (Langlands, 1968, p.286). This kind of explanation has already been examined critically in an earlier chapter; but later on in the same article Langlands agrees that there is now general agreement in East Africa that the international boundaries are accepted as sacrosanct. 'The state area is given, and it is assumed that if anything has to change it is the attitude of the people, not the area' (ibid., p.286).

When the border between Kenya and Tanzania was closed in 1978 it seemed that the main reason was not so much the demise of the EAC but rather disagreement over the issue of assets and liabilities of the former community - railway rolling stock and the like.

With the closing of the Tanzanian-Kenyan boundary each country seized whatever joint property it could find within its borders in the form of movable assets; fixed assets became nationalized, by the countries in which they were based. Relations between the East African states became so bad, with the main protagonists, Kenya

and Tanzania, accusing each other of expropriating EAC property and assets, that a mediator from the World Bank had to be appointed to work out a formula for sharing the assets and liabilities. The economic effects of the closure of the Kenya-Tanzania boundary were catastrophic, denying the Kenyan and Tanzanian market some Shs. 180 million a year. Kenyan trade with Zambia was also seriously disrupted, previous transportation through Tanzanian roads and railways having been replaced by the costlier and more risky route from Kenya through Uganda, Rwanda, Burundi and Zaire. Industrial production in Kenya was thus a casualty, leading to labour layoffs for lack of orders (Africa, Mag., 1984, No.149).

In November, 1983 the border was reopened and President Moi's analysis of the position today is particularly relevant. Moi sees the reopening of the border not as a way of reviving the EAC but rather as a means of enhancing regional cooperation through increased trade cooperation - once again going back to a much narrower ad hoc form of cooperation. Moreover, he sees the new regional basis for such trade cooperation, not the former narrow basis of three states but a much larger economic unit similar to the Economic Community of West African States (ECOWAS). Countries within East, Central and Southern African have agreed on the establishment of a Preferential Trade Area (PTA). Here again, the new basis is designed to look not northwards but southwards and south-westwards. Moi argues that the EAC was too small and its authority vulnerable to internal differences, usually resulting with two of its three members siding together against the third. Also its scope, area of cooperation and political base were rather narrow. The PTA has a broader operational base and more viable economic integration unity within its area 'Although the East African Community is dead, the spirit of

cooperation among the people of East Africa still survives' (Fadugba, 1984, p.26). This 'spirit of cooperation' is expressed less formally - but perhaps more effectively - than before by a series of ad hoc arrangements. Thus top defence, immigration and administrative officials of the two border regions between Kenya and Tanzania met to work out agreements on immigration and movement of people and goods across the re-opened border; cattle-rustling; poaching; and the repatriation of unwanted persons. Both countries also pledged not to carry out military exercises along the border. Ministers responsible for communications, transport trade and tourism have also met to cooperate in these fields of activity of mutual importance to both governments.

Moi's reluctance to resuscitate the EAC is understandable on many counts, including those mentioned earlier. But an additional reason is that the closure of the boundary between Kenya and Tanzania had some clear positive effects on the Tanzanian economy. Tanzania was forced to set up a number of industries which now produce virtually all the consumer items previously imported from Kenya.

Uganda, after the disruption, disorder and chaos of the Amin period, is viewed differently as a partner in cooperation, on however ad hoc a basis. It also views the collapse of the EAC from the point of view of a seriously land-locked state. As Obote has put it 'The biggest problem facing African unity is one of communication... Take, for example, we in Uganda. In order to communicate with Rwanda our neighbour, by telephone or by telex, we have to route all these systems through Europe.' (Africa Mag., 1984, January). Obote argues that the most important issue in aspiring to unity at any level is communication in all its forms, both technological and human.

Wider Regional Groupings In examining the attempts to override the divisive effects of existing international boundaries on social, economic and political developments within the Nile Basin, it must be borne in mind that the Nile Basin does not exist in a vacuum, and that its constituent states have interests and responsibilities elsewhere as well as in the Nile Basin. There indeed have been - and in many cases there still are - strong centrifugal forces at work within the Nile Basin states. Indeed, in some senses there appear to be few grounds for cooperation between the constituent states beyond the water-resource issue. Several states have outside organizational, regional or simply emotional attachments with groups of states outside the Nile Basin. To give some examples. In 1975 Sudan and Egypt were associated with Libya, Tunisia, Algeria, Morocco and Mauritania in the Arab Bank for Economic Development in Africa, known generally as BADEA. As its name implies this organisation is concerned with the financing of economic development.¹ A decade earlier, in 1965, Rwanda and Burundi became members of the African Francophone group OCAM (Organization Commune Africaine et Mauricienne). This has a fluctuating membership and has its origins in the Brazzaville group of 1960 (mentioned later in this chapter). Its main functions are to do with posts and telecommunications, tourism, industrial patents and development banks. As for Tanzania, its orientation is to a significant extent southern and south-western: Tanzania is one of the 'front-line states' confronting the Republic of South Africa and it possesses the important Tazara rail link with the copper fields of Zambia. More recently still, Tanzania became in 1979 one of the member states of SADCC (Southern African Development and Coordinating Committee). Then all the Nile Basin states except for Egypt, which has only observer status, are members of the Conference of East and Central African

1. Clearly, this grouping was among states of the Arab League.

States, established in 1967. Burundi, Rwanda and Zaire are the three members of the Economic Community of the Great Lakes Countries established in 1976 to discuss economic matters. In 1975 the Lakes Tanganyika and Kivu Basin Commission was set up to coordinate hydro-meteorological research for the area and Burundi, Rwanda, Tanzania and Zaire became members. In 1969 Burundi, Rwanda and Zaire founded the Organization Commune pour la Cooperation Economique de l'Afrique Centrale for economic cooperation. Coordination of planning and construction of a trans-African highway included among its members Kenya, Uganda and Zaire when the Trans-African Highway Coordinating Committee was set up in 1971. Finally, as already indicated, Kenya's initiative has recently set up the Preferential Trade Area of which all the Lake Plateau states of the Nile Basin are members.

These various groupings vary very much in their purpose - ranging ostensibly from full economic cooperation to a narrow single-purpose aim. They also vary very much in their efficiency. But they do indicate the need always to consider the external ties and responsibilities the individual states of the Nile Basin have with states outside the region.

The Economic Commission for Africa The Economic Commission for Africa (ECA) was set up in 1958 when most of Africa was still under colonial control, but it now acts in close partnership with the Organization of African Unity (OAU), to be discussed in a later section. A summary judgement on its operations must be that ECA has had remarkably little success in its aims to support 'rapid economic development, especially industrialization, aimed at achieving economies of scale in production and correspondingly large internal markets'. Within the Nile Basin it has had a regional base in Kisenyi (Rwanda)

and it has been associated with such matters as geothermal research programmes for electric power production in Kenya and Ethiopia. But its problem throughout has been that to be effective it has to operate at a supra-national level, most states being too small in population and resources to provide viable units for ECA's operations. ECA's plans for integrated transport systems, for example, and for the location of basic industries, have often been unrealistic in that the immediate benefits would have been very unequally distributed among the states concerned. The ECA therefore encourages regional economic groupings, acts in an economic advisory capacity to African states, and produces statistical and other information relating to international trade, resources and economies. It is also responsible for the operations of the African Development Bank, similarly associated with the OAU.

Nationalism It is significant that all attempts at inter-state cooperation face difficulties from and usually founder upon the national interests of individual states. Where a conflict arises - as it inevitably must at some stage - between the interests of a nation operating within clearly defined international boundaries and the interests of a wider grouping for some form of cooperation which to some extent must ignore the existence of those international boundaries, then national interests tend to override the interests of a wider regional grouping - after all, exactly the same process can be seen operating in the European Economic Community. And it must be remembered that the national identity of modern states formed within previous colonial boundaries has only existed in most cases for some 25-30 years. Too much should not therefore be expected too soon, especially as the main problems facing all the individual

nations of the Nile Basin are not, in their own perception, problems of conflict or cooperation with other states, but rather they are problems of achieving true independence and national unity within their own international boundaries. Many African states, on attaining independence, found themselves facing serious problems of internal dissension arising from, for example, tribal or ethnic differences among their people and totally lacking in that sense of unity and cohesion which is an essential prerequisite of the nation state (Boateng, 1975).

Perhaps the best-known instance of a Nile Basin state suffering from internal problems of national cohesion and unity is the Sudan. This country's difficulties arise primarily not from its numerous and often 'bad' boundaries with Egypt, Chad, Central African Republic, Zaire, Uganda, Kenya or Ethiopia. They arise much more from the way the international boundaries bequeathed to the nation by European powers simply lumped areas and peoples together into one 'state' and so created internal divisions and centrifugal forces within the state. Above all in the Sudan there is the serious and intractable north-south problem - the north is largely part of the Arab world, the south contains the Nilotes, Nilo-Hamites and Negroes of the Sudanic linguistic group. Thus while most of the northern peoples are Arabicized and have come under the unifying influence of Islam, the diverse peoples of the south have remained ethnically distinct and politically fragmented. Swamps and forests in the south have inhibited communication and perpetuated separate tribal units. Movement and contact between north and south have always been difficult because of the swamps, and until the late nineteenth century even the main Nile was unnavigable. Except along the Nile itself, an empty area - empty because of poor water supplies and early

depopulation by tribal raids - separates the two regions. During the Anglo-Egyptian Condominium rule this lack of contact was accentuated, entry of northerners into the south being restricted and Arab influences from the north discouraged. Conversely, few southerners were allowed to move to the north. The south was consciously isolated culturally and religiously, Christian missionary activity there being pursued energetically. The south's lingua franca became English while that of the north remained Arabic. The south is relatively backward and poor. President Nimeiri's attempts to unify north and south have concentrated mainly on Arabization of the south, according to his critics, but certainly the underlying lack of unity between north and south remains a fundamental problem in his attempts to improve conditions.

To some extent there are similar though not necessarily north-south centrifugal tendencies in all the Nile Basin states. In two states there is the added problem that the present international boundaries represent the merging of two former units - Ethiopia at present still includes the former Eritrea, over which there is a long drawn-out war of secession in progress; and Tanzania has had occasional periods of tension with Zanzibar, incorporated into the former Tanganyika to create the present state of Tanzania in 1964. The relevance of all this to our main point is clear. Throughout the region the internal divisions within each state are of more immediate significance to the people and, probably, to the governments than are the external tensions at or beyond a state's boundaries. Whether internal cohesion and national unity are a necessary prerequisite for regional groupings is of course another matter. What is certain is that the pattern, timing and form of the transfer from colonial to independent status made such preoccupation with internal national unity inevitable for a long time to come.

The Organization of African Unity (OAU) Although the OAU exists for much more than simply to deal with boundary problems in Africa, its resolutions have had a great effect in influencing the degree of conflict over such international boundary issues as there are and upon the attitude of both academics and practical men. Above all, the 1963 OAU Charter, as Appendix III indicates, includes quite specific reference to international boundary issues, for it has as one of its chief aims a determination to defend the sovereignty, territorial integrity and independence of all African states. The OAU, then, supports the belief expressed in this thesis that the present international boundaries, however illogical and even absurd they may appear, should be viewed as immutable and sacrosanct. To understand the context of this decision that all international boundaries must remain as they are it is important to appreciate the way in which the OAU was set up (Appendix III).

The Charter of the OAU is something of a compromise between two previous 'groupings' - one at Casablanca in 1961, which provided for a fair degree of political union between states and so for some giving up of sovereignty; and one at Monrovia in the same year which approved basic principles of cooperation but did not imply any kind of political integration. Its summary aims are:

1. To promote unity and solidarity among African states.
2. To intensify and co-ordinate efforts to improve living standards in Africa.
3. To defend the sovereignty, territorial integrity and independence of African states.
4. To eradicate all forms of colonialism from Africa.
5. To promote international co-operation in keeping with the Charter of the United Nations.

The OAU is essentially a political organisation of equal and sovereign member states whose effectiveness in terms of actual action, like the United Nations, is limited by the important constraint that it cannot interfere in the internal affairs of any member country. This is at once a weakness and a strength - a weakness because it renders the Organisation powerless to offer assistance even where the internal actions of a member state clearly conflict with the spirit of the Organisation's Charter; a strength because by removing the Organisation from involvement in the internal affairs of its members it protects it from any possible charge of partisanship and therefore makes its authority more acceptable to all its members. However, in addition to its strictly political functions the Organisation also aims to coordinate and intensify the efforts of members to improve living standards in the continent as a whole and to promote international cooperation within and outside Africa, having due regard to the Charter of the United Nations and the Universal Declaration of Human Rights.

The 1964 Cairo summit meeting of the Organisation of African Unity pledged all member states to respect the borders existing upon achievement of independence. The OAU has since successfully intervened in border disputes between Gabon and Equatorial Guinea, Guinea and Senegal, and Morocco and Algeria, but a few troubled borders remain, notably between Somalia and Ethiopia. In August 1976 a Mediation Committee, set up to arbitrate in the Ogaden war, reaffirmed the inviolability of colonial boundaries.

The OAU continues to operate on the principle that even though boundaries may not be justified on ethnic - or indeed most other - grounds any adjustment of any international boundary in Africa would simply create other problems. The OAU accepts that the

nation state will continue to remain the organizing unit and that all inter-state problems must be solved by solutions other than by changing international boundaries. For all these reasons the July 1964 resolution of the OAU 'solemnly declares that all Member States pledge themselves to respect the borders existing on their achievement of independence.'

The fact that the OAU has set its face against changing Africa's international boundaries does not mean that all states accept the principle of immutable or sacrosanct boundaries. There have been many violations of existing boundaries since 1964 - in our study area between Tanzania and Uganda and between Egypt and Sudan, for example. Moreover, a number of writers argue quite specifically against the principle, and it may well be that internal tensions and inter-state conflicts over a whole host of issues might lead to many other attempts to change the existing state pattern. On simple practical grounds, while an acceptance of the status quo may be justified in terms of the international stability it fosters, the economic consequences may be serious - especially for the land-locked states of Uganda, Rwanda and Burundi. Chime (1969) is unhappy with the OAU's stance on boundaries for a quite different reason. He argues that the OAU was meant to be the culmination of the Pan-African dream to eradicate the boundaries bequeathed by colonial powers. To allow the continued existence of colonial boundaries is, so he believes, to condone neo-colonialism. Unsatisfactory and arbitrary boundaries must be changed as they have, according to Chime, proved to be 'stumbling blocks in the relations between African states' (ibid., p.66). According to Chime and many other authorities of this school of thought, the case for rejecting the immutability of international boundaries in Africa is stronger than

in any other part of the world. For Africa has a uniquely high concentration of states 'whose boundaries are drawn with little regard for those elements of geography - national entities or ethnic groups, convenience of economic activity or lines of communication' (ibid., p.65).

Those authorities who support the OAU's policy of maintaining the status quo of boundaries in Africa produce a number of arguments other than those implied in the OAU statements and Charter. Allott (1969) notes that the strong interest in preserving the status quo as far as African boundaries are concerned embodies a notion expressed in its strongest form in the international law doctrine of uti possidetis, which was borrowed from Roman law: that an existing state of affairs should be preserved, whether its origin was lawful or not. Touval (1969) points out that the reason some authorities (and governments) do not accept the status quo in respect of former colonial boundaries is that they think in terms of 'geographical determinism', laying too much emphasis - as did Curzon and Holdich - on the geographical (and defensive) factors of a boundary. Such authorities are still making value judgements about 'good' and 'bad' boundaries, by which they mean the degree to which boundaries respect 'geographical realities'. Until recently - certainly in practice - the idea of defence and protection against attack was very strong and uppermost in people's minds when fixing international boundaries. But this attitude was in itself a cause of conflict and the idea of protective or defensive boundaries has now probably been rendered obsolete by technological advances in weaponry. As Touval argues, so-called boundary problems arise not from the facts of geography - the location of the boundary or the way it cuts through physical or human features - but from what he calls 'the realm of

politics'. He cites the example of the Ethiopia-Somalia conflict, widely quoted as an example of a 'bad' boundary on all geographical grounds. But, as Touval puts it, 'no doubt, the Somali tribes' need to cross annually the border from Somalia into Ethiopia for grazing, and friction between these tribesmen and the Ethiopian authorities, have contributed much to the conflict between the two states. But arrangements for grazing for the tribes could have been made without the issue becoming a major territorial dispute.' At this point it can be pointed out that this is exactly what has happened with the Masai problem, where the Tanzanian and Kenyan authorities have made such arrangements. But, as Touval goes on to say, 'Somalia chose to pursue irredentism, and did not seek a solution through arrangements to facilitate trans-frontier grazing' (Touval, 1969, p.104).

There is no doubt that the vast weight of opinion - especially among African leaders - is today against shifting the existing boundaries. Most governments now fully accept Article III, paragraph 3, of the OAU Charter which pledges all states 'to respect for the sovereignty and territorial integrity of each state and for its inalienable right to independent existence'; there is, too, general support for Article 19 which set up the machinery to preserve the status quo of boundaries between African states.¹ As President Tsiranana of Madagascar put it, 'it is no longer possible, nor desirable, to modify the boundaries of Nations, on the pretext of social, religious, or linguistic criteria' (Tsiranana, 1966). Together with this essentially practical view, backed up by the OAU, there are those who clearly accept the opinion, expressed in this thesis, that the policies or the cupidity of states create friction, not the boundaries which frame them. This is well put by Zartman (1969, p.79): 'any African state can have boundary problems if it

1. The Mediation, Arbitration and Conciliation Committee.

wants' and 'there are so many real and possible boundary problems in Africa that it is a living museum for taxonomy and analysis... Boundary problems are policy problems. A government decides whether it wants to claim neighbouring territory, and then decides how to pursue its goals'.

CONCLUSIONS

The final section of the previous chapter dealt with what is undoubtedly the most central and practical point of relevance to any contemporary study of international boundaries and inter-state cooperation in Africa - the decision by the OAU to support the existing former colonial boundaries as the territorial frameworks for the independent nations of Africa today. In spite of all the weaknesses of existing boundaries - at least according to academic and, especially, European writers - it is recognised among Africans themselves that any alternative boundaries would create more problems than they would solve. After almost a quarter of a century of static international boundaries in the Nile Basin, at least, there is now no significant move or desire to change them, and the earlier comment by Barbour (1961, p.303) that 'the present pattern of countries and boundaries may not be destined to endure for long' does not now represent a tenable position. The fact that the boundaries have existed unchanged for so long into independence and are now sanctioned by the OAU means that today the international boundaries of the Basin are not critical features in inter-state relations: certainly they are not anything like Curzon's "razor's edge" referred to in chapter one.

In practice, then, the international boundaries of the Nile Basin tend to reject the hypothesis that the boundaries themselves qua boundaries are today significant causal factors in conflicts between states. Inter-state conflicts have existed within the Basin, and will no doubt occur again; but, as with the break-up of the East African Community, 'border problems' are seen to be the expression and symptom of or the excuse for such conflict, not its cause. On the other hand, while it may be true that boundary problems

involving large areas and large-scale attempts to resolve them are likely to decline in Africa, Zartman (1969, p.10) makes the point that border disputes - the result of local hazards implicit in the exact demarcation of a line on the ground - will continue to arise. To this writer, Zartman's distinction between a 'problem' and a 'dispute' is too arbitrary to be of much value in any particular analysis. But there is little doubt that certain types of problems may well increase: there are, for instance, the problems of refugees, the problem of 'shiftas' and the difficulties arising from supporting cross-border guerrillas. There have been many cases of all these types of problem in the Nile Basin: for example, real friction between Ethiopia and Sudan only developed after the 1964 Ethiopian revolution when Sudan's policy of tolerating bases in the Sudan for the Ethiopian separatist movement led to inter-state conflict. Yet in all these types of problem, the evidence and analysis presented in the present thesis supports the contention that the actual boundary has in no case caused the problem: the problem is expressed at the boundary but is not caused by the location or nature of the boundary.

Without in any way trying to provide an apologia for colonial partitioning and boundary-making, the present study firmly suggests that the causative role of international boundaries in inter-state disputes or conflicts in the Nile Basin is very slight at most. Both bilaterally and multilaterally within different regional groupings, the major problem is the nature of a state - its government, ideology, economic status, social cohesion and the like - vis à vis another state. In other words, to follow Ancel, the problem is between nations, not about boundaries. Furthermore, according to Widstrand (1969, p.168), this means that only an idiographic approach is legitimate in the study of boundaries. No useful generalizations are possible, he argues, for 'every boundary problem is unique and can only be solved to a limited extent by analogy'.

Looking to the future, what kind of inter-state cooperation is likely? At the level of water resources, there seems little doubt that the Nile Basin states have enough mutuality of interest to guarantee this kind of cooperation. Outside this field of activity, however, it is likely that national interests will continue to supersede those of larger groupings or regions. Ad hoc agreements or arrangements may well proliferate, as in East Africa, but formal 'communities' or organizations are unlikely to get very far. As for political union of some kind, this seems further away than at independence. However unsatisfactory national boundaries may appear in theory, in practice they do represent the territorial limits of administration and it is within these limits that the interests and loyalties of a state are now - perhaps increasingly - focussed. Inter-state cooperation, in spite of the theoretical opportunities for such cooperation provided by the 'arbitrary' boundaries, does not seem to be occurring at any substantial economic, let alone political, level. A possible exception lies in the northern part of the Nile Basin, where some kind of closer linkage, perhaps even involving the setting up of confederation, may well be achieved between Egypt and Sudan.

This raises an important question that underlies much of the argument in the present thesis. Is nationalism, expressing itself within national boundaries, a desirable end in itself or a desirable precondition for subsequent inter-state cooperation? Whatever may be said of nationalism, and in whatever way it may be evaluated, there seems little doubt that in the 1980s there are clear signs of trends towards the more parochial forms of nationalism and away from the kind of inter-state cooperation discussed in the final chapter. Cooperation is viewed as rhetoric: nationalism is the reality. International boundaries today - throughout the Nile Basin - have never acted so clearly as barriers as they have increasingly become since independence. This was, of course, to be expected, and not only because

boundaries define territory and nationality. For during the colonial period 'the weight of imperial power on each side held the position steady, and the border remained open, subject to customs and visa requirements, except when the European states quarrelled among themselves' (Austin, 1963, p.143). Moreover, it is clear that boundary problems arise from the efforts of states to achieve coincidence among its three units of interest and identity - 'the popular unit or nation, the organizational unit or party-government, and the territorial unit or country' (Zartman, 1969, p.80). And this even well-established, developed countries are finding it difficult to achieve.

Though the evidence examined in this study suggests strongly that international boundaries are not a significant cause of friction or conflict between states in the Nile Basin; and although the OAU's resolution supports the immutability of the present boundaries in perpetuity; at the same time there is no substantial evidence that these international boundaries are likely to be used as the basis for inter-state cooperation in the immediate future. This is a pity. For, to quote Nyerere once again, 'we must use the existing pattern of states as an instrument for unifying Africa and not as an instrument for dividing Africa' (Nyerere, 1963, p.5).

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APPENDIX I

EGYPT-SUDAN WATER AGREEMENTS

1. Before 1906 The main agreements between Britain and the upstream powers of the Nile Basin concerning Egyptian and Sudanese interests are as follows:

- (i) In the protocol of April 15th, 1891 signed in Rome between Great Britain and Italy, it was agreed by article 3, not to construct "on the River Atbara any works which might sensibly modify its flow into the Nile".
- (ii) According to article 3 of the treaty of May 15th, 1902 between Great Britain and Ethiopia, the Ethiopian Government engaged itself not to construct or allow to be constructed, without British and Sudanese consent, any work across the Blue Nile, Lake Tana or Sobat, "which would arrest the flow of their waters".
- (iii) In 1906, the Agreement concerning Ethiopia, between Great Britain, France, and Italy, stipulated that they, while resolved to maintain the integrity of Ethiopia in case of trouble, "in any case... will be concerned with safeguarding the interests of Great Britain and Egypt in the Nile Basin and especially that which concern the regulation of the waters in the River and its tributaries...".
- (iv) By article 3 of the London Agreement of May 9th, 1906 between Great Britain and the Independent Congo State, the latter undertook not to construct, or allow to be constructed, without the consent of the Sudanese Government, any work which would diminish the volume of water entering Lake Albert from two of its tributaries.

2. 1925 Nile Commission Report The main findings are the following:

- (i) The natural flow of the river should be reserved for the benefit of Egypt from the 19th January to the 15th July (at Sennar), subject to the pumping in the Sudan as defined below.
- (ii) The Gezira Canal may begin to draw on the natural flow of the river on the 16th July, the Canal being gradually raised to full supply level by the 31st July, according to the scale fixed in "Nile Control", contained in Appendix D, provided at Sennar and Malakal during the preceeding five days, allowing for a ten days lag in the case of the latter.
- (iii) From the 1st August to the 31st December the Gezira Canal may, subject to the progressive scale laid down in paragraph 57 of this Report (Cmd. 3348, p.20), draw the following volumes from the river:

The 1st August to 30th November, 168 cubic meters a second. The 1st to 31st December, 160 cubic meters a second, provided that, in any year which the total flow of the natural river in December at Aswan is less than 4,700 million cubic meters, 80 cubic meters a second shall be taken from the natural river during

the whole of December, and the balance shall be taken from the natural river up cubic meters by which the actual total December natural river in that years falls short of 4,700 million cubic meters.

- (iv) The Gezira Canal may not draw during the ninth of January more than the volumes provided in "Nile Control", i.e., 80 cubic metres a second from the 1st to 15th, and 52 cubic meters a second from the 16th to 18th, a total of 117 million cubic meters.
- (v) The final filling of the Sennar Reservoir from the level required to give full supply in the Canal to the full storage level of the reservoir should be carried out in November, as provided in "Nile Control".
- (vi) Any further flood pumping carried out in the Sudan up to the end of February should be considered as drawing its supply from the Sennar Reservoir after the 31st December. In other words, a volume equal to that consumed on these areas after the 31st December, according to ascertained data, should be discharged from the reservoir as compensation to Egypt, and the Sennar Reservoir, should be worked so as to provide the additional storage required to cover the compensation volumes as above.
- (vii) After the end of February only perennial pumping as referred to in paragraph 81 (Cmd.3348, p.27), should be carried out in the Sudan.

The commission came to the following conclusion:

- (1) "The Commission foresees that it will be necessary from time to time to review the questions discussed in this Report. It regards it as essential that all established irrigation should be respected in any future review of the question. In particular the Sudan should only take from the natural river in January, exclusive of pumping rights as now existing, the 'Nile Control' volume of 117 million cubic metres. All other requirements till July should be provided by the Sudan from storage or other conservation works".
- (2) "The Commission has been impressed by the fact that future development in Egypt may require the construction of works in the Sudan and neighbouring territories, such as Uganda, Kenya, and Tanganyika, and it feels that Egypt should be able to count on receiving all assistance from the administrative authorities in the Sudan in respect of schemes undertaken in the Sudan, as well as from the British Government in any questions concerning the neighbouring territories."
- (3) "The Commission has endeavoured to find a practical and workable basis for irrigation, and to foresee, and, as far as possible, to provide for, any difficulties that may arise in the future. But it is aware that doubtful points may well arise in the interpretation of any document, and that differences of opinion as to fact cannot fail to occur from time to time in such matters as the volumes of water flowing in a river or canal, discharged through sluices, or lost by evaporation or seepage. It does not feel called upon to make proposals with regard to special arrangements

for dealing with such doubts and differences, which seem to be outside the sphere of a technical commission. It does, however, desire to record emphatically the view that neither the elaborate drafting of an agreement nor the provision of special machinery for adjudication should be allowed to obscure the importance of mutual confidence and co-operation in all matters concerning the river and its waters."

- (4) "Finally, the Commission desires to draw attention to the very great importance of continued study of the river and systematic record of the statistics. A very good hydrological organization has been built up, and its continued efficiency is absolutely essential, not only to fresh development work, but also to the correct working of the arrangement proposed in this Report, or, indeed, of any other arrangements that could be desired."

3. 1929 Nile Waters Agreement "Exchange of notes between Egyptian and British Government in regard of the use of the waters of the river Nile for irrigation purposes."

The elaborate report of the 1925 Nile Commission referred to in the Notes, is not here reproduced. It was published by the Government Press, Cairo, in 1928, and by the Stationery Office of the British Government in 1929 (Cmd.3348).

The 1928 publication also contains, under the title of "Nile Waters Agreement" a statement of Working Arrangements for Controlling Irrigation in the Sudan for the year 1929, signed on March 20, by the Egyptian Minister of Public Works and the Irrigation Adviser of the Sudan Government.

No.1

Mohamed Mahmoud Pasha to Lord Lloyd
 Presidence du Conseil des Ministres
 Cairo, May 7, 1929

Excellency,

In confirmation of our recent conversations, I have the honour to communicate to your Excellency the views of the Egyptian Government in regard those irrigation questions which have been the subject of our discussions.

- (1) The Egyptian Government agree that a settlement of these questions cannot be deferred until such time as it may be possible for the two Governments to come to an agreement on the status of 'the Sudan, but, in concluding the present agreements, expressly reserve their full liberty on the occasion of any negotiations which may precede such an agreement..
- (2) It is realised that the development of the Sudan requires a quantity of the Nile water greater than which has been so far utilised by the Sudan. As your Excellency is aware, the Egyptian Government has always been anxious to encourage such development, and will therefore continue that policy, and be willing to agree with His

Majesty's Government upon such an increase of this quantity as does not infringe Egypt's natural and historical rights in the waters of the Nile and its requirements of agricultural extension, subject to satisfactory assurances as to the safeguarding of Egyptian interests as detailed in later paragraphs of this note.

- (3) The Egyptian Government therefore accept the findings of the 1925 Nile Commission, whose report is annexed hereto, and is considered an integral part of the present agreement. They propose, however, that, in view of the delay in the construction of the Gebel Aulia Dam, which under paragraph 40 of the Nile Commission's Report, is regarded as a counterpart of the Gezira scheme, the dates and quantities of gradual withdrawals of water from the Nile by the Sudan in flood months as given in article 57 of the Commission's Report be modified in such a manner that the Sudan should not withdraw more than 126 cubic meters per second before 1936, it being understood that the schedule contained in the abovementioned article will remain unaltered until the discharge of 126 cubic meters per second is reached. These quantities are based on the Nile Commission's Report, and are therefore subject to revision as foreseen therein.
- (4) It is further understood that the following arrangements will be observed in respect of irrigation works on the Nile:
 - (i) The Inspector-General of the Egyptian Irrigation Service in the Sudan, his staff, or any other officials whom the Minister of Public Works may nominate, shall have the full liberty to co-operate with the Resident Engineer of the Sennar Dam in the measurement of discharges and records to satisfy the Egyptian Government that the distribution of water and the regulation of the dam are carried out in accordance with the agreement reached. Detailed working arrangements agreed upon between the Minister of Public Works and the Irrigation Adviser to the Sudan Government will take effect as from the date of the confirmation of this role.
 - (ii) Save with the previous agreement of the Egyptian Government, no irrigation or power works or measures are to be constructed or taken on the river Nile and its branches, or in countries under British administration, which would, in such a manner as to entail any prejudice to the interests of Egypt, either reduce the quantity of water arriving in Egypt, or modify the date of its arrival, or its level.
 - (iii) The Egyptian Government, in carrying out all the necessary measures required for the complete study and record of the hydrology of the River Nile in the Sudan, will have all the necessary facilities for so doing.
 - (iv) In case the Egyptian Government decided to construct in the Sudan any works on the river and its branches, or to take any measures with a view to increasing the water supply for the benefit of Egypt, they will agree beforehand with the local authorities on the measures to be taken for safeguarding local interests. The construction, maintenance and administration of the above-mentioned works shall be under the direct control of the Egyptian Government.

- (v) His Britannic Majesty's Government in the United Kingdom of Great-Britain and Northern Ireland shall use their good offices so that the carrying out of surveys, measurements, studies and works of the nature mentioned in the two preceding paragraphs is facilitated by the Governments of those regions under British influence.
- (vi) It is recognised that in the course of the operations here contemplated uncertainty may still arise from time to time either as to the correct interpretation of a question of principle or as to technical or administrative details. Every question of the this kind will be approached in a spirit of mutual good faith.

In case of any difference of opinion arising as to the interpretation of execution of any of the preceding provisions, or as to any contravention thereof, which the two Governments find themselves unable to settle, the matter shall be referred to an independent body with a view to arbitration.

- (5) The present agreement can in no way be considered as affecting the control of the river, which is reserved for free discussion between the two Governments in the negotiations on the question of the Sudan.

I avail, etc.
M. Mahmoud, President
Council of Ministers

No. 2

Lord Lloyd to Mohamed Mahmoud Pasha

The Presidency, Cairo

May 7, 1929

Sir,

I have the honour to acknowledge receipt of the note which your Excellency has been good enough to address to me to-day.

- (2) In confirming the arrangements mutually agreed upon as recited in your Excellency's note, I am to express the gratification of His Britannic Majesty's Government in the United Kingdom of Great Britain and Northern Ireland that these discussions have led to a settlement which cannot fail to facilitate development and to promote prosperity in Egypt and the Sudan.
- (3) His Majesty's Government in the United Kingdom concur in your Excellency's view that this agreement is, and should be, essentially directed towards the regulation of irrigation arrangements on basis of the Nile Commission Report, and has no bearing on the status-quo in the Sudan.

In conclusion, I would remind your Excellency that his Majesty's Government in the United Kingdom have already acknowledged the natural and historical rights of Egypt in the waters of the Nile. I am to state that His Majesty's Government in the United Kingdom regard the safeguardings of those rights as a fundamental principle of British Policy, and to convey to your Excellency the most positive assurances that this principle and the detailed provisions of this agreement will be observed at all times and under any conditions that may arise.

I avail, etc.
Lloyd, High Commissioner.

4. 1952 Modifications of the Nile Waters Agreement, 1929

The following is the official statement issued under date of October 18, 1952, by the Public Relations Office, Khartoum.

A Communique was issued in December 1950 which said that technical discussions between representatives of the Sudan and Egyptian Government were proceeding on the raising of Sennar reservoir level, the construction of a dam on the Fourth Cataract near Merowe, and the Sudan's further requirements in Nile Waters. These discussions were interrupted and prolonged by other events but, happily, agreement has now been reached. Stated simply, it has been agreed:

- (1) that the Sudan can raise the level of water in Sennar reservoir by one metre subject, until the construction of the proposed Lake Tana dam, to special conditions in the case of very low years;
- (2) that Egypt can build the Fourth Cataract dam and the Sudan will give all possible help, as in the case of Jebel Aulia;
- (3) that when the necessary data have been collected there will be technical discussions to decide the respective shares of the Sudan and Egypt in the additional water available on the completion of new projects, including the Fourth Cataract dam; the Sudan will begin to benefit from the first project to be completed: the shares in cost will be agreed for each project in proportion to the shares in benefit: the shares in the Lake Tana project remain as originally agreed, half to Egypt and half to the Sudan.

In addition, agreement has been reached on means of making available to the Sudan surplus "flood" water which can be stored. Investigations are now being made to establish how much can be stored in the Jebel Aulia reservoir without affecting existing pump schemes, saqias, etc. In consequence of this agreement an additional allocation of water has already been made to the Pumps Control Board.

5. 1959 Nile Waters Agreement

As the River Nile needs projects, for its full control and for

increasing its yield for the full utilization of its waters by the Republic of the Sudan and the United Arab Republic (Egypt) on technical working arrangements other than those now applied:

And as these works require for their execution and administration, full agreement and co-operation between the two Republics in order to regulate their benefits and utilize the Nile waters in a manner which secures the present and future requirements of the two countries.

And as the Nile Waters Agreement concluded in 1929 provided only for the partial use of the Nile Waters and did not extend to include a complete control of the River waters, the two Republics have agreed on the following:

First: THE PRESENT ACQUIRED RIGHTS

- (1) That the amount of the Nile waters used by the United Arab Republic until this Agreement is signed shall be her acquired right before obtaining the benefits of the Nile Control Projects and the Projects which will increase its yield and which projects are referred to in this Agreement. The total of this acquired rights is 48 milliards of cubic meters per year as measured at Aswan.
- (2) That the amount of the waters used at present by the Republic of Sudan shall be her acquired right before obtaining the benefits of the projects referred to above. The total amount of this acquired right is 4 milliards of cubic meters per year as measured at Aswan.

Second: THE NILE CONTROL PROJECTS AND THE DIVISION OF THEIR BENEFITS BETWEEN THE TWO REPUBLICS

- (1) In order to regulate the River waters and control their flow into the sea, the two Republics agree that the United Arab Republic constructs the Sadd el Aali (High Dam) at Aswan as the first link of a series of projects on the Nile for over-year storage.
- (2) In order to enable the Sudan to utilize its share of the water, the two Republics agree that the Republic of Sudan shall construct the Roseires Dam on the Blue Nile and any other works which the Republic of the Sudan considers essential for the utilisation of its share.
- (3) The net benefit from the Sadd el Aali Reservoir shall be calculated on the basis of the average natural River yield of water at Aswan in the years of this century, which is estimated at about 84 milliards of cubic meters per year. The acquired rights of the two Republics referred to in Article "First" as measured at Aswan, and the average of losses of over-year storage of the Sadd el Aali Reservoir shall be deducted from this yield, and the balance shall be the net benefit which shall be divided between the two Republics.
- (4) The net benefit from the Sadd el Aali Reservoir mentioned in the previous item, shall be divided between the two Republics

at the ratio of 14 1/2 for the Sudan and 7 1/2 for the United Arab Republic so long as the average river yield remains in future within the limits of the average yield referred to in the previous paragraph. This means that, if the average yield remains the same as the average of the previous years of this century which is estimated at 84 milliards and if the losses of over-year storage remain equal to the present estimate of 10 milliards, the net benefit of the Sadd el Aali Reservoir shall be 14 1/2 milliards and the share of the United Arab Republic shall be 7 1/2 milliards. By adding these shares to their acquired rights, the total share from the net yield of the Nile after the full operation of the Sadd el Aali Reservoir shall be 18 1/2 milliards for the Republic of the Sudan and 55 1/2 milliards for the United Arab Republic.

But if the average yield increases, the resulting net benefit from this increase shall be divided between the two Republics in equal shares.

- (5) As the net benefit from the Sadd el Aali (referred to in item 3 Article Second) is calculated on the basis of the average natural yield of the river at Aswan in the years of this century after the deduction therefrom of the acquired rights of the two Republics and the average losses of over-year storage at the Sadd el Aali Reservoir, it is agreed that this net benefit shall be the subject of revision by the two parties at reasonable intervals to be agreed upon after starting the full operation of the Sadd el Aali Reservoir.
- (6) The United Arab Republic agrees to pay to the Sudan Republic 15 million Egyptian Pounds as full compensation for the damage resulting to the Sudanese existing properties as a result of the storage in the Sadd el Aali Reservoir up to a reduced level of 182 meters (survey datum). The payment of this compensation shall be effected in accordance with the annexed agreement between the two parties.
- (7) The Republic of the Sudan undertakes to arrange before July 1963, the final transfer of the population of Halfa and all other Sudanese inhabitants whose lands shall be submerged by the stored water.
- (8) It is understood that when the Sadd el Aali is fully operated for over-year storage, the United Arab Republic will not required storing any water at Gebel Aulia Dam. And the two contracting parties will in due course, discuss all matters related to this renunciation.

Third: PROJECTS FOR THE UTILISATION OF LOST
 WATERS IN THE NILE BASIN

In view of the fact that at present, considerable volumes of the Nile Basin Waters are lost in the swamps of Bahr El Jebel, Bahr El Zeraf, Bahr El Ghazal and the Sobat River, and as it is essential that efforts should be exerted in order to prevent these losses and to increase the yield of the River for use in agricultural expansion

in the two Republics, the two Republics agree to the following:

- (1) The Republic of the Sudan in agreement with the United Arab Republic shall construct projects for the increase of the River yield by preventing losses of waters of the Nile Basin the swamps of Bahr El Jebel, Bahr El Zeraf, Bahr El Ghazal and its tributaries, the Sobat River and its tributaries and the White Nile Basin. The net yield of these projects shall be divided equally between the two Republics and each of them shall also contribute equally to the costs.

The Republic of the Sudan shall finance the above-mentioned projects out of its own funds and the United Arab Republic shall pay its share in the costs in the same ratio of 50% allotted for her in the yield of these projects.

- (2) If the United Arab Republic, on account of the progress in its planned agricultural expansion, should find it necessary to start on any of the increase of the Nile yield projects, referred to in the previous paragraph, after its approval by the two Governments and at a time when the Sudan Republic does not, need such project, the United Arab Republic shall notify the Sudan Republic of the time convenient for the former to start the execution of the project. And each of the two Republics shall, within two years after such notification, present a date-phased programme for the utilisation of its share of the waters saved by the project, and each of the said programmes shall bind the two parties. The United Arab Republic shall at the expiry of the two years, start the execution of the projects, at its own expense. And when the Republic of Sudan is ready to utilise its share according to the agreed programme, it shall pay to the United Arab Republic a share of all the expenses in the same ratio as the Sudan's share in benefit is to the total benefit of the project, provided that the share of either Republic shall not exceed one half of the total benefit of the project.

Fourth: TECHNICAL CO-OPERATION BETWEEN
THE TWO REPUBLICS

- (1) In order to ensure the technical co-operation between the Governments of the two Republics, to continue the research and study necessary for the Nile control projects and the increase of its yield and to continue the hydrological survey of its upper reaches, the two Republics agree that immediately after the signing of this Agreement a Permanent Joint Technical Commission shall be formed of an equal number of members from both parties; and its functions shall be:
 - (i) The drawing of the basic outlines of projects for the increase of the Nile yield, and for the supervision of the studies necessary for the finalising of projects, before presentation of the same to the Governments of the two Republics for approval.
 - (ii) The supervision of the execution of the projects approved by the two Governments.

- (iii) The drawing up of the working arrangements for any works to be constructed on the Nile, within the boundaries of the Sudan, and also for those to be constructed outside the boundaries of the Sudan, by agreement with the authorities concerned in the countries in which such works are constructed.
- (iv) The supervision of the application of all the working arrangements mentioned in (c) above in connection with works constructed within the boundaries of Sudan and also in connection with the Sadd el Aali Reservoir and Aswan Dam, through official engineers delegated for the purpose by the two Republics; and the supervision of the working of the Upper Nile projects, as provided in the agreements concluded with the countries in which such projects are constructed.
- (v) As it is probable that a series of low years may occur, and a succession of low levels in the Sadd el Aali Reservoir may result to such an extent as not to permit in any one year the drawing of the full requirements of the two Republics, the Technical Commission is charged with the task of devising a fair arrangement for the two Republics to follow. And the recommendations of the Commission shall be presented to the two Governments for approval.
- (2) In order to enable the Commission to exercise the functions enumerated in the above item, and in order to ensure the continuation of the Nile gauging and to keep observations on all its upper reaches, these duties shall be carried out under the technical supervision of the Commission by the engineers of the Sudan Republic, and of Uganda.
- (3) The two Governments shall form the Joint Technical Commission by a joint decree, and shall provide it with its necessary funds from their budgets. The Commission may, according to the requirements of work hold its meetings in Cairo or in Khartoum. The Commission shall subject to the approval of the two Governments, lay down regulations for the organisation of its meetings and its technical, administrative and financial activities.

Fifth:

GENERAL PROVISIONS

- (1) If it becomes necessary to hold any negotiations concerning the Nile waters, with any riparian state, outside the boundaries of the two Republics, the Governments of the Sudan Republic and the United Arab Republic shall agree on a unified view after the subject is studied by the said Technical Commission. The said unified view shall be the basis of any negotiations by the Commission with the said states.

If the negotiations result in an agreement to construct any works on the river, outside the boundaries of the two Republics, the joint Technical Commission shall after consulting the authorities in the Governments of the States concerned, draw all the technical executions details and the working and maintenance arrangements. And the Commission shall, after the

sanction of the same by the Governments concerned, supervise the carrying out of the said technical agreements.

- (2) As the reparian states, other than the two Republics, claim a share in the Nile waters, the two Republics have agreed that they shall jointly consider and reach one unified view regarding the said claims. And if the said consideration results in the acceptance allotting an amount of the Nile water to one or the other of the said states, the accepted amount shall be deducted from the shares of the two Republics in equal parts, as calculated at Aswan.

The Technical Commission mentioned in this agreement shall make the necessary arrangements with the states concerned, in order to ensure that their water consumption shall not exceed the amounts agreed upon.

Sixth: TRANSITIONAL PERIOD BEFORE BENEFITING
FROM THE COMPLETE SADD EL AALI RESERVOIR

As the benefiting of the two Republics from their appointed shares in the net benefit of the Sadd el Aali Reservoir, shall not start before the construction and the full utilisation of the Reservoir the two parties shall agree on their agricultural expansion programmes, in the transitional period from now up to the completion of the Sadd el Aali, without prejudice to their present water requirements.

Seventh:

This agreement shall come into force after its sanction by the two contracting parties, provided that either party shall notify the other party of the date of its sanction, through the diplomatic channels.

Eighth:

Annex (1) and Annex (2, A and B) attached to this Agreement shall be considered as an integral part of this Agreement.

Written in Cairo in two Arabic original copies this 7th day of Gumada El Oula 1379, the 8th day of November 1959.

For the Republic of Sudan
(SIGNED)

For the United Arab Republic
(SIGNED)

MOHAMED TALAAT FARID

ZAKARIA MOHIE EL DIN

APPENDIX II

UNITED NATIONS DEVELOPMENT PROGRAMME (SPECIAL FUND)PLAN OF OPERATION

Country: Kenya, Sudan, Uganda, United Arab Republic (Egypt) and
United Republic of Tanzania

Title of Project: Hydrometeorological Survey of the Catchments of
Lakes Victoria, Kioga and Albert

1967

Summary Data:

Special Fund allocation	US\$ 1,959,400
Consisting of:			
Special Fund contribution	US\$ 1,821,100
Government contribution towards			
Local operating costs	US\$ 138,300
Government counterpart contribution in kind			US\$ 2,236,200
Duration			Five years
Executive Agency			World Meteorological Organisation
Co-operating Government Agency			The Technical Committee for the Hydrometeoro- logical Survey of the Catchments of Lakes Victoria, Kioga and Albert

PREAMBLE

For the purpose of a hydrometeorological survey of the catchments of Lakes Victoria, Kioga and Albert to be undertaken by the Governments of Kenya, Sudan, Uganda, United Arab Republic (Egypt) and the United Republic of Tanzania with the assistance of the Special Fund, for which the World Meteorological Organisation shall act as Executive Agency, this Plan of Operation shall be the Plan of Operation provided for in Article I, paragraph 2, of the Agreement signed by the Governments of Kenya on 5 October 1964, Sudan on 2 May 1960, Uganda on 22 March 1963, United Arab Republic on 21 March 1960 and the United Republic of Tanzania on 17 July 1962, and the Special Fund. It has been established in seven original copies.

I. PURPOSE AND DESCRIPTION

- 1.1 The objectives of the project are the collection and analysis of hydrometeorological data of the Catchments of Lakes Victoria, Kioga and Albert in order to study the water balance of the Upper Nile. The data collected and the study are expected to assist the countries in the planning of water conservation and development and to provide the ground work for inter-governmental co-operation in the regulation and use of the Nile.
- 1.2 The project will undertake the following specific tasks:
 - a. Setting up additional data collecting stations (24 hydrometeorological, 156 rainfall including 6 rainfall recorders, 67 hydrological and 14 lake level recording) and upgrading some of the existing stations, in order to complete an adequate network from which basic hydrometeorological data can be collected and analysed;
 - b. establishing of seven small index-catchments for intensive studies of rainfall-runoff relationships for application to other parts of the catchment areas;
 - c. aerial photography and ground survey of those sections of the lake shore areas which are flat and which will be most subject to change with variations in levels of the lakes. Since only a few contours above and below lake water level will be required, aerial photography will be used to prepare planimetric maps and the contours will be properly located by topographic survey;
 - d. devising and proposing analytical procedures for the various parameters involved in the water balance of the Lakes, using the data collected from the new and existing stations, and from the index catchments; and
 - e. training staff of the participating Governments in hydrometeorological work.
- 1.3 The area to be covered by the survey is shown on the attached map. Essentially it represents the part of the catchments within the three East African participating countries.
- 1.4 Close co-ordination will be maintained between this project and the UNDP/Special Fund assisted project surveys and pilot demonstration schemes leading to the reclamation of the Yala Swamp, which is under execution in Kenya, to study the effects of natural and artificial changes in swamp conditions on the water balance.
- 1.5 The observational programme and any studies that will be carried out during the project period will be co-ordinated with UNESCO WITHIN THE PROGRAMME ESTABLISHED IN EACH COUNTRY FOR THE International Hydrological Decade. In fact, this project may be considered as part of the region's contribution to the Hydrological Decade.
- 1.6 The Headquarters of the Project will be located in Entebbe, Uganda.

II. PRIOR OBLIGATIONS

- 2.1 Prior to the Commencements of operations in the project, the Governments shall establish a Technical Committee for the Hydrometeorological Survey of Lakes Victoria, Kioga and Albert which shall assume overall responsibility on behalf of the Governments for the execution of the project and which will act as the co-ordinating agency vis-à-vis the Executive Agency and the Special Fund.
- 2.1.1 The Committee shall be constituted of five Members representing the participating Governments as follows:
- Kenya - Director of Water Development
 - Sudan - Executive Member, Permanent Joint Technical Commission for Nile Waters
 - Uganda - Commissioner of Water Development
 - United Arab Republic - Executive Member, Permanent Joint Technical Commission for Nile Waters
 - United Republic of Tanzania - Director of Water Development and Irrigation
- 2.1.2 The Director of the East African Meteorological Department or his representative shall be a co-opted Member of the Technical Committee.

APPENDIX III

ORGANIZATION OF AFRICAN UNITY . - OAU

The Charter of the Organization of African Unity was signed on May 25th, 1963 in Addis Ababa, Ethiopia. It superseded the Charter for the "Union of African States" adopted in January 1961 at a conference in Casablanca, Morocco, which provided for a degree of political union, and the association formed at a conference in Monrovia, Liberia, which approved basic principles later incorporated into the OAU Charter but did not imply political integration. All but two of the then 32 independent black African nations signed the Charter. The remaining two, Morocco and Togo, signed later and since that time all African states have joined the OAU upon gaining independence. The aims of the OAU are:

1. To promote unity and solidarity among African states.
2. To intensify and co-ordinate efforts to improve living standards in Africa.
3. To defend sovereignty, territorial integrity and independence of African states.
4. To eradicate all forms of colonialism from Africa.
5. To promote international co-operation in keeping with the Charter of the United Nations.

HISTORY

There were various attempts at establishing an inter-African organization before the OAU Charter was drawn up. In November 1958 Ghana and Guinea (later joined by Mali) drafted a Charter which was to form the basis of a Union of African States. In January 1961 a conference was held at Casablanca. An African Charter was adopted and it was decided to set up an African Military Command and an African Common Market.

Between October 1960 and March 1961 three conferences were held by French-speaking African countries, at Abidjan, Brazzaville and Yaoundé. None of the twelve countries which attended these meetings had been present at the Casablanca Conference. These conferences led eventually to the signing in September 1961, at Tananarive, of a charter establishing the Union Africaine et Malgache, now the Organisation commune Africaine et Mauricienne.

In May 1961 a conference was held at Monrovia, attended by the heads of state or representatives of nineteen countries. They met again in January 1962 at Lagos, and set up a permanent secretariat and a standing committee of Finance Ministers, and accepted a draft charter for an Organization of Inter-African and Malagasy States.

It was the Conference of Addis Ababa, held in 1963, which finally brought together African states despite the regional, political

and linguistic differences which divided them. The Foreign Ministers of 32 African states attended the Preparatory Meeting held in May.

The topics discussed by the meeting were: (1) creation of the Organisation of African States; (2) co-operation among African states in the following fields: economic and social; education, culture and science, collective defence; (3) decolonization; (4) apartheid and racial discrimination; (5) effects of economic groupings on the economic development of Africa; (6) disarmament; (7) creation of a Permanent Conciliation Commission; (8) Africa and the United Nations.

The Heads of State Conference which opened on May 23rd drew up the Charter of the Organization of African Unity, which was then signed by the heads of thirty states on May 25th, 1963. The Charter was essentially functional and reflected a compromise between the concept of a loose association of states favoured by the Monrovia Group and the federal idea supported by the Casablanca Group, and in particular by Ghana.

ARTICLE III OF THE O.A.U. CHARTER (1963)

Member states adhere to the principles of sovereign equality, non-interference in internal affairs of member states, respect for territorial integrity, peaceful settlement of disputes, condemnation of political subversion, dedication to the emancipation of dependent African territories, and international non-alignment. *

* The O.A.U. has consistently insisted on the immutability of the former colonial boundaries. For example, in 1977 a Mediation Committee was set up to arbitrate in the Ogaden war and to reaffirm the inviolability of colonial boundaries.