Chapter 3  
Challenges: Sustainability and Obsolete Treaties

This treaty only benefits Egypt. We cannot sit back while we have water we cannot use to irrigate our land. Why should we preserve our water for Egypt – Raila Odinga (then Energy Minister’s address to the Kenyan Parliament), and Waste in the Lake basin is a two-lane highway: flowing down into the Lake is the waste and pollution generated upstream. In the opposite direction, leaving the basin, flows the region’s wealth in different forms: exploitation of fish, and the rich gold mines in Macalder and Kitere. – The late Prof. Oyugi Aseto

3.1 Summary

Through its links with Lakes Tana and Victoria and all the rivers that feed them, the great Nile system belongs to the peoples of Rwanda, Burundi, Tanzania, Uganda, Kenya, the Sudan, Ethiopia, and Eritrea. Yet, when the present Nile Treaty was “negotiated” and signed in 1929, these peoples were never consulted. It was a treaty purely between the various British colonial regimes that lorded it over most of these African countries.

That the pact overwhelmingly favoured Egypt is no wonder. Egypt was far more important to Britain than the other colonies. Through the Suez Canal, it was a valid econo-strategic link with the riches of the Middle East, India and the Far East. But more relevant than that, the Egyptian section of the Nile Basin was (and remains) a veritable treasure trove of agricultural products, especially the raw cotton that continues to feed the maws of Lancashire’s textile industries. And Egyptian farming - the great irrigation works that have maintained that country ever since Pharaoh Menes-Narmer united it in 3100 BC—have depended entirely on extraordinarily fertile alluvium, which the two Niles scoop yearly from Eastern Africa. That was why the treaty banned all the riparian countries south of Egypt from using the Nile water for their own irrigation without Cairo’s consent. Even after independence,
Cairo has clung tenaciously to this blatant injustice. The benefits have been so great that Egypt has adamantly rejected all calls to democratize the international use of the river’s rich resources. But Egypt claims to belong to the comity of African nations and it is good that it has finally seen the sense of sitting down with the other “stakeholders” to negotiate the issue afresh.

The need remains, nevertheless, to use the Nile waters with the greatest rationale. Egypt is right to be anxious about wastage. For the fact remains that, for that country, the Nile is the only lifeline. Other interested countries do not depend on it so completely and so desperately. Therefore, they should exploit the river with enough prudence not to harm Egypt’s interests. What is to be done? One possible solution, suggested by members of the East African Legislative Assembly, is to sell the Nile waters to Sudan and Egypt, just as Egypt has been selling the Nile waters to Israel.\footnote{East African Standard Newspaper, June 17th, 2003.}

### 3.2 Introductory Remarks

The greatest development challenges facing Lake Victoria and its basin are the socio-economic and ecological problems, which are mainly related to the inter-linkage between poverty and environmental degradation. These are further exacerbated by the lack of capacity among the concerned institutions to manage the resources of the Lake Victoria Basin (LVB), both human and natural, in a sustainable manner. Similarly, the judicial and institutional frameworks that govern the socio-economic activities have so far been inappropriately conceived and enforced, and in an uncoordinated manner.

Sustainable growth is one prerequisite for poverty alleviation in any country. Considering the fact that population growth in the Lake Victoria basin is in the region of 3% and that 50% of the population live under poverty line, a substantial growth is required in order to alleviate poverty to any significant degree. The growth that has been seen in the region over the last few decades has mainly been based on the exploitation of natural resources. Some of it is linked to finite resources, such as mining activities (mainly diamonds and gold), other parts of it linked to agriculture and fisheries.

Critical questions on sustainable growth in the region relates to how the benefits of the exploitation of natural resources are used and to whether the non-finite resources are exploited in a sustainable way. The answers are clear enough. There are indications that a large portion of the proceeds from economic activities in the region is not reinvested in the region. Furthermore, It is evident that most present practices are unsustainable.

With the degradation of natural resources follows rising levels of poverty. Small-holder farmers in the LVB are forced to engage in increasingly desperate and unsustainable use of the natural resources. This includes cultivating marginal and fragile areas such as wetlands, and clearing vital forests to open up new arable land or to
get access to gathering fuel wood, leading to intensified soil erosion. The destruction of the basin’s wetlands to create space for cultivation and grazing of cattle (see Fig. 13.2), has resulted in loss of biodiversity and a decreased filtering effect on the water entering the Lake via water courses.

Urbanization in the Lake Victoria basin in combination with widespread poverty has led to proliferation of informal “squatter” settlements in major towns. Such informal settlements lack garbage collection as well as sanitary facilities, leading to the prevalence of diseases such as diarrhea, malaria, typhoid and amoebas, among others. Existing sewage treatment facilities in all major towns have generally poor coverage and are in very poor shape. Raw sewage is discharged into small rivers or streams or directly into Lake Victoria, contributing significantly to pollution. Industries in the region have very poor waste treatment, if any, or are discharging their waste waters to the existing poor municipal waste water systems or directly into the streams and the Lake.

Given the above considerations, it is clear that the Lake receives an increased load of nutrients, organic material and other pollutants, which contribute to a rapidly increasing eutrophication resulting in strong vegetative growth (algae and plants), oxygen consumption and anaerobic conditions in the Lake’s deep water and a change in the water quality. Water quality deteriorates and quantity and quality of fish decrease.

A dramatic illustration of how poverty, in combination with lack of enforcement of laws and institutional capacity, aggravates environmental degradation in the LVB is the revelations regarding poison fishing, the use of illegal nets and overfishing. A dramatic increase in fish export, lack of alternative employment opportunities, in particular for women, and decline in food security have served to perpetuate poverty, which in turn has enticed local fishermen to use unconventional fishing methods such as poisoning or illegal nets, with adverse health and environmental consequences. Furthermore, these practices threaten the future of the fish population and consequently the economy and well being of the communities surrounding the Lake.

The deterioration of Lake Victoria’s ecology is demonstrated in the rapid spread of the water hyacinth, which over periods cover bays and vast Lake surface areas along the shores blocking access to fish landing sites as well as water intakes for water supply facilities [6]. Areas covered with the weed are perfect breeding places for different kinds of organisms, which leads to an increased health hazard from diseases such as malaria and bilharzia. The decreased water quality constitutes a great risk for the part of the population using Lake water directly as drinking water and causes extra costs for the municipalities using Lake water for tap water production.

The general health situation in the Lake Victoria region is alarming. The mortality in diseases such as cholera/diarrhoea, malaria, tuberculosis and HIV/AIDS is very high. The AIDS disease with its impact on society aggravates the region’s economic problems. A study in 1994 by FAO reveals that both cash income and labour in farming households are partly diverted to cope with HIV/AIDS. This leaves less labour for agriculture and less income for the purchase of agricultural inputs and for off-farm activities. The disease also leaves many orphaned children, which put
more strain on extended families, already under considerable stress. Of immediate concern, however, is the Corona virus, which is now (2020) posing increased health and economic challenges to the region.

Problems facing the Lake are compounded by the fact that the relevant municipalities surrounding it, e.g., Kampala in Uganda, Kisumu in Kenya, and Musoma in Tanzania lack the capacity to implement sustainable development policies within a regional context of high urbanization rate and weak national and regional economies [7]. UN–Habitat through its urban management programme initiated the Lake Victoria Region City Development Strategies Programme in early 2002 in a bid to strengthen the capacity of the three centers.

3.3 Management Issues Facing Lake Victoria

Lake Victoria faces several management problems. These include management issues like reducing conflicts regarding the usage of the shores of the Lake for fish breeding or for papyrus production for domestic usage; the question of allocation of the Lake’s fishery benefits between the riparian populations and export to earn foreign exchange; the problem of minimizing overcapacity of fish production and avoiding economic waste; and the issue of reducing threats of existing fish catches from overfishing or activities other than fishing. There is evidence that total fish catches have increased in recent years, but these catches are concentrated on some individual species. That is, whereas some species are decreasing, other species are increasing. This situation causes uncertainty about the future trends in total catch from areas such as the Nyanza Gulf. What kind of decision should there be in this uncertain trend?

Lake Victoria fisheries, especially in the Nyanza Gulf (Kenya), are being exploited at a very high rate, thanks to the remarkable improvements in the capacities in fisheries such as an increase in the number of boats, improvement of communication network around the Lake, handling shades, provision of cold storage and other preservation methods such as smoking and sun drying of fish. It has been estimated that, on the Kenyan side of the Lake, there are about 21,000 fishermen operating over 5,000 boats. This is the highest concentration of fishermen in the Lake. However, despite this large numbers, there is no knowledge of the magnitude of fish stocks and the maximum sustainable yields that should be exploited. In spite of this uncertainty, there are warning signs of a declining fishery in Lake Victoria.

Several factors have been identified as the possible causes of the decline in fishes. These include the cutting of the papyrus swamps for making mats, reclamation for agriculture, dislodge by floating islands and other uses. Pollution is another factor. It emanates from industrial and domestic wastes from large cities like Kisumu in Kenya, Mwanza in Tanzania, and big towns like Jinja in Uganda. In addition, there is a growing threat from increased use of fertilizers and pesticides in the agricultural areas within the Lake basin. These are washed down the rivers by rainfall and eventually find their way into the Lake. Finally, there is the problem posed by the Nile Perch, which has devoured some other fish species in the Lake, thus drastically reducing
the number of some species to near extinction. What kinds of management decisions should be taken in these conflicting factors?

The foregoing are some of the issues that management decisions have to encompass. More specifically, the management decisions must include the following considerations.

### 3.3.1 Management of Lake Victoria Resources

The region needs a lot more than fresh injections of funding. Ultimately, the people of the Lake can only solve the Lake basin’s problems themselves. Uganda seems to have taken this sentiment to heart in its campaign to protect and boost the wetland ecologies that fringe the Lake and serve as a crucial natural filter.

Launched in 1989, the key to the Uganda National Wetlands Program’s success has been community involvement, and specifically women, because the government recognizes that they are the guardians of water and fire in the community. They know best how to manage those resources.

The program also offers a five-week course in wetland management, trains communities in making a range of products from sustainably harvested wetland plants such as papyrus, rattan cane and hyacinth, and is in the process of quantifying the economic contribution of the wetlands’ natural services.

The establishment of colonial rule over the people of the region brought with it resource management structures that removed the power from traditional leaders to the central governments of larger territories of Kenya, Uganda and Tanganyika. This meant that people who had no interest in the Lake could be given the responsibility to manage resources such as fisheries. The ownership of the resources shifted with time.

The population influx and lack of properly planned infra-structural development has brought many problems to these cities. Such problems like sewer system, industrial pollution, shortage of water supply are a serious headache to the citizens. County governments and municipal councils alone cannot address the problems. The citizens have to join them with ‘own key’ solutions through organized groups such as Non-Governmental Organizations (NGOs).

The economic benefits of the Lake’s resources has spread to other communities thus increasing pressure on the resources. Farming and industrial activities in the basin and the surrounding highlands has also intensified, resulting into drastic change in land use and increased pollution into the Lake. All these activities put a lot of stress on Lake Victoria’s resources. The number of fish species have drastically decreased to just about 3 of commercial value at present; incidences of water borne diseases have also significantly increased; aquatic weeds began to proliferate at alarming rates. The Lake is gradually dying and could no longer support the millions of people

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2[see](https://africa.wetlands.org/en/news/uganda-national-wetlands-policy-review-23-years-making-finally-kicks-off/).
who depended on it. There is therefore dire need to restore the Lake to its original supportive qualities.

The situation cannot be directly reversed to the pre-independence state. The most progressive intervention is to bring these diverse cultures together to better manage and utilize the Lake’s resources. The communities have therefore formed East African Communities Organization for the Management of Lake Victoria (EcoVic) and Lake Victoria Regional Local Authorities Cooperation (LVRLAC) [2]. The two organization have formalized the operational plan to work together to improve the environmental situation of Lake Victoria.

### 3.3.2 Ownership of Lake Victoria: Who Owns the Lake?

If you ask fishermen on the Kenya side of the Lake, ‘Who owns the fish?’ they will tell you that it belongs to the government. Such attitudes indicate the extent to which many feel that they have lost out or lack a stake in managing their own resources. It doesn’t help either, that with the many disasters that have stalked the region in the recent past, armies of aid agencies and NGOs have also come, doing little more than taking the place of *Mama na Baba*, the government.

All of these opportunities, bright spots flickering on the horizon, are fragile, easily extinguished. And they won’t amount to much overall if the fundamental problem of the LVB is not addressed: resource ownership. It is not for lack of laws - whether old or new—*that fishermen poison fish, that industries flush their untreated waste down rivers, that municipal councils endanger the lives of their citizens by emptying raw sewage directly into the Lake*. These acts of irresponsibility are nurtured in an environment where entire communities have been disenfranchised and the extraction and *exportation* of wealth have become the dominant trends. Until these basic issues are addressed, the region’s economic potential will be something we’ll be talking about forever.

### 3.3.3 Jurisdiction and the Political Environment

In terms of the surface area, Kenya, Tanzania and Uganda, now partner states in the East African Community (EAC), respectively have control over 6, 49 and 45% of the total Lake area.

Overwhelmingly, the politics of management and ownership of the Lake fall into the larger context of the establishment of the East African Community.³ Within the Community, two institutions on Lake Victoria have been established. These are the Lake Victoria Fisheries Organization, which is specific to fisheries, and the

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³The Treaty for the Establishment of the East African Community. Arusha, Tanzania.
Lake Victoria Development Program (covering general development matters of the Basin) [1, 2].

The EAC Partner States recognize three important and convergent issues relating to management of the shared waters. These are; firstly, that they share an interest in the well being of the Lake and its living resources and in the rational management and sustainability of these resources. Secondly, they recognize the need to develop Lake Victoria region as an Economic Growth Zone. Thirdly, they agree that management decisions relating to any portion of the Lake, within the territorial limits of any one of the Partner States, will affect the others, and hence there is the concomitant necessity that management decisions take such into account.

Fragmentation of the Lake management institutions in Kenya is a big problem. Kenya does not have appropriate institutional mechanisms for integrated management of Lake Victoria and its basin. The management responsibility of the Lake cuts across jurisdictional, administrative and national borders, making it difficult to establish a sound management framework. Moreover, active stakeholder involvement has been lacking in the establishment of many institutions responsible for the management of the Lake and its basin.

Managing the Lake Victoria and its basin should be guided by a common long-term vision. For the Lake to continue to provide benefits into the future, a comprehensive management approach involving all stakeholders and covering all activities affecting the water resources throughout the watershed is required. To work effectively, management plans must be developed at the community level, involve the participation of all groups who benefit directly and indirectly from the Lake, and have clear and transparent procedures for resolving conflicts.

### 3.3.4 Development Challenges

After several decades of marginal economic growth, increasing poverty amidst escalating environmental degradation, the East African countries are confronted with a series of critical transitions to attain sustainable socio-economic growth. These transitions include:

- Demographic transition toward an optimal population size, structure and distribution in relation to the environment and natural resources.
- Social transition toward a more equitable sharing of development opportunities and benefits with priority to the poor majority.
- Gender transition toward expanded rights and participation of the vulnerable, particularly women in the development process.
- Economic transition toward equity-led growth with priority to the poor and to protecting the environment and natural resources needed for future development.
- Agricultural transition toward sustainable land use and land management options to enhance food security, improved livelihoods and conservation of land water and vegetation resources.
Energy transition toward efficient and less polluting sources of energy. Priority should be to the development of renewable sources and affordable alternatives to fuel wood for the poor majority.

Technological transition toward accelerated industrial development with priority to technologies that produce less waste and are more energy and resource efficient.

Institutional transition toward effective national and regional institutional arrangements with priority to integrating economic, equity and environmental imperatives in planning and decision-making within and among different ministries and countries.

Governance transition toward greater public accountability and participation with priority to new partnerships among governments, industries and NGOs.

Capacity building transition toward national and regional self-reliance with priority to accelerated development and use of local know-how, technology and expertise.

Development budget transition from aid dependence to self-reliance. Peace and security transition toward a new era of regional co-operation and integration with priority to the peaceful settlement of disputes.

3.4 The River Nile Treaties

In the previous sections, we noted the issues concerning Lake Victoria and its environs. For a complete and comprehensive understanding of the Lake, it is important to address the question of the Nile Treaties. These treaties were signed by Egypt and other interested parties to safeguard the interest of Egypt. These treaties controversies have arisen in recent years, with other riparian states demanding the abrogation of the treaties. This chapter presents an overview of the Nile Treaties and their implications for the economic development of the riparian states upstream.

3.4.1 The Origins of River Nile

Most history books credit the “discovery” of the source of the Nile to the 19th century explorer John Speke (see Fig. 2.1) who captivated the Western world with this news in 1862.\(^4\) This claim, however, no longer holds. In fact, a little-known German explorer, Bruckhart Waldekker, proved Speke wrong.\(^5\) It is now accepted that the Nile originates from two distinct geographical zones—the basin of the “White Nile” and the “Blue Nile”. The White Nile originates from the Great Lakes Region and is fed by the Bahr-el-Jebel water system to the North and East of the Nile Congo rivers divides. The Blue Nile originates in the Highlands of Ethiopia and Eritrea, so do the other major tributaries of the Nile, Atbara and the Sobat. Recent research has

\(^4\)Britannica Concise.
\(^5\)John Mbaria, “Revoke Obsolete River Nile Treaty” in the Daily Nation, Thursday, March 29, 2002.
indicated that the Ethiopian Highlands contribute about 85% of the total volume. Lake Victoria, though, is a major source of River Nile. The Lake contributes less than 15% of Nile water. About 84% of the water in the Lake comes from the seven rivers in Kenya, even though Kenya owns only 6% of the Lake.

### 3.4.2 Defects of Past Treaties: Legal Implications

Most of these consist only of an article in the treaties and agreements about colonial boundaries and economic territories. In chronological order [5]:

1. The Anglo Italian protocol signed on 15th April 1891.
2. The treaty between Britain and Ethiopia of 15th May 1902.
3. The agreement between Britain and the government of the independent state of the Congo signed on 9th of May 1906.
4. The 1901 agreement between Britain and Italy over the use of the River Gash.
5. The Tripartite (Britain–France–Italy) Treaty of December 13, 1906.
6. The 1925 exchange of notes between Britain and Italy concerning Lake Tanner.
7. The agreement between Egypt and Anglo Egyptian Sudan dated 7th May 1929.
8. The 1959 Nile Waters Agreement (between Egypt and Sudan).

Let us closely examine these treaties.

**The Anglo-Italian Protocol of April 15, 1891:** Only Article III of this treaty refers to the Nile water. The remaining articles define the colonial territorial claims of Great Britain and Italy in East Africa. Article III states that the Italian government engages not to construct on the Atbara River, in view of irrigation, any work, which might sensibly modify its flow into the Nile. This article of the treaty is curious in light of the fact that neither this river flowed in the territory claimed by Italy nor was Italy colonizing a country near the Atbara River, in order to have a claim over the river. However, the reference to the Atbara River on the part of Britain made some sense since the Sudan and Egypt, through which the Atbara flows, were within the British colonial territory. The reason for Italy to sign such an agreement foregoing its irrigation development without receiving any benefit in return is unclear. Moreover, for Great Britain to be interested in including this reference in a treaty with a country at a distance of some thousands of kilometers from the Atbara River makes the essence of the agreement more irrelevant.

It appears that the intent of the treaty was not the use of the Nile water, but to establish a colonial boundary. Given this context, the treaty cannot be seen as an agreement over property rights to the river. Even if, say, the treaty is assumed to define use rights to the river, what was meant by the term “sensibly modify the flow into the Nile”? The volume of Atbara water used upstream to be considered, as a sensible modification by downstream users of Britain colonies is undefined. The language used is too vague to provide the parties with clear property rights and guarantees for water use. It is not unreasonable, therefore, for the remaining riparian
states to see no reason for this treaty to provide a historical base for binding present and future cooperation on Nile water use.

**The Treaty between Great Britain and Ethiopia of May 1902**: The aim of this treaty was to establish the border between Ethiopia and the Sudan. One of its articles, Number III, relates to the use of Nile water. The English version, as reviewed by Britain and later by the Sudan, reads as follows: “His Majesty the Emperor Menilik II, King of Kings of Ethiopia, engages himself towards the Government of His Britannic Majesty 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 except in agreement with His Britannic Majesty’s Government and the Government of Sudan”. The Amharic version, however, gave a different meaning and understanding to Ethiopia and “was never ratified by this country”. The treaty was understood by Ethiopia as follows: “…Securing and maintaining the prior agreement of Britain before construction of any work on the Nile tributaries; not to stop (arrest) the flow of the Nile rivers did not mean not to use; and, that the treaty was made between Britain (colonizer of the Sudan) but not with the Sudan as it was under the colonial power of Britannia. As Britain is no longer ruling the Sudan, this agreement does not hold at present.”

The 1902 agreement has been the most controversial treaty in the history of Nile agreements as both parties claimed that their own understanding of the treaty was correct. And, not only has the claim remained controversial but it has also been the cause of disputes, which threaten the socio-political and economic dynamics of the basin environment and efforts toward future cooperation. This is because, first, referring to this agreement, Sudan has argued that Ethiopia should not use the Nile water without the permission of the Sudan. Second, the Sudanese claim has been supported by Egypt with the possibility of military retaliation if Ethiopia used the Nile water. Third, there is the possibility that this threat has played some role in Ethiopia’s extremely poor record in food production, though poor agricultural policies have no doubt played the major role.

This controversy remained a threat to present and future cooperation over the Nile waters. By forbidding the Nile water from being arrested by Ethiopia, the treaty inadvertently advocated the principle of sustainable development. Whether or not its intent was out of concern over the impact of development of Nile waters on the environment is subject of much debate. Stopping a flow of a river creates an artificial Lake that destroys ecological systems and often results in the relocation of people. However, it is unrealistic to believe that this treaty was predictive enough to anticipate the impact of water impoundment on biophysical and social systems in the basin, looking at its objectives and the time it was constituted.

**The Agreement between Britain and the Government of the Independent State of the Congo on 9th May 1906**: This was an agreement on the colonial boundary of the Congo between Britain and Belgium. The Congo being called an ‘independent state’ when the treaty was signed by the Government of Belgium on behalf of this country was hypocritical. Article III of the agreement was about the Nile waters and it stated that: “The Government of the independent state of the Congo undertakes not to construct, or allow to be constructed, any work over or near the
Semliki or Isango River which would diminish the volume of water entering Lake Albert except in agreement with the Sudanese Government”.

Belgium signed this unfair agreement on behalf of the Congo, despite the agreement entirely favoring the downstream users of the Nile waters and restricting the people of the Congo foregoing its Nile water use. The agreement did not require downstream users to consult the upstream countries for anything that they might do to the Nile waters. In this treaty, it is difficult to find any incentive for riparian states that might enhance their future cooperation since it involved neither the principle of equitable water use nor the approach of integrated water development.

The 1901 Agreement between Britain and Italy over the Use of the River Gash: The agreement states that “The Government of Erythraea, while recognizing all its rights on the waters of the Gash and having regard to the requirements of the Colony, sees no difficulty in declaring that, in so far as the regime of the waters of that river are concerned, it will regulate its conduct in accordance with the principles of good neighbourship”. Evidence is scarce, however, on whether or not this treaty bound the parties to the agreement. Nevertheless, of all the treaties and agreements made during the colonial period, it could be said that this agreement was the most equitable. Because of difficulty in ensuring equitable water use, the agreement was defined and reinforced later by the “the Anglo-Egyptian Exchange of Notes” with subsequent detailed arrangements of 1925.

The exchange of notes included technical provisions suitable for practical implementation as follows: “Quantified allocation, to each party, of water from the river Gash, Flow regime terms and conditions for water allocation, and the Amount of annual payment by the Sudan to Eritrea as a proportion of Sudanese revenues from irrigated cultivation at Kassala”. This treaty is held by some of the riparian states as not being binding because the colonial signatory governments are no longer present in the Nile basin. Nevertheless, it can be used as a basis for the effort being undertaken to establish cooperation among the riparian countries.

The Tripartite (Britain–France–Italy) Treaty of December 13, 1906: Article 4 (a) of this treaty dealt with the use of the Nile water in Ethiopia’s sub-basin. It states: “To act together …to safeguard; …the interests of Great Britain and Egypt in the Nile Basin, more especially as regards the regulation of the waters of that river and its tributaries (due to consideration being paid to local interests) without prejudice to Italian interests”. This treaty denied “the absolute sovereignty” of Ethiopia over its water resource. It resulted in Ethiopia immediately notifying its rejection of the agreement by indicating that no country had the right to stop it from using its own water resources. Neither Ethiopia’s military power nor its international political and economic influence was strong enough to protect Ethiopia’s sovereign rights over its water resource. Ethiopia’s rejection of this agreement was a revision, if not retraction, of the May 15, 1902 treaty signed between Ethiopia and Britain.

The 1925 Exchange of Notes between Britain and Italy Concerning Lake Tana: Britain and Italy had signed an agreement in 1919 over Lake Tana, of Ethiopia, which read in part as follows: “In view of the predominating interests of Great Britain in respect of the control of the waters of Lake Tana, Italy offers Great Britain her
support, in order that she may obtain from Ethiopia the concession to carry out works of barrage in the Lake itself …”.

In 1925 it was expanded to say that:

…Italy recognizes the prior hydraulic rights of Egypt and the Sudan …not to construct on the head waters of the Blue Nile and the White Nile (the Sobat) and their tributaries and influence any work which might sensibly modify their flow into the main river”.

Ethiopia opposed this agreement and notified the parties of its objections as follows:

To the Italian government, Ethiopia said:

The fact that you have come to an agreement, and the fact that you have thought it necessary to give us a joint notification of that agreement, make it clear that your intention is to exert pressure, and this in our view, at once raises a previous question. This question, which calls for preliminary examination, must therefore be laid before the League of Nations.

And, to the Britannia government Ethiopia said:

The British Government has already entered into negotiations with the Ethiopian Government in regard to its proposal, and we had imagined that, whether that proposal was carried into effect or not, the negotiations would have been concluded with us; we would never have suspected that the British Government would come to an agreement with another Government regarding our Lake.

When an explanation was required from the British and the Italian governments by the League of Nations, they denied challenging Ethiopia’s sovereignty over Lake Tana. This notwithstanding, however, there was no explicit mechanism enforcing the agreement. A reliable and self-enforcing mechanism that can protect the property rights of each stakeholder is essential if the principle of economically and ecologically sustainable international water development is to be applied”.

**The Agreement between Egypt and Anglo-Egyptian Sudan of 7th May 1929:**

This agreement included the following terms:

(a) Egypt and Sudan utilize 4 billion cubic meters of the Nile flow per year, respectively;
(b) The flow of the Nile during January 20 to July 15 (dry season) would be reserved for Egypt;
(c) Egypt reserves the right to monitor the Nile flow in the upstream countries;
(e) Egypt assumed the right to undertake Nile river related projects without the consent of upper riparian states.
(f) Egypt assumed the right to veto any construction projects that would affect her interests adversely.

It is important to note that Egypt was still under British influence in 1929 and neither Sudan nor the remaining riparian states, aside from Ethiopia, were independent. The roles of both referee and player were taken, in the process of this agreement, by Britain in the name of its colonial territories in order to favor one, Egypt, by limiting the rights of the Sudan, and by rejecting those of the remaining riparian states. The agreement became the basis for the next agreement, called **The 1959 Nile Water Agreement**, which opened a door for Egypt and the Sudan to acquire rights to Nile
water resources and for the full utilization of these waters by developing the Aswan high Dam, with its huge impact on the biophysical and social (disposition of human settlement) environment of the basin.

In May 1929, the Egyptian Prime Minister and the British High Commissioner to Egypt, signed the Nile River Treaty. Although the 1929 agreement was concluded between the British High Commission in Cairo and the Egyptian Government, while the 1959 treaty was between Egypt and the Sudan governments, the pacts bind Uganda, Tanzania, and Kenya to date. They bar the three countries from using Lake Victoria waters without Egypt’s permission. The 1929 treaty was signed at a time when Lake Victoria was thought to be the source of river Nile. The treaty was a culmination of previous agreements made in 1889, 1891 and 1902—all which merely satiated British selfish interests against the Italian and (later) the Ethiopian Government. All ended up securing, for the 96% Egyptians crowded along the Nile, the use of 48 billion cubic meters of the water each year while Sudan got 4 billion cubic meters. These agreements were not sensitive to the water needs of the other eight countries in the basin (Tanzania, Uganda, Kenya, Rwanda, Burundi, Ethiopia, and the Democratic Republic of Congo).

The treaty acknowledged Egypt’s natural and historical rights to the Nile waters. “Without the consent of the Egyptian Government, no irrigation or hydro-electric works can be established on the tributaries of the Nile or their Lakes, if such works can cause a drop in water level harmful to Egypt”, so says a section of the treaty.

The original agreement concluded in 1929 heavily favored Egypt’s “historic rights” and gave Egypt and Sudan 100% use and control of the waters from Lake Victoria. Even in the event of floods, other riparian states had no permission to use this water. Thus, in 1949, Owen Falls Treaty prohibited Uganda from using Lake Victoria water for irrigation in Karamoja.

**The Nile Treaty of 1959:** This was an agreement between the Sudan and Egypt for full utilization of Nile waters. In the 1950s, Egypt was planning the Aswan High Dam project to collect the entire annual flow of the Nile water. The objective of the 1959 Agreement was to gain full control and utilization of the annual Nile flow. One of the financiers of the project, the International Bank for Reconstruction and Development (IBRD) required a secure water allocation for Sudan and compensation for the population to be dislocated due to the project. In 1956 Sudan had become an independent country and wanted previous agreements, which it saw as being unfair, to be changed, so that it could pursue another agreement on the use of Nile water with Egypt. At the beginning of the talks, both Sudan and Egypt claimed large areas of irrigable land and amounts of Nile water: Sudan claimed 44 billion cubic meters of Nile water to irrigate 2.22 MH, while Egypt claimed even more water than Sudan that irrigates 7.1 MH. The debate over the claims delayed the agreement, but whether or not Sudan agreed, the construction of the Aswan High Dam was seen as a development priority for Egypt. Although neither the Sudan nor Egypt were contributors to the Nile water but only users, the agreement for the full utilization of the Nile Waters was signed in 1959, between Sudan and Egypt. The agreement contained the following main points:
1. The controversy on the quantity of average annual Nile flow was settled and agreed to be about 84 billion cubic meters measured at Aswan High Dam, in Egypt.
2. The agreement allowed the entire average annual flow of the Nile to be shared between the Sudan and Egypt at 18.5 and 55.5 billion cubic meters, respectively.
3. Against this backdrop in the sharing of the waters of the Nile, which disregarded the contribution of the upper riparian states, changing the status quo has been an issue of hairsplitting interpretation. This is why sound water resources management is very crucial.

The general observation from the treaties discussed so far is that, countries have tried to make interpretations in their own words and contexts. It is, however, important for countries to adopt new ways that will help them forge ahead. This will be achieved through respect of the object and the purpose of treaties as established by the International Law. According to the Vienna Law of treaties, a treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in that context and in the light of its object and purpose.

The object and the purpose of any agreement therefore must serve the interests of all the parties. In conclusion, as discussed above, none of the treaties and agreements dealing with the use of Nile waters signed during the colonial period involved all the riparian countries and they did not deal equitably with the interests of these riparian states. Also they did not take into account the impact of water development on the basin’s social and biophysical environment.

**Some Important Terms of the 1959 Nile Treaty:**

Egypt and Sudan signed a Treaty in Cairo on November 8, 1959. Its title was “United Arab Republic and Sudan Agreement (with annexes) for the Full Utilization of the Nile Waters”. The agreement came into force on December 12, 1959. The 1959 agreement set Egypt’s share at 55.5 bcm per year and Sudan’s 18.5 bcm per year.

**Agreement on a Unified View:**

1. The Treaty said in part: “If it becomes necessary to hold any allegations with any riparian state, outside the boundaries of the two republics, the governments of the Sudan Republics and the United Arab Republic (Egypt) 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”.
2. The Sudan–Egypt treaty also notes: “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 execution details and the working maintenance arrangements”.
3. The treaty also gives Egypt and Sudan powers to “supervise the carrying out of technical agreements” by other riparian states.
4. According to the agreement, any other country that wishes to lay claims on the Nile waters, and that includes Lake Victoria, will only get a share, if Egypt
and Sudan agree. The treaty reads: “As the riparian 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”. 6

**Deductions in Equal Parts:**

1. The Treaty further says: “And if the said consideration results in the acceptance of allotting an amount of Nile water to one or the other of the said states, the acceptance amount shall be deducted from the shares of the two republics in equal parts, as calculated at Aswan. Even then, any water taken out will have to be monitored by a technical commission (which) shall make the necessary arrangement with the states concerned”.

2. Little is known about an annex document in which Sudan gave a “water loan” to Egypt. The annex reads: “The Republic of the Sudan agree in principle to give water loan from the Sudan’s share [to Egypt] in order to enable the latter to proceed with her planned programs for agricultural expansion”.

Sharp focus has been put on the Nile water agreement but it is the 1959 treaty signed by Egypt and the Sudan that has shocking clauses. According to the treaty, none of the Lake Victoria nations can use the Lake’s water without supervision by a “technical commission” appointed by Egypt and Sudan. Further, they can only be allocated a certain quota by the two. In one clause, the two nations agree, “if the other riparian states claim a share in the Nile waters, the two republics shall jointly consider and reach one unified view. And…the accepted amount shall be deducted from shares of the two”. The treaty authorizes a technical commission to “make the necessary arrangement with the states concerned to ensure that their water consumption shall not exceed the amounts agreed upon”.

**Consequences of the Nile Treaty:** The implementation of the Nile Treaty means the following consequences:

According to the treaty, Egypt’s approval must be obtained if any project is to be undertaken on the Nile River. Archival information shows that as early as 1949 when the Owen Dam was constructed, the British Government wrote to the Uganda Electricity Board telling it that the project would only go ahead “If the Egyptian Government approved it”. To date, there is an Egyptian resident engineer at the dam.

A document titled “Exchange of Notes Constituting An Agreement Between the Government of Great Britain and Northern Ireland and the Government of Egypt regarding the Construction of the Owen Falls Dam, Uganda signed at Cairo on December 5, 1949” is one of the many agreements on the issue. The pack was signed by Britain and Egypt and it binds the former colonies.

**Military Coup against Dissenting Foreign Governors:** When President Gamal Abdel Nasser begun building the Aswan High Dam, contrary to the agreement, Sudan withdrew from the treaty. Later, there was a military coup in Sudan. The new Sudanese Government renegotiated the treaty resulting in the 1959 agreement, which increased Egypt’s share to 55.5 billion cubic meters (or 82% of the annual flow), while Sudan’s share was increased to 18.5 billion cubic meters (or 18%). Egypt is today accused

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6Daily Nation newspaper, March 28, 2002.
of being behind the coup that followed the standoff and saw Mr. Jaffer Numeiri take power in Sudan. Once again, Egypt and Sudan ignored Kenya and all the other basin countries and went ahead to irrigate 6 million acres and 2.75 acres, respectively.

**Threat of Usage of Force**: To sustain this selfishness, the two countries have used the threat of force to intimidate other countries from utilizing the waters flowing into the Nile. For instance, in May 1978, the then Egyptian Minister of Irrigation and Land Reclamation, Mr. Abd a-Azim Abu al-Ata warned countries in the Horn of Africa that any attempt to control the source of the Nile was “an act of aggression”.

Such has been the sensitivity with which Egypt treats any attempt by upstream countries to use the Nile waters for their needs. Even Kenya, which contributes two-thirds of the water flowing into Lake Victoria, is not spared from this threat. “The day that Kenya decides to use water from Lake Victoria, we’ll have less water in Egypt. One litre of water used for their irrigation will be reduced from water received in Cairo”, a senior official in Egypt was quoted by the Financial Times of London in January 1988. The then Egyptian Ambassador to Kenya, Dr Rifaat al-Ansary reacted that his country had nothing to do with this and there was no controversy. But as the Ambassador denied any controversy, other countries were not happy with the fact that his country, and Sudan, in 2001 insisted that the treaty could only be renegotiated, if other Nile Basin countries first recognized it as binding.

Nevertheless, the agreement goes against the internationally recognized riparian states’ rights of Kenya and the other eight Nile Basin countries. This law states that a riparian state has sovereignty over the stretch of any river within its international boundaries and may use such water as it deems fit so long as it does not infringe upon the rights of other riparian states on the same river. It could be with this law in mind that Tanzania disregarded the treaty in 1962 while Uganda constructed a second hydro-electric power generation dam on the Bujagari Falls on the Nile. Kenya seems to have settled for the renegotiation option.

**The Near War with Ethiopia over the Use of Nile Water**: In June 1980, Egypt nearly went to war with Ethiopia after the latter opposed moves by Egyptian President Anwar Sadat to divert the Nile waters to the Sinai Desert, which is outside the Nile Basin. After making peace with Israel, Mr Sadat had promised Israelis that he would irrigate the desert. On its part, Ethiopia had threatened to obstruct the Blue Nile, a notion that made Egypt prepare for war. Egypt has also placed its hydrologists along the 5,584 km-long course of the Nile ostensibly to monitor its volume. Nonetheless, Ethiopia is in the process of completing the biggest dam in the continent; the Grand Ethiopian Renaissance Dam, which is currently (2020) causing tension between it and Egypt.

The eight countries need to disregard the treaty as already done by Uganda and Ethiopia if they are to meet their rising water needs. Today, their combined population stands at 202 million against 98 million Sudanese and Egyptians. Though a substantial section of the eight countries’ population may have alternative sources of water, this has not been adequate for the rising population.

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7 https://www.internationalrivers.org/campaigns/grand-ethiopian-renaissance-dam.
8 https://www.bbc.com/news/world-africa-50328647.
3.4 The River Nile Treaties

The Riparian States and Egyptian Concept on use of River Nile: Meanwhile countries sharing Lake Victoria cannot use its water for development projects. Egypt and Sudan must agree that Kenya and indeed the other basin countries have as much right over the use of the waters as they do. While there is merit in the Tanzanian President’s statement in 1998 that the Nile resource should be “a formidable unifying factor instead of a source of division and conflict”, the eight countries should handle the controversy with more boldness. Collectively, they should disregard the treaty so that Egypt and Sudan can approach the issue in a spirit of give-and-take. The eight Basin countries should not continue honoring a treaty that neglects others’ interests.

Demands to Revoke the River Nile Treaty: Sudan was the first country to demand a review of the 1929 treaty. The action brought a brief standoff between Khartoum and Cairo after Sudan got independence from Britain in 1956. In April 2002, there was a heated debate in the Kenyan Parliament about the Nile Treaties signed in 1929 and 1959, respectively. The Members of Parliament questioned the legality of those treaties. Consequently, there was a heated debate as to whether Kenya should or should not honor the treaties. Surprisingly, the debate, just like the treaty, was pegged on the wrong assumption that Lake Victoria is actually the only source of river Nile and the MPs, during their contribution, argued from this point of ignorance.

As East African politicians question the legality of a treaty that gives Egypt and the Sudan absolute rights over river Nile waters, one issue is quickly coming to the fore: How will the two nations react given their enormous economic and agricultural interests? In Kenya, the then Energy Minister Raila Odinga and then minister for roads and public works and Kisumu East Town MP Gor Sungu questioned the legality of the 1929 and 1959 Nile waters Treaties while the same issue have cropped up at the new East African Legislative Assembly. Recently, Mr. Odinga threw the first salvo in Kenya’s parliament, calling upon the government to review the treaty and denouncing it as “obsolete”, accusing Egypt of planning to “Export” the water to Sinai via a tunnel [1]. The story of the tunnel is little known, although it is part of a huge land reclamation project in Sinai Desert called the North Sinai Agricultural Development project. Since 1987, the project has been diverting Nile water to agricultural developing plots west of Suez Canal,9 with allegations that the water may end up in Israel.

Debate on a 1929 treaty that bound countries in the upstream of River Nile from “touching” its waters has been simmering for a while now. The treaty gave Egypt and Sudan absolute right to use 100% of the river’s water. The debate re-surfaced in April 2002, when a legal consultant with the United Nations Environmental Program, Prof. Charles Okidi, implored the three East African countries to ignore the treaty and go ahead and utilize the waters of Lake Victoria. He asked East African countries to ignore the 1929 treaty.10 Yet, unlike this treaty, which was binding on British colonies, the 1959 one is between two independent nations—Egypt and Sudan—without reference to other concerned countries. The then Energy Minister Raila

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9 see https://earthobservatory.nasa.gov/images/1495/egypts-north-sinai-agricultural-development.
10 Daily Nation newspaper, March 29, 2002.
Odinga saying the treaty was “unfair” had earlier made a similar call. By and large, the Kenya government seems reluctant to be drawn into the controversy. It is not clear why Government officials have continued to refer to this flawed water use arrangement as an “Agreement”.

For one, it was made before Kenya was a state, as we know it. “This treaty only benefits Egypt. We cannot sit back while we have water we cannot use to irrigate our land. Why should we preserve our water for Egypt”? Mr. Odinga asked Parliament? Experts predict minimal impact on the Nile if East African countries harvest Lake Victoria water for local use. Parliament was right in demanding a renegotiation of the 1929 Nile Water Agreement between Britain and Egypt over the use of Nile’s waters. A treaty they did not sign in some distant past should not bind Kenyans. In June 2003, members of the East African Legislative Assembly (EALA) called for a renegotiation on the Nile Treaty with a view to selling waters of the Nile to Sudan and Egypt.

**Source of Acrimony:** With approximately 125 million people depending on the Nile for survival, the river is seen today as possible source of acrimony in East Africa. At the Regional Regulative Assembly, Uganda member Yona Kanyomozi questioned the importance of the 1949 Owen Fall Dam Agreement and wondered why Egypt was using more water than agreed. He also wonders why Egypt does not participate in conservation of Lake Victoria. He said, “What bothers me is that when Uganda developed a scheme to divert some of the Nile waters to Karamoja for irrigation, the plan was opposed by Egypt, yet for them they can do anything with the Nile waters”.

How the treaty binds other riparian countries is doubtful. But since then Egypt—the most powerful military power in the region - has been warning that it could go to war over Nile waters. In 1979, Egyptian President Anwar Sadat said: “The only matter that could take Egypt to war again is water”. And in 1988, then Egyptian foreign minister Boutros-Ghali, who latter became UN Secretary-General, went a step further. He said: “The next war in our region will be over waters of the Nile, not politics”.

Such sentiments have for the years caused Nile nations eager to renegotiate the Nile water treaties to tread with caution. They are aware that for Egypt, in particular, Nile waters are a matter of life and death. From as early as 1898, when a French expedition tried to control the headwaters of the of the Nile, Egypt has discussed the Nile with passion. In 1958, it sent a military expedition to a disputed territory with the Sudan, pending negotiations over Nile waters. This eventually led to a coup and installation of a pro-Egyptian government in the country. From 1978 onwards tensions have persisted between Egypt and Ethiopia after Ethiopia proposed to construct dams on headwaters of the Blue Nile. That was when President Sadat warned that Egypt’s next war would be over the Nile. But can the region go to war over water? The only recorded incident of an outright war over water was 4,500 years ago in mod-

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11 Daily Nation newspaper, October 19, 2001.
12 John Mbaria: Revoke obsolete Nile treaty. Daily Nation newspaper, March 29, 2002.
13 John Mbaria: Revoke obsolete Nile treaty. Daily Nation newspaper, March 29, 2002.
ern southern Iraq between two Mesopotamian city-states over the Tigris-Euphrates. Scholars say that 80% of water’s war consists of verbal threats and posturing by state leaders, probably aimed at their own internal constituents.

In the past 50 years, there have been only 37-recorded events in which people actually shot at each other over water along international borders. Of those, 27 were between Israel and Syria over the Jordan and Yarmouk rivers. Is the Nile meandering towards that, or is this just a cold water war?

**The New Nile River Treaty:** In September 2002, the Coordinator of the Uganda-based inter-state organization, the Nile Basins Initiative, informed a workshop meeting in Kisumu, Kenya, that a new legal framework was to be signed in two months’ time by 10 riparian countries, which include Burundi, Democratic Republic of Congo, Egypt, Ethiopia, Eritrea, Kenya, Rwanda, Sudan, Tanzania and Uganda.

The Nile Basin Initiative was launched in 1999 following consultations among the 10 riparian countries. Although Egypt is today backing a new initiative among the Nile Basin riparian states, which might redistribute more equitably the river’s water usage rights, it is not clear how far this will go. Note 3.1 below provides a historic perspective of the basins initiatives.

**Note 3.1 (A Brief History of the Nile Basin Initiative (NBI), 1992–2001)**

1992: In 1992 the Council of Ministers (Nile-Com) of Water Affairs of the Nile Basin States launched an initiative to promote cooperation and development in the Basin. Six of the riparian countries—the Democratic Republic of Congo (D.R.C), Egypt, Rwanda, Sudan, Tanzania, and Uganda; formed the Technical Cooperation Committee for the Promotion of the Development and Environmental Protection of the Nile Basin (TECONILE). The other four riparian states participated as observers. Within this framework, the Nile River Basin Action Plan (NRBAP) was prepared with support from CIDA. One of the projects (Project 3), whose objective is to develop a co-operative framework for management of the Nile, was endorsed by all countries during the 3rd meeting of the Nile-COM (in Arusha, 9–11 February, 1995) and is being implemented with UNDP funding.

1995: The World Bank was asked by the COM to play a lead role in co-ordinating the inputs of external agencies to finance and implement the NRBAP.

March 1997: The request from COM to the World Bank was reiterated.

June 1997: The request was accepted by the World Bank. The World Bank proposed that it undertakes the task in partnership with UNDP and CIDA, and that a review and consultation process be launched prior to a Consultative Group-style donor meeting.

November 1997: A review of the Nile River Basin Action Plan was undertaken with the support of an International Advisory Group (IAG). The IAG meeting of international experts was held at Coolfont near Washington, D.C., USA.

January 1998: A Special Review Meeting was held in Cairo with senior officials attending from the riparian countries to discuss the Draft Review Report and move towards the definition of a priority, revised Action Program. Discussions converged on two complementary ideas which provide a structure for the revised Action Program—a shared vision, and action on the ground.

March 1998: The 6th COM Meeting, held in Arusha, Tanzania, was attended by eight riparian countries (all except Eritrea and D.R. Congo). It was a major milestone in Nile co-operation. The meeting considered the Revised Action Plan.

July 1998: The 1st meeting of the Nile Technical Advisory Committee (Nile-TAC) was held in Dar es Salaam, Tanzania, under the chairman ship of Mr. Meraji Msuya.

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14Source: The Nile Basin Initiative Secretariat (Nile-SEC).
21–22 Sept 1998: The 2nd meeting of the Nile-TAC, held in Arusha, Tanzania. Meeting agrees on the Terms of Reference of the Nile-TAC, its Rules of Procedure, its Policy Guidelines and a Plan of Action.

23–24 Sept 1998: Extra-Ordinary meeting of the Council of Ministers (Nile-COM) was held in Arusha, Tanzania.

22nd Feb 1999: Extra-ordinary meeting of the Nile Basin Council of Ministers, was held in Dar es Salaam, United Republic of Tanzania. Agreed minutes were prepared which formally established the Nile Basin Initiative.

23–24 Feb 1999: 3rd meeting of Nile-TAC in Dar es Salaam, Tanzania.

4–7 May 1999: Nile-TAC held a Strategic Planning and training workshop in Sodere, Ethiopia, which initiated the preparation of projects within the Basin-wide Shared Vision Program.

10–14 May 1999: 4th meeting of the Nile-TAC in Addis Ababa, Ethiopia. The formation of Working Groups to develop Project Concept Documents for the Shared Vision Program.

12–13 May 1999: 7th meeting of the Council of Ministers for Water Affairs in the Nile Basin States (Nile-COM), Addis Ababa.

15th May 1999: First meeting of the Eastern Nile Council of Ministers.

1st June 1999th The Nile Basin Initiative Secretariat started operations in the former TEC-CONILE building in Entebbe, Uganda, with Mr. Meraj Msuya as Executive Director.

30th August–3rd Sept 1999: 5th meeting of the Nile-TAC in Entebbe and second meeting of the Working Groups to develop Project Concept Documents for the Shared Vision Program in preparation for the ICCON meeting.

3rd Sept. 1999: The official opening of the Nile Basin Secretariat offices in Entebbe, Uganda.

13–18 Dec. 1999: National experts from various sectors meet at the Nile Basin Secretariat in Entebbe to share ideas and work together in initiating project studies under the Shared Vision Program.

24–26 Jan. 2000: 6th Nile-TAC meeting is held at the Nile Basin Secretariat in Entebbe to agree on the work plan for the priority project proposals for the Nile Basin.

18 March 2000: Senior officials from the Nile Basin Initiative present their “Shared Vision” for the time to the international community during the Second World Water World Forum in the Hague, the Netherlands, attended by over 4,000 participants from all over the world.

23rd March 2000: 7th Nile-TAC meeting is held in Deft, the Netherlands to review alternative work plans and meeting schedules towards the first ICCON.

31st July–3rd August 2000: 8th Nile-TAC meeting is held in Khartoum, Sudan, as a precursor to the 8th Nile-COM meeting, to finalize proposals for the priority projects under preparation.

4–5 Aug. 2000: 8th Nile-COM meeting is held in Khartoum. It endorses the priority projects being prepared under the Shared Vision Program and instructs the Nile-TAC to complete preparation of full project documents to be submitted to the Nile-COM in the first week of December 2000. The Council confirms February 2001 and Geneva, Switzerland as the time and venue of the first ICCON.

21–25 Aug. 2000: National experts from the Nile Equatorial Lakes region meet in Entebbe to share ideas on a series of possible joint projects for the region, to be prepared under the Nile Equatorial Lakes Subsidiary Action Program (NELSAP).

20–29 January 2001: National experts from the Eastern Nile meet in Addis Ababa to share ideas about joint projects being prepared under the Easter Nile Subsidiary Action Program (ENSAP).

6th September 2002: Mr. Antoine Sendama, Co-ordinator of Nile Basin Initiative, announces that a new legal framework—a revision of the Nile Treaty—is to be signed by 10 riparian countries (nations neigbouring water masses). The countries are Burundi, Congo, Egypt, Ethiopia, Eritrea, Kenya, Rwanda, Sudan, Tanzania and Uganda.
3.5 Inter-State Conflicts

Fishermen have frequently found themselves in situations where they trespass into a neighbouring State’s territory with the end results often being conflict, leading to arrests and the confiscation of boats and fishing equipment. A real-case scenario is illustrated by Migingo Island in Fig. 3.1, which is an island currently disputed between Kenya and Uganda due to it being home to the dwindling Nile Perch (*Lates niloticus*) fish. Owing to uncertainty about the boundary, Global Navigation Satellite System (GNSS [3, 4]) was used by a team of surveyors from both countries to mark the boundary and establish that the disputed island belongs to Kenya.

3.6 Concluding Remarks

Two main challenges face the lake and its basin; (i) sustainability issue, which entails utilization of the resources with an eye on the future, and in so doing, balancing the social, economic and environmental pillars [3, 4], and (ii), the question of adhering to obsolete treaties that prevent the full exploitations of the resources in a sustainable way. This Chapter has expounded on these issues.

References

1. Aseto O, Ong’ang’a O (2003) Lake Victoria (Kenya) and its environs: resource opportunites and challenges. Africa Herald Publishing House, Kendu Bay, Kenya
2. Awange JL, Ong’ang’a O (2006) Lake Victoria: ecology resource and 571 environment. Springer, Berlin
3. Awange JL (2012) Environmental monitoring using GNSS. Global navigation satellite system. Springer, Berlin, New York
4. Awange JL (2018) GNSS environmental sensing. Revolutionizing environmental monitoring. Springer, Berlin, New York

15Source: [http://www.nation.co.ke](http://www.nation.co.ke).
5. Bullock A, et al (1995) Report on LVEMP tasks 11, 16 and 17. FAO, Rome
6. Ongore C, Aura C, Ogari Z, Njiru J, Nyamweya C (2018) Spatial-temporal dynamics of water hyacinth, Eichhornia crassipes (Mart.), other macrophytes and their impact on fisheries in Lake Victoria, Kenya. J Great Lakes Res 44:1273–1280. https://doi.org/10.1016/j.jglr.2018.10.001
7. UN–Habitat (2005) Cities development strategies for improved urban environment and poverty reduction in Lake Victoria region. Kampala, Kisumu and Musoma. A document of the process, achievements and lessons. Urban management programme—working paper series