

# Transboundary water cooperation and conflict resolution in the Southern African region: influence of the 1890 Anglo-Germany Treaty

DOI: 10.46932/sfjdv3n2-081

Received in: February 15<sup>th</sup>, 2022 Accepted in: March 1<sup>st</sup>, 2022

## **Sylvester Anthony Matemu**

Eng. LLM in International Water Law Institution: University of Dundee, Scotland Address: Ministry of Water, Dodoma Tanzania E-mail: sapndekambo@gmail.com

#### **Damas Alfred Mashauri**

PhD in Civil Engineering
Institution: Tampere University of Technology, Finland
Address: Sean Prince Park, Flat No. 40, Ongwediva, Namibia
E-mail: damas.mashauri@gmail.com

#### **ABSTRACT**

The availability, distribution and control of freshwater resources have been at the centre of the human story since the start of the Neolithic revolution roughly 12,000 years ago. With the advent of the modern nation state and its attendant emphasis on sovereignty, self-sufficiency and rivalry, it comes as no surprise that interactions between states over shared watercourses have at times been tense and conflictual. This fact was elaborated by the Ex- UN Secretary General; Kofi Annan, Message during the World Water Day on 22nd March, 2002. He warned that... "Fierce national competition over water resources has prompted fears that water issues contain the seeds of violent conflict. By the year 2025 two thirds of the world's population is likely to live in countries with moderate or severe water shortages as demand for water approaches the limit of the available supply". Water as a fugitive resource, respects neither political boundaries nor commonly accepted notions of fairness or equity, hence posed the most complex management challenges to water managers of today. In the SADC region, shared waters cannot be viewed in a purely national context due to its fluidity and the mobility of its nature. It is factual that, over 70% of the water bodies in the region are transboundary in nature. In terms of state practice, the concept of community of interest is commonly traced back to a French decree of 1792 dealing with the opening of the Scheldt River to Navigation. The position expressed in this decree was quickly adopted in a number of instruments concerned primarily with rights of navigation in international rivers, but also in some early agreements not restricted to navigational uses. Therefore, the lakes, and watercourses which form the frontier between the two states or which are situated at the territory of both or which flow into the said lakes and watercourses shall continue to be considered as "common". In this regard one may wish to refer to the recent global instruments namely; the UN Convention on the Law of the Non-Navigational uses of International Water (1997) which came into force on 17th August 2014 and the Convention on the Protection and Uses of Transboundary Watercourses and International Lakes (1992) which came into force on 6<sup>th</sup> October, 1996 and further in 2016 became an official global legal framework for transboundary water cooperation. These instruments are regarded as a vital step in building a strong foundation for global principles on water management and governance. Legal agreements between states during the colonial era as well as post-independence in the Southern Africa region, have formed the bedrock of cooperative water resources management regionally. The Anglo Germany Treaty of July, 1890 (The Helgoland Treaty), had established an agreement between the colonial powers of Great Britain, France, Portugal, Belgium and Germany and their respective spheres of influence over the African nations aimed to establish



borders between the nations. Interesting to note in the presence of scarcity of geo-information over the areas in question; the water bodies (Rivers and Lakes) were used to mark the lines of influence hence boundaries of the sovereign states of today. This chapter therefore, will provide an account of the influence of the 1890 Anglo – Germany Treaty (Helgoland Treaty) and international customary law in regard to conflict resolution and transboundary water cooperation in the Southern Africa Region (SADC). It will also examine some of available information as well as the historical background of boundary treaties; legal frameworks for cooperation; importance of Africa Union(AU) resolutions on the same, such as Resolution AHG/Res16(1) of July 1964 as well as resolution CM/Res.1069(XLIV) of 1986 and finally a conclusion.

**Keywords:** the helgoland treaty, au charter, trans-boundary resources, anglo-germany protectorates, sadc, spheres of influence.

## 1 INTRODUCTION

The role of water in virtually all of the water-related disputes or conflicts that have occurred in the Southern Africa region have been secondary to considerations of territorial sovereignty (Ashton, 2000). In most cases, these disputes have been driven by perceptions that the territorial integrity or sovereignty of one country is compromised or threatened by the claims of a neighbouring territory. Many of the international boundaries in Southern Africa region are aligned with rivers and watercourses; the locations of these boundaries are the legacies of surveys and treaties conducted by earlier colonial powers. However, because rivers are dynamic systems that frequently change their courses in response to flood events; we can anticipate future disputes over the precise locations of international boundaries when rivers change their shape and configuration. The Treaty of 1890 was one of the key events in the 'Scramble for Africa' amongst the European powers of the day (Perry, 2000). For example, from 1890 the Caprivi Strip formed part of German South-West Africa to the South, across the Chobe River, lay the British Bechuanaland Protectorate<sup>1</sup> now known as Botswana.

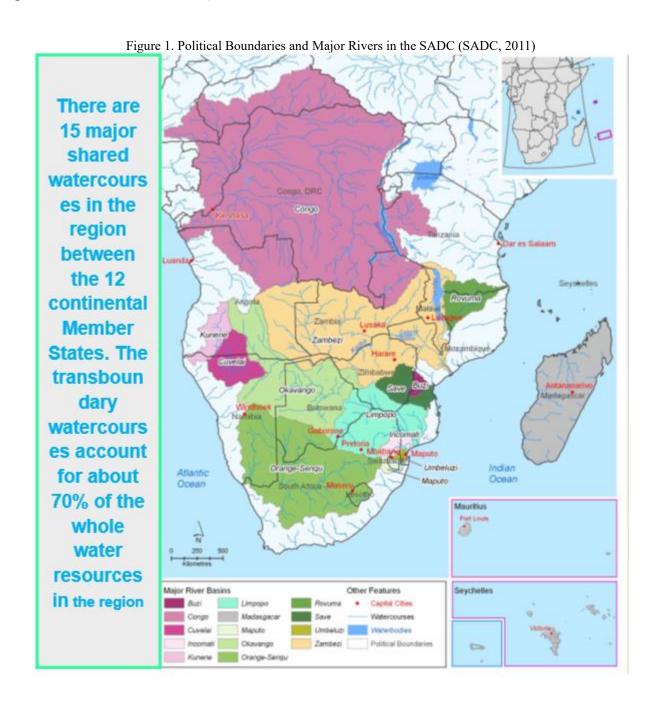
We can also anticipate that almost all future disputes or conflicts involving water, or concerned with some aspect of water, will tend to be local in scale. These conflicts will be amenable to institutional and government intervention and the rights and responsibilities of individuals are well protected in national legislation. At the international scale of a water- based conflict or dispute between two or more countries, some principles of international law provide a solid foundation for negotiation and arbitration. However, it is clearly in the interest of individuals and societies that appropriate national and international

<sup>&</sup>lt;sup>1</sup> The Caprivi Strip was conquered, along with the rest of German South-West Africa, by South African forces in the course of World War I. South Africa thereupon obtained a League of Nations mandate, which it delegated to the British Bechuanaland Protectorate from 1921 to 1929.

Legally, the mandate was terminated by the UN General Assembly in 1966, following which the Assembly established the United Nations Council for South West Africa/Namibia: but South Africa remained in de facto control until Namibia became independent in March 1990. In the meantime, the British Bechuanaland Protectorate had on 30 September 1966 became the independent Republic of Botswana.



institutions should jointly develop management plans for shared river/lake basins and also derive workable protocols that can be used to prevent water-based conflicts in the region. The map below illustrates the SADC region political boundaries and major river basins for better knowledge and common understanding. There are 15 major shared watercourses in the region between the 12 continental Member States. The transboundary watercourses account for about 70% of the whole water resources in the region (Figure 10.1, Table 10.1 and 10.2).





## 2 HISTORICAL BACKGROUND OF BOUNDARY TREATIES

Sir Edw ard Hertslet (ed.) in the preface of his book titled: *Map of Africa by Treaty, has* posed a question as to whether or not the methods used by the imperial powers to partition Africa fall precisely into one or other of the doctrinal moulds from which territorial sovereignty where a state has a right to exercise its power within her boundaries have been traditionally formed. It is perhaps now of more practical interest than might have been supposed in the late 1950's and early 1960's, when the vast majority of colonial territories in Africa stood at the threshold of independence. Indeed, at that time there were grounds for doubting whether African states would continue to accept as binding the principles of international law that were essentially European in origin, especially those relating to territorial acquisition of colonial possessions which, because of their dependent status, were not usually recognized as true subjects of international law<sup>2</sup>.

By then, new African states, however, have shown themselves to be less concerned with tracing roots of title in terms of the traditional forms of international law, than with the practical realization that whatever might be the injustices wrought by imperial partition, it is better to accept inherited territorial boundaries than to plunge the continent into a re-adjustment of frontiers that would in effect be a new scramble for Africa. This is borne out by the important boundary resolution passed by the then Organization of African Unity (O.A.U) in 1964, to which later reference will be made.

The traditional modes of territorial acquisition, however, are not entirely irrelevant, since they may still have to be considered when dealing with boundary disputes between individual African states for, it must be emphasized, the acknowledgement by AU members that inherited boundaries should now be respected; does not in itself provide a clue as to what those boundaries are, nor can it guarantee the prevention of future disputes concerning the location on the ground of a particular boundary line. For example, article VI of the Anglo - Germany Agreement (Helgoland Treaty) of 1st July, 1890 clearly justify and stipulate that: "All the lines of demarcation, traced in Articles I to IV, shall be subject to rectification by agreement between the two powers in accordance with the local requirements. It is especially understood that, as regards the boundaries traced in Articles I to IV, commissioners shall meet with the least possible delay for the object of such rectification" (Pyeatt, 1988). Therefore, Articles [I to IV] must be read in tandem with article VI to make rightful interpretation.

Interestingly, is on how the water bodies (Rivers and Lakes) were used to mark the lines of influence in the presence of scarcity of geo-information, hence the boundaries of the sovereign states of Africa and Southern Africa region of today.

2588

<sup>&</sup>lt;sup>2</sup> B.V.A Roling, International Law in an Expanded World, pp. 11-13



The colonial powers agreed on their spheres of influence and description of the borders in their respective areas and neighbouring regions. In the absence of geo-information over the areas in question, the basis for making boundaries depend on the description of natural boundaries mainly rivers, lakes and mountains. The imperial boundary making was testified by the then Prime Minister of Great Britain's Lord Salisbury who remarked thus:

"We have been engaged in drawing lines where no white man's foot ever trod; we have been giving away mountains and rivers and lakes to each other, only hindered by the small impediment that we never knew where the mountains and rivers and lakes were" (Pyeatt, 1988)

## 2.1 TREATIES AND CESSION

A generally accepted view is that, treaties could be concluded only between true subjects of international law that is sovereign states. Although the word treaty in the past was often used to describe negotiations between a European power and the ruler of an African community, it has been frequently given contradictory meaning, since for some purposes it was regarded as an internationally binding agreement, and in other instances it was looked on more in terms of a commercial contract such as might be concluded under private law<sup>3</sup>. A further complicating factor is that the negotiations were often concluded by the local community not with European state in its sovereign capacity but with agents of a private commercial enterprise which lacked official treaty-making powers. For instance, Article 2 of the Royal Charter granted in 1888 to the Imperial British East Africa Company authorized the negotiation of treaties and cessions with local rulers, subject to the approval of the British Government. Such treaties served a variety of purposes including political, commercial, military protection and anti-slavery just to mention a few.

Agents of commercial companies employed out all means including the use of standard forms to win signatures of area Chiefs. But the form of the legal relations created by such contracts cannot be considered as an agreement between the equals. The typical European views as to the international validity of agreements between states and local rulers of territories. The arbitrator of - the Island of *Palmas Case*, Judge Huber, in 1928, expressed that *such contracts were not in the international law sense, capable of creating rights and obligations to local rulers. But, on the other hand, same contracts were not wholly void of indirect effects on situations governed by international law.* 

The view of this distinguished arbitrator makes it clear that whether or not an agreement between a European state and a local ruler was an international treaty, properly so called, it could still have evidentiary value. – a kind of *quasi treaty* which refers to a legal *agreement* created between two parties

3

<sup>&</sup>lt;sup>3</sup> Private Law involves interactions between private citizens.



who did not have a previous obligation to each other (Adu Boahen, 1990). In Africa, particularly, European states were anxious to support their claims of effective occupation by reference to paper evidence, however dubious its origin.

There are many conquests that can be stated as cases in point: the British conquests of Somaliland's Habar Awal in 1895 (Adu Boahen, 1990), Benin's Yoruba in 1897, Rhodes's company against the Shona and the Ndebele in what is now Zimbabwe, (Curtin et., 1967) the Germans against the Herero in modemday Namibia (Voeltz, 1995) and against the Hehe in current Tanzania (Fage and Oliver, 1970). Similarities are not to be spotted only regarding a single aspect of the one campaign and another aspect of the other. In an attempt to indicate that a comparison of crucial factors can be sustained throughout the respective campaigns, we focus predominantly on a comparison between selected communities of Hananwa, (Soutpansberg district.); Ijebu and Itsekiri(Nigeria - today) all colonised by Britain around 1892. The Nigeria communities were selected for this comparison because the British campaign against them almost coincided with the Boer campaign against the Hananwa community.

Cession of territory<sup>4</sup> in Africa raises questions concerning consideration, capacity, and subject matter. Where Cession, rather than a treaty of protection, was involved, consideration was payable but its adequacy, as in private law, was usually immaterial. For example, Harry Johnston obtained his Taveta concession, for a quantity of beads, handkerchiefs, and cloths that determined the boundary between Kenya and Tanzania.

#### 2.2 SPHERES OF INFLUENCE

Territorial agreements made between colonial powers were referred to limits of spheres of influence<sup>5</sup>. Since the expression occurs in several of the treaties that partitioned Southern Africa, it deserves examination. Sphere of influence is not a term of the art (Hall, 1924). The origin of the phrase is uncertain but it appeared in diplomatic language at least as early as 1869 and become a useful description for pegging out a potential claim.

What is clear, however, is that a sphere of influence in Africa was a traditional phase; a kind of amorphous prelude to colonial crystallization. Its international legality could be tested by the reactions by non-contracting states. If they made no objection within a reasonable period of time their acceptance would be presumed. For example, the Congo state disowed the north-western limits of the British sphere in East Africa, as laid down in the Anglo-Germany Agreement of 1890, until her own agreement with

<sup>&</sup>lt;sup>4</sup> The act of relinquishing one's right. A surrender, relinquishment or assignment of territory by one state or government to another. The territory of a foreign government gained by the transfer of sovereignty.

<sup>&</sup>lt;sup>5</sup> Sphere of influence means; the geographical area in which one nation is very influential or any region in which one nation wields dominant power over another or others.



Britain in 1894. France did not recognize the limits of the spheres established by this latter agreement until 1899. Very often the treaty creating the sphere of influence contained provisions for the establishment of definite boundaries between the adjacent territorial sovereigns.

The Anglo-Germany agreement of 1890 specifically provided that, the limits of the two spheres were to be rectified by two powers, through an agreement because the limits of spheres of influence were frequently described in terms of latitude or longitude; hence were deliberately left fluid. The rectification of these limits subsequently occurred on the boundaries separating Tanzania from Malawi and Zambia; and Kenya from Tanzania just to mention a few. In other instances, the partitioning power was unable or unwilling to press its claim as far as the theoretical limits of its sphere of influence.

Lord McNair, speaking of state succession with respect to boundaries, cites a traditional view that treaty stipulations defining the boundaries of a territory that is later ceded by one of the contracting parties to a third state are of a real nature, and that their burden and benefit run with the territory ceded. In other words, boundary treaties pass from contract to conveyance, and the transaction is unaffected by the fact that the original parties have changed. He expresses another view that treaty stipulations defining a boundary form a historical matter which, together with other facts, may be resorted to for the purposes of ascertaining the quantum of a piece of territory, and that it is unnecessary to consider whether or not the stipulations survive.

It should be remembered, however, that what have hitherto been regarded as binding rules of international law are essentially European in origin and it by no means follows that they can or should receive uncritical acceptance throughout the world community. A question may arise, can the Europe which has gambled away the power and prestige in European wars demand or even expect that its law will continue to be universally accepted? For reasons, already advanced, it is no longer sufficient to point to isolated instances where new European or European—influenced states have regarded themselves as bound by pre-succession boundary treaties. What is relevant is the altitude displayed by those new states which, especially since world War II, have emerged from colonial status or similar forms of *tutelage* (an act or process of serving as guardian or protector: guardianship). With respect to these new states, the one thing that appears certain is that they have not as yet accepted universally binding principles regarding state succession and prefer to deal with individual problems as they arise.

The inter-African practice concerning succession to treaties *in-rem*<sup>6</sup> is still in the making. Nevertheless, it would be an overstatement to say that the newly independent African states reject in total

<sup>&</sup>lt;sup>6</sup> *In-rem* (*latin*): - is a legal term describing the power a court may exercise over property (either real or personal) or a "status" against a person over whom the court does not have in *personam* jurisdiction (refers to courts' power to adjudicate matters directed against a party, as distinguished from in-rem proceedings over).



the idea of succession to pre-independence treaties. State practice in this respect is of the highest significance and may in time lead to more general conclusions than are at present possible.

It has also been pointed out that where deviations from the rule of automatic succession to dispositive treaties occur they may be due more too political considerations or to the operation of the clausula rebus sic stantbus<sup>7</sup> than to an utter rejection of automatic succession (UN, 1969). On the other hand it is equally important to ensure adequate evaluation of all the material that does indicate acceptance of treaties by successor states. Some considerable light has been thrown on the practical question of succession to pre-independence boundary treaties in Africa by a resolution passed in 1964 by the then Organization of African Unity (O.A.U). This important expression of African attitude must now be examined

## 2.3 THE ROLE OF AFRICAN UNION (AU) CONCERNING BOUNDARIES

It appears fair to say that, although the new African states have reserved attitudes concerning the validity of pre-independence treaties, colonial boundary agreements, on whole, are likely to survive. This conclusion finds support from an important resolution passed by O.A.U in July, 1964 (OAU, 1964).

The reason why African states have accepted the validity of their inherited boundaries requires examination. It must be stressed at the outset, however, that the resolution, though enjoining the AU member states to respect each other's boundaries as they existed at the time of independence, is not in itself a solution to boundary problems such as the Kenya – Somali and Tanzania – Malawi border dispute in Lake Nyasa/Niassa/Malawi, that existed prior to independence, or to questions concerning the interpretation of boundary agreements themselves. In this regard, a question arises again; why is it that nearly all the new African states wish to retain their old colonial boundaries.

It has become boring to say that the original partitioning of Africa was undertaken in ignorance, even in deficiency, of existing tribal boundaries, and that the indigenous inhabitants, even when persuaded to enter into treaty arrangements with the colonizing or protecting powers, had little real say as to the division of their territories. Kwame Nkurumah, the leading advocate of the re-arrangement, and eventual removal, of international boundaries in Africa, bitterly pointed out that, the only interested parties not represented at the Berlin Conference of 1884 – 1885 were the inhabitants of Africa<sup>8</sup>.

2592

<sup>&</sup>lt;sup>7</sup> Clausula rebus sic stantibus is a Latin phrase which means "things thus standing." It is a legal doctrine in public international law which allows treaties to become inapplicable because of a fundamental change of circumstances. This is an exception to the general rule of pacta sunt servanda (promises must be kept). Although clausula rebus sic stantibus is a part of customary international law, it is also provided in Article 62 of the Vienna Convention on the Law of Treaties 1969. Clausula rebus sic stantibus does not apply if the parties to a treaty had contemplated for the occurrence of the changed circumstance. It only relates to the changed circumstances that were never contemplated by the parties.

<sup>&</sup>lt;sup>8</sup> Official Records, United Nations General Assembly, 15<sup>th</sup> Session, 7<sup>th</sup> March 1961



The all-African Peoples Conference, held in Accra, Ghana in December 1958, adopted a resolution to readjust the existing boundaries. However it was passed at a time when very few African countries had attained independence. The same agenda was displayed also at the OAU inaugural Summit held in Addis Ababa in May 1963. The resolution was seen as a desirable prelude to the formation of an African Commonwealth.<sup>9</sup>

By the time this resolution was adopted, there exist boundary disputes between Kenya and Somalia; Somalia and Ethiopia. The Somali attitude that the O.A.U boundary resolution should be restricted to disputes arising after July, 1964; is significant since it is quite possible that this argument might be raised by other member states should they become involved in disputes which though appearing to be new, are in fact of long standing.

In fact, the resolution itself would be meaningless unless it is interpreted as a broad principle of accepting inherited boundaries, since it says nothing, for example, of those cases where colonial boundaries are physically non-existent, or incorrectly demarcated, or where boundary documents are impossible to interpret without recourse to arbitration. A further difficulty in the resolution lies in determining what is meant by the undertaking to respect boundaries as they existed relying on the Anglo - Germany Helgoland Treaty of 1890; at the time of the member state's achievement of national independence as pointed out by Touval (Touval, 1967). For example, the Tanzania – Malawi border controversy concerning Lake Nyasa/Niassa/ Malawi is regarded by some observers as a new dispute, whereas confusion and doubt as to the exact location of the lake boundary arouse half a century ago, possibly longer, and even though Tanzania and Malawi have each accepted the O.A.U boundary resolution. But, this does not preclude them from examining all the pre– independence evidence to support their respective claims. By reflecting on the *status quo* of the said border dispute, one will find out that the job is unfinished because by the time of independence, between 1961(Tanganyika) and 1964(Malawi); the truth-grounding was yet to be demonstrated through border verification by the two powers (Tanzania and Malawi) as a mandatory requirement of Article VI of the inherited Anglo–Germany Helgoland Treaty.

The Treaty gives guidance to both powers to consider all local requirements during the assignment. This was not possible during the colonial time because both countries in a certain period of time before independence were both under British Empire, the only power by then. Historical trends show that, when Tanganyika(Tanzania) was under Germany empire and Nyasaland(Malawi) under British empire, both powers did verification of border on Songwe River by observing Article I –IV and VI of the Treaty to conclude border Agreement in 1901 in that respect.

<sup>&</sup>lt;sup>9</sup> For text of the resolution, see C. Legum, *Pan Africanism*, Pall Mall Press 1965, pp 247-50



It is important therefore to bear in mind that, Southern Africa region (SADC) member states are part of the African Union (ex- O.A.U), and in some instances national boundaries the region are formed by water bodies. Therefore, it is important to examine how these shared water resources are managed in a peaceful and cooperative manner.

## 3 SADC LEGAL FRAMEWORKS FOR WATER COOPERATION

In the Southern Africa region, water resources that are transboundary in nature have a significant contribution to development socially and economically. They also sustain the rich diversity of natural ecosystems and water security for the basic needs and food security.. Over 70% of the region's fresh water resources are shared between two or more Member States. This has been the basis for the development and adoption of a series of regional instruments to support the joint management and development of shared water resources. To guide the process of cooperation and regional integration, a number of Protocols based on the principles of the SADC Treaty were negotiated agreed and adopted (SADC,1998). The Protocol on Shared Watercourses at the first instance was adopted in 1995, came into force in 1998, and then revised in 2000. The Revised Protocol came into force in September, 2003. The shared water resources of the SADC region have several factors to consider b: are limited and unevenly distributed geographically and over time; are shared between several countries in transboundary hydrological basins (e.g. The Zambezi is shared by eight riparian member states). But two of these watercourses are shared by SADC and other non SADC Member States.

SADC Treaty calls for peace and stability, regional economic integration and poverty eradication in order to promote cooperation and avoid water use conflicts (Fatch and Swatuk, 2018). The signing and ratification of watercourse Agreements to establish River Basin Organizations is a testimony of high degree of commitment and cooperation among member states in the region.

## 3.1 TRANSBOUNDARY WATER RESOURCES MANAGEMENT IN THE SADC REGION

In the SADC region, a number of rivers and lakes form the boundaries between some of the member states for varying stretches (Salman, 2000).

It should be noted that, international law does not draw any legal distinction between contiguous rivers and successive rivers (PCIJ, 1929). as illustrated by Tables 1 and 2 below.



Table 1: SADC Countries and their International River Basins

Country	No. of Basins	Shared Basins		
Mozambique	9	Buzi, Umbeluzi, Incomati, Limpopo, Maputo, Ruvuma,		
		Sabi, Zambezi, Pungue		
Angola	6	Kunene, Cuvelai, Okavango, Zambezi, Chiloango, Congo		
Zimbabwe	6	Buzi, Limpopo, Okavango, Sabi, Zambezi, Pungue		
South Africa	5	Incomati, Limpopo, Maputo, Orange, Umbeluzi		
Tanzania	5	Congo, Nile, Ruvuma, Zambezi, Umba		
Namibia	5	Kunene, Cuvelai, Okavango, Zambezi, Orange		
Botswana	4	Limpopo, Okavango, Orange, Zambezi		
Congo (D.R)	4	Ogooue, Congo, Nyanga, Chiloango		
Swaziland	3	Umbeluzi, Maputo, Incomati		
Zambia	2	Zambezi, Congo		
Lesotho	1	Orange		
Malawi	1	Zambezi		

Source (Gleick, 2000)

Table 2: Major International River Basins in the SADC Region

Basin	No. of Basin	Basin countries	Basin Area
	Countries		$(000\mathrm{km}^2)$
Congo	9	Congo (D.R), Central African Republic, Angola, Congo (R.), Zambia, Tanzania, Cameroon, Burundi, Rwanda	3,690
Zambezi	8	Zambia, Angola, Zimbabwe, Mozambique, Malawi, Botswana, Tanzania, Namibia	1,388
Orange (Sengu)	4	South Africa, Namibia, Botswana, Lesotho	950
Okavango	4	Botswana, Angola, Namibia, Zimbabwe	709
Limpopo	4	South Africa, Botswana, Mozambique, Zimbabwe,	416
Ruvuma	3	Tanzania, Mozambique, Malawi	152
Incomati	3	Mozambique, South Africa, Swaziland	46
Maputo	3	South Africa, Swaziland, Mozambique	31
Cuvelai (Etosha)	2	Angola, Namibia	167
Sabi (Save)	2	Zimbabwe, Mozambique	116
Kunene (Cunene)	2	Angola, Namibia	110

Sources: (Rangeley et.al., 1994, Gleick, 2000)

Southern Africa region is faced with high levels of water insecurity (Salman, 2001). Close to 100 million people in the region still do not have access to safe drinking water while about 155 million do not have access to improved sanitation. This prevailing situation undermines sustainable economic growth, poverty reduction and regional stability. Access to water resources in SADC countries is of great importance towards promoting water-based sectors such as mining and agriculture (70% of population depend on agriculture). Studies show that countries with improved access to clean water and sanitation services have an annual economic growth rate of 3.7% compared to 0.1% for countries in the same category without improved access. It is estimated that investments of USD 15 - 30 billion in improved water resources management in developing countries can have direct annual income returns in the range of USD 60 billion hence countries of SADC region are not the exception.



# 3.2 EVALUATING SADC REGION'S TRANSBOUNDARY WATER COOPERATION AND DISPUTE RESOLUTION

The principle of equitable and reasonable use of water defines the bottommost goal of the regime as well as the context for implementation. The 1997 United Nations Watercourses Convention (UNWC) as the principal universal instrument on water use allocation, offers guidance on its application. Article 5 of the Convention provides:

"Watercourse States shall in their respective territories utilise an international watercourse in an equitable and reasonable manner. In particular, an international watercourse shall be used and developed by watercourse States with a view to attaining optimal and sustainable utilization thereof and benefits therefrom, taking into account the interests of the watercourse States concerned, consistent with adequate protection of the watercourse (UN, 1997)".

Further, the convention guides on use, development, and protection of water resources in an international watercourse to consider both equitable and reasonable manner. Such participation includes both the right to utilize the watercourse and the duty to cooperate in the protection and development thereof, as provided in the UN Watercourses Convention. Article 6 of the same Convention provides guidance on how the rule of equitable and reasonable use is to be implemented. – "all relevant factors are to be considered together and a conclusion reached on the basis of the whole" (UN, 1997). This approach follows the International Law Association (ILA) that introduced the concept of equitable and reasonable use of water (ILA, 1966).

The non-exhaustive list of indicative factors to that are considered in Article 6 is open-ended and covers the vast range of circumstances that need to be examined where new or increased uses are to be considered. Importantly, the in-built flexibility of the rule, common for international law, provides enormous potential for including new and changing circumstances that affect the use of shared water resources (Wouters, 2005). This should be seen as strength and not a weakness of the rule. The UNECE Water Convention provides that "the Parties shall take all appropriate measures to ensure that transboundary waters are used in a reasonable and equitable way, taking into particular account their transboundary character, in the case of activities which cause or are likely to cause trans-boundary impact" (Art. 2(2)); and further elaborates specific examples of what this entails.

.State practice supports the norm of international law to foster a holistic and inclusive approach towards trans-boundary water resources management in shared basins. The notion of benefits-sharing finds its legal foundation in this rule of international law which encourages watercourse States to cooperate in all beneficial uses (goods, products and services) connected directly or indirectly with the watercourse



The importance of water to humans, individually and in organised groups, had led them to seek stability in their fluvial relations through the development and acceptance of customs, as well as through more formal acts such as agreements (McCaffrey, 2007) that form instruments to foster cooperation in the SADC region. In any case each agreement should be considered within the context of the five core elements: –scope, substantive rules, procedural rules, institutional mechanisms, and means of dispute settlement to evaluate the extent to which these are dealt within each watercourse and how this affects cooperation.

Good experience do exist in the region citing among others the Zambezi River basin, which is the fourth largest in Africa with a population of approximately 30 million people. The main river channel forms the borders between Zambia and Zimbabwe, and Zambia and Botswana before reaching the ocean in Mozambique. Formal cooperation started when Kariba dam was built in the 1950s and Portugal, the colonial power in Mozambique at that time, Zambia, and Zimbabwe signed an agreement to use the waters of Zambezi. In 1987 Zambia and Zimbabwe established the Zambezi River Authority as a body responsible to facilitate cooperation and managing Kariba dam<sup>10</sup>.

At present the basin is covered by an Agreement on the Establishment of the Zambezi Watercourse Commission (ZAMCOM) (ZAMCOM, 2011). This legal institution was established under the overarching SADC Revised Protocol (2000), which sets the framework for transboundary water resources cooperation across the region. The Protocol promotes a basin-wide approach to water management, encouraging "close co-operation for judicious, sustainable and co-ordinated utilisation of the resources of the shared watercourses (SADC, 2000)". It encourages member States to enter into specific basin-wide agreements, corresponding with the approach promoted by the 1997 UN Watercourses Convention and rules of customary international law (Wouters, 2013) that gives assurance to each Basin State of water entitlement, within its territory, to a reasonable and equitable share for the beneficial uses of the waters of an international drainage basin (UN, 1997).

The Commission Secretariat which is hosted by the government of Zimbabwe provide a platform for discussions and negotiations on issues relevant to the management of the Zambezi River, including flood mitigation, climate change adaptation, joint infrastructure development and management; environmental protection and prevention of water conflicts.

Another experience in the Southern Africa region is on how the border conflict along the Chobe River involving an island known as *Sedudu/Kasikili* was resolved peacefully. The island located in Chobe River, is approximately 3.5 square kilometres and is known as "*Sedudu*" in Botswana and "*Kasikili*" in Namibia. The Chobe River divides around the island, flowing to the north and south, and the island is

-

<sup>&</sup>lt;sup>10</sup> For a history of the Zambezi River Authority see http://www.zaraho.org.zm/history.html



flooded to varying depths for between three and four months each year, (usually beginning in March), following seasonal rains. On 29 May 1996, both Namibia and Botswana jointly submitted their cases for territorial sovereignty of *Sedudu/Kasikili* Island to the International Court of Justice (ICJ), asking the Court for a ruling based on the Anglo-Germany Treaty of 1890(Helgoland Treaty) and the principles of International Law. The historical origins of the dispute are contained in the said Anglo - Germany Treaty of 1890, when the eastern boundaries of the Caprivi Strip along the Chobe River were defined in very vague terms as "the middle of the main channel" of the Chobe River, so as to separate the spheres of influence of Germany and Great Britain.

The opinion of the ICJ, in the legal sense centred the dispute on the precise location of the "main channel". Botswana contended that this is the channel running to the north of the island, whilst Namibia contended that the channel to the south of the island was the main channel. Since the terms of the Anglo-Germany Treaty did not define the location of the channel, the Court proceeded to determine which of the two channels could properly be considered to be the "main channel".

In order to resolve the conflict, the ICJ considered both the dimensions (depth and width) of the two channels and the relative volumes of water flowing within these two channels, as well as the bed profile configuration and the navigability of each channel. The Court considered submissions made by both parties as well as information obtained from in-situ surveys during different periods of seasonal flow. Against the background of the object and purpose of the Anglo-Germany Treaty, as well as the subsequent practices of the parties to the Treaty, the Court found that neither of the two countries had reached any prior agreement as to the interpretation of the Treaty nor the application of its provisions.

In reaching its verdict, the Court also considered Namibian claims that local Namibian residents from the Caprivi area had periodically occupied *Sedudu/Kasikili* Island, since the beginning of the twentieth century, depending on seasonal circumstances as well as river flows and inundation levels. The Court considered that this occupation could not be seen to reflect the functional act of a state authority, even though Namibia regarded this "occupation" as the basis for claims for "historical occupation" of the island. The Court also found that this so-called "occupation" of *Sedudu/Kasikili* Island by Namibian residents was with the full knowledge and acceptance of the Botswana authorities and its predecessors.

Legally, the mandate was terminated by the UN General Assembly in 1966, following which the Assembly established the United Nations Council for South West Africa/Namibia: but South Africa remained in *de facto* control until Namibia became independent in March 1990. In the meantime, the British Bechuanaland Protectorate had on 30 September 1966 became the independent Republic of Botswana. The essential issues in the case were fairly straightforward according to the key parts of Article III of the Treaty (Helgoland Treaty 1890)



Although the English version of the Article referred to the "centre" of the main channel, in the German text the expression used was the "Thalweg des Hauptlaufes" – the thalweg of that channel. There was considerable debate about the meaning of these expressions, but the Court treated the two versions as having the same meaning, citing Article 33(3) of the Vienna Convention, under which "the terms of the treaty are presumed to have the same meaning in each authentic text" (UN, 1969)." Both sides accepted that the Treaty was binding upon them, and relied upon it. The primary question was whether the main channel was that lying to the north and west of Sedudu Island (as Botswana argued) or, as Namibia contended, the channel lying to the south and east. In addition, Namibia argued that its predecessors had occupied and used the island, and exercised sovereign jurisdiction over it, with the knowledge and acquiescence of Botswana and its predecessors since at least 1890.

Both Parties also referred to the principles of the UN Charter and the Charter of the Organization of African Unity (OAU), as well as to Resolution AGH/Res.16 (1) adopted in Cairo on 21 July 1964 by the Assembly of Heads of State and Government of the OAU. The Resolution oblige member states of OAU to pledge themselves inter alia to respect the frontiers existing on their accession to national independence and implementation of the *uti possidetis juris* principle. Citing the earlier judgment in Libya/Chad, the Court recalled that a treaty must be interpreted in good faith, in accordance with the ordinary meaning to be given to its terms in their context and in the light of its object and purpose. Interpretation must be based above all upon the text of the treaty. The Court observed that, on the evidence, the hydrological situation of the Chobe River around the Island may be deemed to be essentially the same as in the 1890 Anglo – Germany Treaty. It then examined the various criteria, as to which substantial bodies of documentary evidence, scientific and other, including satellite photography, had been supplied by the parties in their written pleadings

The Court observed that prior to 1947 no differences had arisen as to the boundary around Kasikili/Sedudu Island on the basis of the maps available by then. The boundary had been supposed to lie in the southern channel and later in 1948 local officials came to the joint conclusion that the main channel was the northern one while at the same time noting that use of the island had been made by Caprivi tribesmen without objection from Bechuanaland now known as Botswana since 1907.

The Court inferred that there was an absence of agreement between South Africa and Bechuanaland by then with regard to the location of the boundary around the island. The status of the island, and that the events cited did not constitute subsequent practice in the application of the treaty establishing the agreement of the parties regarding its interpretation, within the meaning of Article 31 paragraph 3(b) of the Vienna Convention.



Many of the international boundaries in Southern Africa region are aligned with rivers and water courses. The locations of these boundaries as observed today are the legacies of surveys and treaties conducted by earlier colonial powers. It is a point of reference from the proceedings of the Caprivi strip case, between Botswana and Namibia which was ruled by the International Court of Justice that, the 1890 Anglo – Germany Treaty has a strong influence on transboundary water cooperation and dispute resolution in the SADC region and Africa at large

The Court therefore found, by a majority of 11 to 4 votes, that the boundary followed the line of deepest soundings in the northern channel and that Sedudu/Kasikili Island belonged to Botswana, and went on to find that in the two channels the nationals and vessels flying the flags of the two States should enjoy equal national treatment. Furthermore, the northern channel around *Sedudu/Kasikili* Island would hence forth be considered as the "main" channel of the Chobe River Hence the formal boundary between Namibia and Botswana. Botswana and Namibia have agreed after the court judgement that, craft from both countries will be allowed unimpeded navigation in both the northern and southern channels around *Sedudu/Kasikili* Island (Salman, 2000).

In the light of those observations, it is important for everyone concerned to consider the potential preventive approaches that are available so that we can properly formulate and implement suitable policies, strategies and actions to avoid the prospect of water-based conflicts and their adverse consequences in the Southern Africa region. The ICJ ruling on the Sedudu/Kasikili Island dispute (Salman, 2000) was a very good lesson and experience to all of us after a relatively long period of protracted debate and intermittent threats of military action, including formal military occupation of the island by the Botswana Defence Forces. The primary dispute between the two countries was one of territorial sovereignty rather than about access to water or to water-dependent resources. However, water is the physical driving force for changes to the aquatic system that forms the territorial boundary. Unless the two countries jointly develop a bilateral formal cooperative arrangement to address this type of situation, similar cases of water-related conflict can be expected to occur in the future because there are still five islands in the caprivi strip whose territorial sovereignty or ownership is contested; three of these islands are in the Chobe River and two are in the Zambezi River.

Without wishing to pre-empt any options that may be considered by the countries concerned, we can anticipate that the legal principles upon which any decision will be based are likely to follow the same principles and logic used to resolve the dispute over *Sedudu/Kasikili* Island.

Benchmarking on the say - no man is an island unto himself", it is obvious that no nation within an economic region can prosper in isolation. This is recognised in the realm of the Southern African Development Community (SADC), with an overarching objective of attaining the regional social and



economic integration. Fundamental to the achievement of that goal, is the sufficient availability of water throughout the region. It enables food production, hygiene, industry, power generation, environmental diversity and indeed life itself.

Taking an example of South Africa in the context of transboundary water cooperation, is that; four major river systems arise within or flow across this country and are utilised by its people for a variety of purposes, but are also the concern of other upstream or downstream nations. These are the Limpopo, which is shared between South Africa, Botswana, Zimbabwe and Mozambique; the Incomati and Maputo Rivers, that rise in South Africa, with Swaziland and Mozambique as downstream users. In that regard principles of international water law must apply.

## 4 THE ROLE OF INTERNATIONAL WATER LAW

The International water law provide the rules that govern the use of transboundary water resources and facilitate cooperation. Central to these rules is the duty to cooperate – one of the main normative pillars of international law. International agreements and rules of customary international law can help sovereign states to reconcile competing claims. The United Nations (UN) has produced three key instruments which provide guidance for states on how they should approach the beneficial exploitation of their transboundary water resources. These instruments are i) the 1997 UN Convention on the Law of the Non-Navigational Uses of International Watercourses (UNWC); (ii) the 1992 UN Economic Commission for Europe (UNECE) Convention on the Protection and Use of Trans-boundary Watercourses and International Lakes (UNECE TWC); and iii) the 2011 UN Resolution on the Human Right to Water and Sanitation. When transboundary waters are not governed by treaty or any cooperative framework, then customary international law guides states actions.

Each state is entitled to, and obliged to ensure equitable and reasonable use of shared waters, which includes a due-diligence obligation not to cause significant harm to the resources and other states. But, despite of abundance of academic writings and expert reports on transboundary water issues, critical knowledge gaps remain (Dinar et.al., 2007; Ganoulis et.at., 2011). An important question which needs a clear answer is on how cooperative processes can be enabled, and what role does international law play on the subject matter? Transboundary waters (surface and underground), that are shared by two or more countries with divergent and often conflicting needs and interests pose difficult and diverse challenges (Matemu, 2002), However, increasing demand must not necessarily lead to conflict. It may even be seen as an opportunity for cooperation, as examples of regional integration reveal (Grey and Sadoff, 2006).



## 4.1 THE DUTY TO COOPERATE IN INTERNATIONAL WATER LAW

The UN declared 2013 as the International Year of Water Cooperation, urging all member states and all other actors 'to promote actions at all levels, Article 5(2) of the 1997 United Nations Watercourses Convention (UNWC) which is now in force since 2014, introduces the obligation to riparian states that may be affected to participate in the use, development and protection of an international water-course in an equitable and reasonable manneras well as e the duty to cooperate in good faith in all aspects, related to planned measures contained in Part III (Articles 9 and 11-17), Article 14, Article 25 and . Article 31. Most of the provisions in Part III of the UNWC are process-oriented, they support implementation of the governing rule of equitable and reasonable use.

In the same spirit, the United Nations Economic Commission for Europe (UNECE) Technical Working Committee (TWC) is also based on the duty to cooperate and provides considerable details on how this rule is to be implemented, especially within the contest of transboundary pollution. This is central to the list of appropriate measures required for implementing the 'Convention's primary substantive rule of 'limiting trans-boundary impact'. Article 2 of the Convention which is now a global instrument; imposed the duty on 'Riparian Parties' (i.e. states that share the same watercourse) to 'cooperate on the basis of equality and reciprocity, in particular through bilateral and multilateral agreements, in order to develop harmonized policies, programmes and strategies covering the relevant catchment areas, or parts thereof' (Article 2(6)).

The duty to cooperate is the normative cornerstone of the instrument, with more concrete obligations of Riparian Parties provided for in Part II, including the requirement to enter into specific transboundary water agreements particular on activities to be undertaken by watercourses states (including tributaries) with significant fresh water resources.

The use and protection of water resources shared by two or more countries in the Southern Africa region are also governed by prescribed international legal rules. These legally binding norms can be found in numerous international treaties and are reflected also in the rules of customary international law, which is based on State practice (Shaw, 2003). While international law is not the only instrument available to resolve transboundary water conflicts, it provides an over-arching framework for addressing a broad range of water-related challenges and concerns that span across scales, sectors, and disciplines in terms of changing context of the global community and the evolving structure of international water governance.

We live in a world of ever-growing interdependence and inter-connectedness. Our interdependence has grown beyond anyone's imagination in fact. Apart from serving as a value system and consolidating an integrated approach to environment and development, international law is also required



to function as a concrete regulatory framework for co-operation between and action by all relevant actors. This is the fact to be observed by Southern Africa region member countries.

#### 4.2 INTERNATIONAL WATER LAW IN PRACTICE

The 2012 UN meeting on Water, Peace, and Security highlighted the importance of finding ways to improve transboundary water resources cooperation and collaboration. It was particularly emphasised that since water resources could become a real source of manipulation and increasing instability and should be a priority in every nation's foreign policy and domestic agenda, we need to work together to advance cooperation on shared waters. While, unquestionably, the political will of national governments determines to a large extent the degree of cooperation across State borders, international law plays an important role through its prescription of the rules of the game regulating the conduct of individual nations and relations between them. The law of nations defines the limits of State sovereignty and provides the context for transboundary water resources cooperation (Tams, 2011).

The writing by Lord Bingham on, international water law in practice, advise that the daunting challenges now facing the world are to be overcome through the medium of rules that are internationally agreed, implemented and if necessary enforced (Bingham, 2010). The duty to cooperate has evolved around the idea of cooperation and is at the heart of the UN Charter as well as the rules of international law governing trans-boundary water resources.

To achieve the above broad objective, numerous legally-binding and non-binding instruments on transboundary waters were adopted both within and outside the UN system. Among the most important global instruments are the 1997 UN International Watercourses Convention (UN, 1997) and two recent resolutions adopted by the UN General Assembly: one on the Right to Water and Sanitation and another related to trans-boundary aquifers. At the regional level, the two most relevant legal documents contributions are the United Nations Economic Commission for Europe (UNECE) Water Convention which was recently qualified to be open for universal accession and the 2000 SADC Revised Protocol on Shared Watercourses (SADC, 2000) greatly influenced by the 1997UN Watercourses Convention.

Benchmarking on the global and regional cooperative frameworks, States have also concluded a large number of water-related Memoranda of Understanding and agreements for sharing the same river or lake, or their drainage basins. But challenges remain due emerging of ambiguous water rights and allocation of increasingly scarce water resources as the principal cause of water conflicts. But main challenge lies in reconciling different uses of water and in managing their economic, social, and environmental impact. In this context, the rule of law in managing transboundary water conflicts and building international cooperation deserves a closer look (Ziganshina, 2012).



## 5 CHALLENGES OF WATER RESOURCES MANAGEMENT IN THE SADC REGION

Given that Southern Africa region water resources are unevenly distributed in time and space, and that socio-economic development also varies strongly between and within the SADC Member States, it is not surprising that transboundary water management in the region presents a particular challenge. Shared water resources are under tremendous pressure from ever-rising demands and increasing water pollution. This is particularly true for transboundary river basins, in which the management of water resources is not always well co-ordinated.

The development of water infrastructure to safeguard water supply is skewed in the region, with South Africa reaching the limits of its storage options; the DR Congo having tremendous untapped hydropower potential; Namibia turning to recycling and desalination; and Angola steadily expanding its agricultural lands in various headwaters, which is going to affect water availability downstream in the medium to long term. Similarly, the quality and capacity of domestic, industrial and agricultural water supply also vary greatly.

## 5.1 POTENTIAL FOR WATER DISPUTES AND RESOLUTION IN THE REGION

Statistical studies illustrate that, territorial border disputes increased the probability of war and have higher probability of leading states to war than other kinds of disputes (Dominguez, 2015). Also, boundary disagreements which escalate to war, generally involve two neighbouring countries that are underdeveloped (Mandel, 1980). These warring factions usually have parity in military strength, belong to different alliances, and have ethnic tribal or clannish differences. Writers - Nindi, Gledinisch, and Guo; claim resource scarcity generates hostility between neighbouring nations more than any other causes (Nindi, 2015). In essence, rivalry over limited resource, coupled with a population growth could escalate a border dispute into an armed conflict. The trio argues that, the situation calls for the pragmatic management of resources in areas with border disputes taking example of Tanzania and Malawi- boundary in Lake Nyasa/Niassa/Malawi

Indeed, some disputes over shared water resources already exist between some of the countries of the SADC Region. For example, the construction of the *M'njoli dam* in Swaziland over the Umbeluzi River, which is shared by Swaziland, Mozambique, and South Africa, has reportedly decreased the flow of Umbeluzi water to Mozambique by almost half. The construction of the *Driekoppies Dam* in South Africa over a tributary of the Incomati River has raised concerns about the reduction of communal cropping land in Swaziland due to flooding<sup>11</sup>. Namibia's proposed extraction of 17 million cubic meters

<sup>&</sup>lt;sup>11</sup>See Ebenizario Chonguica, Water and the Environment as a Locus fir Conflict in Africa, in GREEN CROSS INTERNATIONAL, WATER FOR PEACE IN THE MIDDLE EASTAND SOUTHERN AFRICA 77 (2000).



of water from the Okavango River for pipeline transport to Namibia's Eastern National Water Carrier is another potential problem.

In the same situation, the Okavango River which is shared by Angola, Namibia, Botswana, and Zimbabwe have raised concerns amongriparian countries on the possible adverse impact of the project (Ashton, 2003). Moreover, Mozambique, being the lowest riparian to eight of its nine major shared rivers, is distrustful of the other upper riparian's intentions with regard to those shared rivers (Carmo Vaz and Pereira, 2000). It should also be mentioned that there is disagreement between South Africa and Namibia over their borders across the Orange River (Salman, 2000).

Both writers Shah and Anyuargue that the effects of colonialism, specifically the creation of Africa's state borders based on the Anglo – Germany Treaty 1890, have created prolonged border disputes. Furthermore, in a 2007 study, Anyu claims that a majority of the 103 ethnic and interstate conflicts in Africa were the result of artificial boundaries drawn by colonial powers during the scramble for Africa in the mid-1880s. Prescott and Triggs also confirm that interstate boundaries in Africa are the prominent *raison d'être* for conflicts in the region because their delimitation lacked important information about Africa's inhabitants and geographical data (Anyu, 2007 and Shah, 2010).

A good lesson to consider goes back to the ancient Greece, the Aetolian state's boundaries varied according to the disposition and tempo of the state's leadership. Consequently, Aetolia experienced confrontations with sister Greek states, and her reputation was compromised. The writer Domininguez argues that some countries might boast of political will to solve such conflicts. The question remains; what aptitude is required to make plausible decisions to mitigate or resolve border conflicts? But this challenge remains, if interstate border conflict countries do not have the necessary political will, transparency and good faith to find a resolution due to leadership.

## 6 CONCLUSION

The Southern African region faces acute problems with regard to freshwater resources both in terms of availability, spatial and seasonal variations, population growth and urbanization. All these will continue to add more pressure to the competing demands on limited available water resources. Under the said circumstances, it is not surprising that the countries in the SADC region have placed the main agenda of cooperation between the users of shared watercourses.. The signing and entry into force of the 1995 Protocol was certainly an important step towards cooperation among the SADC countries in the sharing and management of their common water resources.



Further revision and updating of the 1995 Protocol which is in tandem with the UN Water Convention (UN, 1997) is also significant towards aligning the Revised Protocol with internationally accepted norms in the field of shared watercourses.

Taking into consideration that many of the international boundaries in southern Africa region are aligned with rivers and water courses; the locations of the same are the legacies of surveys and treaties conducted by earlier colonial powers. At this contemporary times, it is a point of no doubt from the proceedings of the Caprivi strip case between Botswana and Namibia; and that of Bakassi Peninsular Conflict, between Nigeria and Cameroon both of which were peacefully resolved by the International Court of Justice, confirmed that the 1890 Anglo – Germany Treaty which is accepted by African nations to contribute in international law; still have a strong influence on transboundary water cooperation and dispute resolution in the region.

The peaceful settlement of the dispute over the Kasikili/Sedudu Island and the cooperative environment that led to the conclusion of various bilateral and multilateral agreements in the region should allay any apprehensions and assist in resolving existing and potential disputes. These positive developments should also assist in making shared water resources a catalyst for cooperation rather than a source of conflict. All of this progress provides a good basis for the SADC's future cooperation. Necessary steps must be taken to implement the provisions of the Revised Protocol and existing bilateral/multilateral agreements by maintaining the cooperative spirit while addressing the real challenge of managing the most precious and scarce resource in the region.

Necessary steps must be taken to implement the provisions of the Revised Protocol and existing bilateral/multilateral agreements by maintaining the cooperative spirit while addressing the real challenge of managing the most precious and scarce resource in the Region. The Helgoland Treaty therefore, remain to be valid as a fall-back position in case of potential or real problems especially of borders and that of transboundary water resources management in nature reflecting on the *status quo* of Lake Nyasa/Niassa/Malawi and Zambezi. Basins



#### REFERENCES

Adu Boahen, A., 1990. General history of Africa VII. Africa under colonial domination 1880-1935 (Paris, 1990), p. 44. 7th ed. Paris

Anyu, N., 2007. International Court of Justice and Border-Conflict Resolution in Africa: The Bakassi Peninsular Conflict. Mediterranean Quarterly, Volume 18. No.3, 39–55.

Ashton, P., (2003). Southern African Water Conflicts: Are They Inevitable or Are They Preventable? in Green Cross International, Water For Peace In The Middle East And Southern Africa 86. Political Science.

AU., (1964). Resolutions Adopted by the First Ordinary Session of the Assembly of Heads of State and Government. In Organisation of African Unity. Cairo, 17 - 21 July, 1964. Addis Ababa: AU Secretariat. Pg.1-23.

Boahen, A., 1990. General history of Africa VII. Africa under colonial domination 1880-1935. 1st ed. Paris: University of California Press.

Carmo Vaz, A. and Lopes Pereira, A., 2000. The Incomati and Limpopo International River Basins--A View from Downstream, in the management of shared river 112. Water Policy, 2(1), 99-112

Charles, B., 1996. The International Water Resources Law. The International Law Association's Contribution to International Water Resources Law, vol.36/iss2/2, pp. 156-216.

Curtin, P., Feierman, S., Thompson, L. and Vans ina, J., 1967. African history from earliest times to independence, (New York, 1995), p. 419

Curtin, P., Feierman, S., Thompson, L. and Vans, J., 1995. African history from earliest times to independence. 1st ed. New York

Dinar.A., 2007. Bridges over Water: Understanding Transboundary Water Conflict, Negotiation and Cooperation. 1st ed. London: World Scientific

Domínguez, J., Mares, D., Orozco, M. and Palmer, D., 2015. Boundary Disputes in Latin America. 1st ed. United States Institute of Peace

Dominguez, J., 2015. Boundary Disputes in Latin America," United States Institute of Peace, http://www.usip.org/files/resources/pwks50.pdf. 1st ed. nited states: United States Institute of Peace.

Fage, J. and Oliver, R., 1905. The Cambridge history of Africa VI. c. 1870-c.. 6th ed. Cambridge: general eds.

Fage, J. and Oliver, R., 1970. 'African reaction to the imposition of colonial rule in East and Central Africa' in R.O. Collins (ed.), Problems in the history of colonial Africa. 6th ed. LONDON: Englewood Cliffs

Hall, W., 1924. Treatise on International Law. 8th ed. New York: A. P. Higgins.

Hirji, R. and Grey, D (1998). Managing International Water in Africa: Process and Progress, in International Water Courses-Enhancing Cooperation and Managing Conflict 77, 79. In World Bank Technical Paper No. 414.



ILA, (1966). Uses of the Waters of International Rivers. In Report of the Fifty-Second Conference. Helsinki, 1966. Helsinki: ILA. 447-533.

ILA, (1996). Declaratory instruments Helsinki Rules on the Uses of the Waters of International Rivers. In 52nd Conference of the International Law Association. Helsinki, Finland, August. Helsinki: UNESCO. Jacques, G.,et al., 2011. Trans boundary Water Resources Management: A Multidisciplinary Approach. 2nd ed. Weinheim-German: John Wiley & Sons.

Joanna, F.et al., 2018. Water Security. Boundaries of benefit sharing: Mapping conflict and cooperation in the Lake Malawi/Niassa/Nyasa sub-basin, Vol. 4-5, Pg 26-36.

Leestemaker, J., 2000. The Domino Effect, a Downstream Perspective in Water Management in Southern Africa, in Green Cross International, Water For Peace In The Middle East And Southern Africa 140

Mandel, R., 1980. Roots of the Modern Interstate Border Dispute. The Journal of Conflict Resolution, Vol.24 No.3, 427–454

Matemu, S., 2002. LLM Dissertation, Legal Obligations and Challenges for Transboundary Watercourse State in Managing its National Waters: A case study of Tanzania. 1st ed. scotland: University of Dundee

McCaffrey, S., 2007. The Law of International Watercourses. 2nd ed. england: oxford university press.

McCaffrey, S., 2007. The Law of International Watercourses. 2nd ed.: Oxford University Press Nindi, S., 2015. Changing Livelihoods and Environment along Lake Nyasa, Tanzania. African Study Monographs, Suppl. 36, 71 – 93.

Oliver, R. and Fage, J., 1985. The Cambridge history of Africa VI:1870-1905. 1st ed. Cambridge: Cambridge University Press.

Pakenham, T., 1991. The scramble for Africa 1876-1912. 1st ed. New York: Penguin Random House LLC Perry A., (2000): Caprivi Strip: World Court Awards Island to Botswana: International Court of Justice Case concerning Kasikili/Sedudu Island (Botswana/Namibia). IBRU Boundary and Security Bulletin, Summer 2000

Peter H, G., 2000. The World's Water 2000-2001 The Biennial Report On Freshwater Resources. 1st ed. Washington, D.C: Island Press.

Petter Gledinisch, N., 2006. Conflict Over Shared Rivers: Resource Scarcity of Fuzzy Boundaries?" Political Geography. 1st ed. united states: Elsevier Ltd

Pyeatt, D., 1988. Heligoland and the Making of Anglo-German Colonial Agreement in 1890. Masters. Texas-USA: Texas Tech University.

Ranger, T., 1970. 'African reaction to the imposition of colonial rule in East and Central Africa' in R.O. Collins (ed.), Problems in the history of colonial Africa. 1st ed. LONDON: Englewood Cliffs

Ranger, T., Revolt in southern Rhodesia, 1896-7 (London, 1967). 1st ed. New York: T.O. Ranger.

Ranger, T., 1970. 'African reaction to the imposition of colonial rule in East and Central Africa in Problems in the history of colonial Africa, 1860-1960. 1st ed. Collins: Englewood Cliffs.



Ranger, T., 1967. Revolt in southern Rhodesia, 1896-7. 1st ed. London: New York Time

Robert, R. et al, (1994). International River Basin Organizations in Sub-Saharan Africa. In World Bank Technical Paper. Washington, D.C., August, 1994. United States of America: World Bank. Pg. 100.

SAD, C., (2000). Revised Protocol on Shared Watercourses in the Southern African Development Community. In SADC. Windhoek, 7 August, 2000. Namibia: SADC.Pg. 20.

SADC., 2000. SADC Revised Protocol on Shared Watercourses in the Southern African Development Community. Windhoek. SADC

SADC., 2011. Regional Strategic Action Plan on Integrated Water Resources Development and Management. 3rd ed. Gaborone- Botswana: SADC Secretariat.

Sadoff, C., and Grey, D., 2002. Beyond The River: The Benefits of Cooperation on International Rivers. Water Policy, 4, 389-403.

Salman, M., 2007. International Water Resources Association. The United Nations Watercourses Convention Ten Years Later: Why Has its Entry into Force Proven Difficult? Vol. 32, Number 1, Pg. 1-15

Salman, S., 2000. International Rivers as Boundaries -The Dispute over Kasikili/Sedudu Island and the Decision of the International Court of Justice. WATER INT'L, 25, 580

Salman, S., 2001. Legal Regime for Use and Protection of International Watercourses in the Southern African Region: Evolution and Context. NRJ, Vol. 4, 985.

Sanderson, G., 1963. The Anglo-German Agreement of 1890 and the Upper Nile. The English Historical Review, Vol. 78, No. 306, pp. 49-72, 24.

Shah. 2010. Anup. [ONLINE] Available at: https://www.globalissues.org/article/84/conflicts-in-africa-introduction. [Accessed 15 January 2015].

Shillington, K., 1995. History of Africa. 1st ed. London.

Shillington, K., 1995. History of Africa. 1st ed. London: MacMillian International.

Shillington, K., History of Africa (London, 1995), pp. 327-329.. 1st ed. London: K. Shillington Voeltz, R., 2020. German colonialism and the South West Africa Company 1884-1914. 1st ed. Athens: Ohio University Center for International Studies.

T. Pakenham, The scramble for Africa 1876-1912 (New York, 1991), pp. 490-495

Tanzi A., 2000. The relationship between the 1992 UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes and the 1997 UN Convention on the Law of the Non-Navigational Uses of International Watercourses' Report of the UNECE Task Force on Legal and Administrative Aspects (2000) at 32-37

Tarik, K., 2020. Trans-boundary Water Resources Management: A Multidisciplinary Approach. Desalination and Water Treatment, [Online]. Vol. 51, 2013 - Issue 19-21, Pg.10. Available at: https://doi.org/10.1080/19443994.2013.768808 [Accessed 13 May 2020].



UN., (1970). Vienna Convention on the Law of Treaties. In United Nations Conference on the Law of Treaties. Vienna, 23 May, 1969. Vienna - Austria: UN secretariat. Pg. 1-280.

UN., (2020). The Dublin Statement and Report of the Conference. In The Dublin Statement and Report of the Conference. Dublin, Ireland, 26 -31 January 1992. Geneva, Switzerland: World Meteorological Organisation. 1 - 55.

UN., 2014. General Assembly of the United Nations. Convention on the Law of the Non-Navigational Uses of International Watercourses, 49 (A/51/49), 18.

UNCED, (1992). Agenda21: The Rio Declaration on Environment and Development. In United Nations Conference on Environment & Development. Rio de Janerio, Brazil, 3 to 14 June 1992. Rio de Janerio: United Nations Sustainable Development

Voeltz, R., 1988. German colonialism and the South West Africa Company. 2nd ed. Ohio: New York Time

Voeltz, R., 1995. German colonialism and the South West Africa Company, 1884-1914 (Athens, Ohio, 1988), 45-54

Wouters, P., 2013. Universal and Regional Approaches to Resolving International Water Disputes: What Lessons Learned from State Practice? The PCA/Peace Palace Papers.

Wouters, P., Vinogradov, S., Allan A., Jones, P., Rieu-Clarke, A., (2005). Sharing Transboundary Waters—An Integrated Assessment of Equitable Entitlement: The Legal Assessment Model. International Hydrological Programme. Paris. UNESCO

ZAMSEC, 2011. Agreement on the Establishment of the Zambezi Watercourse Commission. 1st ed. Harare: ZAMSEC.