

## **The Dubious Colonial Treaties and Agreements over Nile Waters that Form the Yardstick for Egypt's Biased Monopoly of Nile Ownership**

*The Vague Colonial Treaties and Agreements of River Nile that Form the Yardstick for Egypt's Dubious Monopoly of Nile Ownership, Ruining the Natural Rights of the Upstream Riparian Countries to Nile Water Use.*

### **1.0 THE PROBLEM STATEMENT**

**Saturday, 09 July 2022 (PW)** — African crises are deeply rooted in colonialism. The former colonizers would beset Africans against other Africans as a way to attain their interests of human resource extraction in form of slaves and natural resources from plants, animals and precious minerals: gold, silver, diamond, copper and uranium among others. Even after granting independence, African states are still remote-controlled via the so-called neocolonialism. The colonized would not make decisions without consulting or citing the previous treaties and agreements imposed by their colonial masters. The complex state, in which the current Nile Basin countries are locked in, is intertwined with the intricate colonial legacies. The British bias colonial agreements constitute the yardstick from where the Arab Republic of Egypt claims high share of Nile Waters, what they now branded as “Egypt’s natural and acquired rights”. Despite the fact that most Upstream countries were too, British colonies, the desire to irrigate cotton plantations in Egypt meant to satisfy the raw materials needed for textile industries in the Great Britain overrode the rights of the riparian nations.

To increase water flow northwards, the British colonial government in 1907 proposed for a canal at Jonglei, an area adjacent to the SUDD’s water entrapment region. This project became effective in 1974 but thwarted in 1984 by a southern Sudan rebellion championed by the SPLA/M led by Dr. John Garang de Mabior. SPLM released its Manifesto on 31<sup>st</sup> July 1983, informing the world why the southern Sudanese waged a protracted war with the Northern Sudan. In chapter five, article 14(b), SPLM spelt out the issue of Jonglei Canal as one of the reasons supporting their rebellion and it states: “*Construction of the Jonglei Canal, and especially the plan to resettle two and a half million Egyptian peasants along the Canal. This plan led to mass unrest in the South, leaving three students dead, and several politicians arrested*”.

By far Egypt has continued to infringe on the natural rights of the other Nile member states for the last 130 years counting from 1892, yet Arab Republic does not contribute a drop to Nile waters. The main legal issue in the Nile colonial agreements is the failure to incorporate the interests of the upper riparian countries that own the Nile. But if they want to disfavor Egypt, they could divert the Nile main channel to pour into India Ocean.

Egypt, Sudan and Northern part of South Sudan are some of the drier areas affected by the Sahara Desert that now covers 3.6 million sq. miles. Lack of water is the major hindrance to the industrial growth of Northern Africa states since most industries require water as raw material. Egypt is in constant quest for more water to boost her industrial growth. South Sudan has recently been hit by flooding since 2019 and Egypt sees this as an opportunity to maneuver her immemorial interest of getting more Nile waters. To a common citizen displaced by floods in Upper Nile Region, Egypt is the liberator from flooding.

However, South Sudanese patriotic nationalists have visualized canal and dredging with keen lenses of better vision. This creates antagonism between the misled South Sudanese government officials and the impartial court of the 'public opinion'. In wooing South Sudanese leaders towards bilateral relation since Independence, Egypt provided unrealistic scholarships, meager medical supplies (merely an ambulance equipped with first-aid toolbox), free visas to South Sudanese, Free Embassy building to South Sudan government and free ambassadorial residence in Cairo while secretly pushing her demand for Nile waters in return.

Recently Egypt invited H.E. President Salva Kiir to attend a climate change summit in Cairo. This invitation is already contradictory because Egypt can't claim to be addressing climate change issues while concurrently introducing risk factors that adversely accelerates climate change in South Sudan. If Egypt is a good partner in development, why doesn't she start with mega-projects such as constructing a dam (in South Sudan) to electrify the whole country that is in darkness and a referral hospital for treatment of South Sudanese at home?

In essence, Egypt provides South Sudan with peanuts as she takes the lump sum; this is a special case of predatory commerce by the powerful on the weak. But all those free gifts and bribes will stop sooner after Egypt dredges the rivers! Nevertheless, South Sudan is richer than the poor Egypt to depend on. South Sudan's natural resource-base is only second to DR Congo's in African. In guarding our natural resources, all South Sudanese must be on high alert like passengers whose plane has developed a technical glitch in air.

Dredging Nile tributaries is disastrous to South Sudan and beneficial to Egypt and this explains the rush, bribery and double-dealing in the project. The dredging exercise was to commence without conducting environmental, social and economic impact assessments, a thing akin to rape of a minor! Even if dredging of the Nile was not to have any dire consequences as alleged by the hardliners of the project, it is inherently constitutional for the Ministry of Water and Irrigation to involve the Ministry of Environment & Forestry, Ministry of Wildlife Conservation and Tourism, the whole Council of Ministers, the National Parliament, the Judiciary, and the country's security apparatus. Institutions under the same government should never operate in isolation since they run the same national agenda. Nevertheless, informed decision-making as the pillar of success nationwide.

The continuous flooding in Greater Upper Nile Region that has displaced fellow citizens and kill both humans and cattle is a national crisis that must be arrested nationally with utmost concern. It requires the Country's leadership to swiftly take feasible measures that curb flooding without accelerating the already existing desertification. This publication therefore provides: the brief description of historical agreements on Nile waters, the advantages of dredging/canal, disadvantages of dredging/canal, solutions to flooding and demands by South Sudanese in regard to Nile Waters.

## **1.1.THE NILE**

The River that we call Nile is the longest river in the whole world straddling at a length of 6850 km. Nile forms one-tenth of Africa's total landmass with three main branches; the White Nile, the Blue Nile and the Atbara. The White Nile drains the upper riparian countries namely: Burundi, Rwanda, DRC, Kenya, Tanzania and Uganda. It stretches from Burundi and joins the Kagera River

that flows into Lake Victoria, the second largest freshwater lake in the world that rests on the crux between Uganda, Tanzania and Kenya with 40%, 50% and 10% share respectively. White Nile contributes about 28% of the Nile River by volume, water evaporation losses in the South Sudan's SUDD notwithstanding.

The Atbara and Blue Nile originate from the Horn of Africa riparian countries (Ethiopia, Eritrea and Djibouti) and contribute about 70% by Nile water volume. Both Blue and White Nile branch form a confluence at Khartoum before terminating at the Mediterranean Sea. Nile is a transboundary natural resource involving some 12 countries; **Upstream:** Burundi (0.4%), Rwanda (0.7%), DRC (0.7%), Tanzania (2.7%), Uganda (7.4%), Kenya (1.5%), Ethiopia (11.6%), Eritrea (0.8%) and Djibouti (0.1%); **Mid-stream:** South Sudan (45%); **Downstream:** Sudan (18.6%) & Egypt (10.7%). The percentages represent the area occupied by Nile in a country (modified after prof. T. Elkhazin, 2022). A greater look of Nile will also include the Central African Republic (CAR) since some streams from CAR feed the Bahr el Ghazal Basin. Throughout history, Nile has sustained livelihoods, an array of ecosystems and rich diversity of cultures.

## 1.2. THE SUDD WETLANDS

The SUDD is Africa's largest freshwater wetland and one of the largest tropical wetlands in the world. It is found in South Sudan covering about 57,000 sq. km in area. The areal extent of SUDD region varies from 90,000 sq. km to 42,000 sq. km depending on the seasonal flooding. The feed of the SUDD is mainly the White Nile from Lake Victoria in East Africa. The White Nile dissipates northwards from Juba across a shallow depression to produce a network of channels, lagoons and inundated areas, which harness the nutrients of the underlying clay soils. Patterns of flood inundation heavily influence the SUDD's vegetation, which consists primarily of permanent swamps, river and rain flooded grasslands, and floodplain woodlands (UNESCO, 2017).

SUDD Wetlands is locally, regionally and internationally recognised for its unique ecological attributes that include various endangered mammalian species, antelope migrations, millions of Palearctic migratory birds and large fish populations. The Notable wildlife species include: the African elephants (*Loxodonta africana*), buffalo, Nile lechwe (*Kobus megaceros*) endemic to South Sudan, Nile crocodile, hippopotamus, shoebill (*Balaeniceps rex*), the white-eared kob (*Kobus kob thomasi*) and tiang (*Damaliscus lunatus tiang*) migration is an example of a superlative natural phenomena of the largest antelope migration in the world similar to that of wildebeests' migration in Serengeti of Tanzania ecosystem. The SUDD is an important wintering ground for some of the migratory birds such as the Great White Pelican (*Pelecanus onocrotalus*), Black Crowned Crane (*Balearica pavonina*), White Stork (*Ciconia ciconia*) and Black Tern (*Chlidonias niger*) and shoebill (*Balaeniceps rex*). SUDD wetland forms part of the East-Asian/East African flyway of Palearctic birds, linking breeding ranges in central-Europe and Asia with winter ranges to the south. A large number of inter-African bird migrants also rely on the SUDD and surrounding habitats as a dry season refuge.

The habitats of the SUDD swamps are diverse and represented by the permanent and seasonal rivers, lagoons, permanent swamps, seasonal and rain flooded grasslands, floodplain woodlands and highland communities. These habitat types comprised of unique species diversity and are composed of all the major classes of aquatic organism, over 100 fish species, reptiles, 470 bird

species, 100 mammalian species, some 350 plants species (belonging to different genera), and over 120 insect species and unknown number of reptilian and amphibian species (UNESCO, 2017).

The SUDD rich and abundant fish populations is a response to the favourable interlocking environmental conditions for recruitment and survival offered by its mosaic of habitat types. Key aquatic habitats range from open water and riverine to lacustrine and palustrine, which offer ideal spawning, rearing, growing, feeding and survival grounds. These habitats are largely intact and unaffected by industrial development.

The SUDD's vast flooded expanse with lagoons, channels and floating vegetation transform the entire SUDD habitats into a scenic landscape of exceptional natural beauty, and sustain the ecosystem of remarkable habitat features and species diversity, enhancing the maintenance of the ecological process and incredible natural phenomena. The annual seasonal floods' discharge across the wetland systems throughout the year modifies the entire ecosystems in terms of nutrient cycle and other ecological processes. UNESCO recognizes SUDD wetlands as a World Heritage Site.

The culture and society of approximately one million people inhabiting the SUDD wetland region are closely linked to its ecological setting. The dominant cultural affiliations in the SUDD are the tribes of Nuer, Dinka, Shilluk and Anyuak all of whom are Nilotic and pastoralists peoples indigenous to the Nile Valley. These groups have developed traditions that have allowed them to adapt to the inundated and seasonally variable conditions across the SUDD through a combination of nomadic agro-pastoralism, non-timber forest product collection and fishing.

Egypt's persistent demand for Nile waters through the quest for canal and dredging of Nile tributaries in South Sudan puts these endangered species at the front of direct extinction. The dredging is henceforth a national sovereignty sabotage, regional security threat and a threat to human survival in South Sudan.

### **1.3. CAUSES OF FLOODING**

Global warming is a consistent upsurge in the earth's average temperature denoted by increasing global surface temperatures caused or influenced by the uninterrupted emissions of greenhouse gases. Climate change results from global warming. Over 90% of the air being polluted by carbon dioxide and Chlorofluorocarbons (CFCs) like Methane and Nitrous oxide and other air pollutants affect the climate sensitivity and levels of precipitation of the planet. Factors that cause global warming are both natural and man-made. Viewed naturally, volcanic eruptions and natural forest fires release toxic gases that temper with the atmosphere. Melting Permafrost and Glaciers at the north and south poles of the planet also creates ecological imbalances.

Through man-made factors, the largest source of heat-trapping pollution originates from combustion of fossil fuels, emissions from the transportation sector, industries and power plants and deforestation. All these processes emit significant amount of greenhouse gases. The effects of global warming include an increase in sea levels creating coastal flooding, changes in precipitation leading to more floods in some areas and droughts in others, increased intensity of storms, and the spread of disease vectors. The effects of global warming are being felt around the world today, not only South Sudan.

The flooding of the Nile is the result of the yearly monsoon between May and August causing enormous precipitations on the Ethiopian Highlands whose summits reach heights of up to 4550 m.

#### **1.4. SOLUTIONS TO FLOODING IN SOUTH SUDAN**

##### **(a). Construction of dykes and embankments**

Dykes or levees are used to control the movement of water to prevent flooding. Where protection dykes are used to continually control and constrict water flow, they are designed in a similar way to embankment dams where the raised water level is prevented from seeping through the protection dyke and causing inundation of the surrounding land. For this application, the dyke consists of at least one zone of fine-grained soil to act as a hydraulic barrier to the seepage water. To prevent erosion of the water-exposed face of the protection dyke, a revetment is normally used.

##### **(b). Construction of water storage reservoirs and dam(s)**

Constructing a dam will control flooding as excess water is channeled into the dam. Dam will electrify South Sudan using hydroelectric power, a clean source of energy as opposed to fossils energy that released toxic gases into the atmosphere. Electricity is the engine of economic progress as several investors will be attracted to South Sudan.

##### **(c). Urbanization coupled with appropriate drainage system that contains water within South Sudan**

Since South Sudanese are living in dilapidated grass-thatched houses, structures that are very susceptible to water destruction, government needs to spring up with development of modern settlement structures. Modern concrete buildings can withstand torrential rains unlike the traditional tukuls. In 1871 after Berlin became the imperial capital of Germany, the government began to build an underground drainage system. By 1878, Berlin had built a 744-kilometer drainage network with the ability to drain heavy rain from day to night. Construction of underground drainage systems and permeable pavements along roads relieved that country from flooding. The construction of permeable pavements solves the problem of urban water accumulation on the one hand, and balance the urban ecosystem on the other.

##### **(d). Changing from the traditional method of agriculture to modern methods**

Agriculture is the backbone of any economy, and approximately three quarters of the country's water resources are usable in agricultural sector through irrigation of farmlands and food processing industries requiring water as the raw material. This is where Egypt wants more Nile waters.

##### **(e). Peace, reconciliation and Unity among all citizens**

South Sudanese citizens should abandon tribal wars and communal violence but concentrate on procreation to increase the diminishing population. Population pressures will call for use of excess water. Egypt demands for excess water to meet the needs of her ever-increasing population.

**(f). Flood forecasting will ensure that early warnings** be issued by the Upstream riparian countries so that the mid-stream and down-streamers prepare early to mitigate the excess water released from Lake Victoria and Ethiopia.

**(g).** Other emergency response actions such as relocation of the most flood affected citizens by the government is a short-term solution to flooding that cannot be ruled out. Provision of basic services (accommodation facilities, Food and medicine) is a necessary priority.

**(h).** Any other method of flood control other than dredging and canal.

**1.5. The Major Nile Water-Related Treaties and Agreements made during colonisation that became the benchmark from where Egypt dubiously claims the ownership of the Nile waters (adapted from Kefyalew Mekonnen).**

#### **The Anglo-Italian Protocol of April 15, 1891**

Only Article (III) of this treaty refers to the Nile water. The remaining defines the colonial territorial claims of Great Britain and Italy in East Africa. Article III states the following: "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".

#### **The 1901 Agreement between Britain and Italy over the Use of the River Gash**

The agreement states: "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 the parties to the agreement were bound by this treaty; 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 exchanges 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 not to be 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.

#### **The Treaty between Great Britain and Ethiopia of May 15, 1902**

The aim of this treaty was to establish the border between Ethiopia and the Sudan. But One of its articles, number III, related to the use of Nile water. "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"

Ethiopia, in rebuttal: 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 9<sup>th</sup> May 1906 Agreement between Britain and the Government of the Independent State of the Congo**

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 favouring the downstream users of the Nile waters and restricting the people of the Congo from accessing their part of the Nile water without presenting anything in return for 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 that might enhance their future cooperation since it involved neither the principle of equitable water use nor the approach of integrated water development.

### **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 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 using its own water resource.

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 as follows. "...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 and their tributaries and affluents 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:

*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:

*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 (Tilahun, 1970:90). 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 7<sup>th</sup> May 1929**

According to Whittington and Guariso (1983:41), this agreement included the following:

- Egypt and Sudan utilize 48 and 4 billion cubic meters of the Nile flow per year, respectively;
- The flow of the Nile during January 20 to July 15 (dry season) would be reserved for Egypt;
- Egypt reserves the right to monitor the Nile flow in the upstream countries;
- Egypt assumed the right to undertake Nile river related projects without the consent of upper riparian states
- Egypt assumed the right to veto any construction projects that would affect her interests adversely.



Egypt was still under British influence in 1929. Neither Sudan nor the remaining riparians apart from Ethiopia (which was too poor and weak to challenge this agreement) 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 favour one, Egypt, over the remaining riparians. So, the agreement was mainly to secure the Nile water for Egypt by limiting the rights of the Sudan and rejecting those of the remaining riparians. The agreement became a base 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.

### **The 1959 Nile 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 (Collins, 1993). The Objective of the 1959 Agreement was to gain full control and utilization of the annual Nile flow. Before implementing the project, Egypt found it was important to seek a guarantee from the Sudan and international recognition for financing and technology of the dam. 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 (Okidi, 1994) 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 million hectares, while Egypt claimed even more water than Sudan that irrigates 7.1 million hectares (Howell, 1988). 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. One way or the other, the Sudan had to come to commit itself to the agreement.

Finally, in 1959, 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 between Sudan and Egypt without inviting them to join the agreement or otherwise obtaining the consensus of other riparian countries. The agreement contained the following main points:

- 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.
- The agreement allowed the entire average annual flow of the Nile to be shared among the Sudan and Egypt at 18.5 and 55.5 billion cubic meters, respectively.
- Annual water loss due to evaporation and other factors were agreed to be about 10 billion cubic meters. This quantity would be deducted from the Nile yield before share was assigned to Egypt and Sudan.
- Sudan, in agreement with Egypt, would construct projects that would enhance the Nile flow by preventing evaporation losses in the Sudd swamps of the White Nile located in the southern Sudan. The cost and benefit of same to be divided equally between them. If claim would come from the remaining riparian countries over the Nile water resource, both the Sudan and Egypt shall, together, handle the claims.

- If the claim prevails and the Nile water has to be shared with another riparian state, that allocated amount would be deducted from the Sudan's and Egypt's and allocations/shares in equal parts of Nile volume measured at Aswan.
- The agreement granted Egypt the right to construct the Aswan High Dam that can store the entire annual Nile River flow of a year.
- It granted the Sudan to construct the Rosaries Dam on the Blue Nile and, to develop other irrigation and hydroelectric power generation until it fully utilizes its Nile share.
- A Permanent Joint Technical Commission to be established to secure the technical cooperation between them.

Why the IBRD did not give greater consideration to the rights of the other riparian countries is a mystery. Irrigation, hydroelectric power, and water supply projects developed under the Aswan High Dam project have become the basis for Egypt to claim historical water rights over and above those of the remaining riparians in the basin. This claim has created an unfavourable climate for the development of future riparian cooperation in the basin.

Besides exacerbating the developing conflict over water allocation (equity), the dam has had adverse impacts on the basin's ecosystems. Due to the large impoundment created by the dam, there are several species that are new to the basin's environment. These include the malaria mosquito (Cope *et al.*, 1995: 145) and Bilharzia parasites (Abdelwahab *et al.*, 1993: 697-700). Also, since the construction of the Aswan High Dam in 1964, erosion in the delta has increased greatly, trapping Nile sediments in Aswan Lake (Fanos, 1995: 821-27).

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 riparians. Also they did not take into account the impact of water development on the basin social and biophysical environment. Upstream riparian States such as Kenya, Tanzania, Uganda and Ethiopia have expressed concerns of not being bound by these agreements because they have never been parties to them. Former leader of Tanzania, Mwalimu Julius Nyerere upon the attainment of his country's Independence in 1961 reckoned: "Nile water agreements exposed our country and other upstream riparian states to Egypt's mercy, forcing us to submit our national development plans to Cairo's control and surveillance, and that such an approach to public policy does not coincide with the country's status as sovereign State".

## **1.6. Nile Dishonored agreements after the Independence of Riparian Countries**

On 1 July 1993, a Framework for general co-operation between the Arab Republic of Egypt and Ethiopia signed in Cairo. Two articles from this agreement stated as:

Article 4: The two Parties agree that the issue of the use of the Nile waters shall be worked out in detail, through discussions by experts from both sides, on the basis of the rules and principles of international law.

Article 8: The two Parties shall endeavour towards a framework for effective co-operation among countries of the Nile basin for the promotion of common interest in the development of the basin.

Despite appending signature, Egypt took a divergent underground means to sabotage the agreement.

The Nile Basin Initiative was established in 1999 to develop a scheme for the equitable distribution of water among the Nile basin countries. Ethiopia, Uganda, Tanzania, Rwanda and Kenya have signed the Agreement on the Nile River Basin Cooperative Framework (Entebbe Agreement). This agreement allows construction of projects that do not “significantly” affect the Nile water flow. Egypt has rejected the Agreement because it necessitates renegotiation of its share of the Nile water and surrender of its veto power guaranteed under the old British colonial agreements.

In May 2009, a new framework on how to share River Nile resources particularly water was convened in Kinshasa, DRC. Egypt argued that it would not approve a new framework that would deprive it of a right to 55.5 billion cubic meters of water per year and its right of veto over projects that would affect its allocation violate Egypt’s natural and historical rights in the waters of the Nile and its needs for agricultural expansion.

On 23<sup>rd</sup> 2015, Egypt, Sudan and Ethiopia signed an agreement in Khartoum, Sudan on Declaration of Principles for the construction of the Grand Ethiopia Renaissance Dam (GERD). The agreement called upon the three countries to honor the Principle of Cooperation based on common understanding, mutual benefit, good faith, win-win, and principles of international law, Principle of Development, Regional Integration and Sustainability, Principle of Equitable and Reasonable Utilization of Nile waters in their territories, Principle to Cooperate on the First Filling and Operation of the Dam, Principle of Dam Safety, Principle of Sovereignty and Territorial Integrity and Principle of Peaceful Settlement of Disputes that arise in relation to water use. However, Egypt later sponsored rebellion in Tigray region, an attempt to overthrow Dr. Abiy Ahmed who continued the GERD project.

Various Egyptian leaders over the years have threatened to go to war to protect the so-called Egypt’s “acquired rights” over the Nile. In 1978 Egyptian President Anwar Sadat argued, “we depend upon the Nile 100 per cent in our life, so if anyone at any moment thinks of depriving us of our life, we shall never hesitate to go to war”. Boutros Boutros Gahali, Former Egyptian Foreign Minister and Secretary General of the United Nations also asserted, “the next war in our region will be over the water of the Nile, not politics”.

Before Grand Ethiopia Renaissance Dam (GERD) was constructed, the initial threats leaked by high-level Egyptian security intelligence stated: “If it comes to a crisis, we will send a jet to bomb the dam and come back in one day, simple as that. Or we can send our special forces in to sabotage the dam. But we aren’t going for the military option now. This is just contingency planning. Look back to an operation Egypt did in the mid-late 1970s. In 1976, when Ethiopia was trying to build a large dam, we blew up the equipment while it was traveling by sea to Ethiopia. A useful case study...”

The same source further indicated that Egypt is “discussing military cooperation with Sudan” and has “a strategic pact with the Sudanese since in any crisis over the Nile, Sudan gets hit first then us.” That military cooperation includes stationing Egyptian “commandos in the Sudan for ‘worst case’ scenario on the Nile issue. Sudanese president Umar al-Bashir has agreed to allow the Egyptians to build a small airbase in Kosti to accommodate Egyptian commandos who might be sent to Ethiopia to destroy water facilities on the Blue Nile...The military option is not one that the Egyptians favor. It will be their option if everything else fails.” So far Egypt has successfully

lobbied the multilateral development and other investment banks and donors to deny or cut funding for the dam and to apply political and diplomatic pressure on Ethiopia and the other upstream Nile countries. The World Bank has publicly stated it will not fund any new projects on the Nile without Egypt's approval.

Other schools of thoughts would perceive Nile waters disagreements at an angle of Arab countries versus African countries of the Nile Basin, however.

From all the above citations, it is clear that Egypt's interest is guided by the colonial legacy that did not consider the natural rights of the other member states.

All these agreements on Nile Basin (1891, 1901, 1902, 1906, 1925, 1929, 1949, 1959) should now be considered obsolete because all the other Upstream Riparian countries were still under the yoke of colonialism except Ethiopia, which at the time of the agreements was even sidelined as a minor. It is realistic to claim that the sharing ratio for the Nile waters should be proportional to the distance from the source that is the upstream countries should own 50%, mid-stream 30% and the rest to the Down-streamers. The law of natural selection clearly sets in here so that those further away from the source were selected against while those at the source enjoys the royalty for which nature locates them closer the Nile source. By natural justice, if the Arab Republic of Egypt were to own large share of the Nile waters as she assumes, nature would have located her at the Source and not at the mouth of the river.

### **1.7. ADVANTAGES OF DREDGING THE NILE TRIBUTARIES AND DIGGING OF JONGLEI CANAL**

(i). It increases flowing water volume northwards thus beneficial to Egypt in terms of agriculture, industrial growth and finally prosperity to Egyptians. This advantage to Egyptians is a disadvantage to South Sudanese since we will have shortage of water for agricultural sector and other industries that use water as raw material.

(ii). It decreases flooding in South Sudan but this reciprocates sooner into desertification resulting into social and economic hardships of South Sudanese and other riparian states.

There is/are no advantage(s) of poverty so is dredging of rivers!

### **1.8. DISADVANTAGES OF DREDGING THE NILE TRIBUTARIES AND DIGGING OF JONGLEI CANAL**

#### **I. Desertification of South Sudan**

The dredging of the Nile tributaries and Jonglei Canal is to exacerbate the southwards desertification of the already advancing Sahara Desert. Northern part of South Sudan is already affected by the Sahara Desert with ambient temperatures of 42 °C on average in hot season. Naturally, it is advantageous to live in water than in desert because the solution to desertification is effected by water availability, and the converse. In deserts, water scarcity has limited human lives' progress; hence, in future South Sudan will also be like Egypt especially if dredging does occur.

## II. Lost of Natural Biodiversity within the SUDD Nile and other Mid-stream & Upstream wetlands

Dredging affects the Upstream riparian countries directly, not only the SUDD Wetlands. When a River slopes steeply downstream, all the wetlands, lakes and streams/rivers from the upstream side will be drained at a rate proportional to the steep gradient induced by dredging.

World's endangered species distributed around the SUDD wetlands plus wetlands in the Upstream nations hold local, regional and international heritage and pride. Through Eco-tourism, they earn revenue to governments as well as recreation that is part of life enjoyment. Uganda's government for example, discovered oil in the Albertine Graben and its Sovereignty is not foregoing the already existing game parks that host some of the diverse ecosystems in the Albertine region. This is because oil is a finite resource while recreation and revenue from beautiful nature's reserves are infinite.

## III. Drying of Nile swamps (toich) negatively impact on the Agro-pastoral communities

By far South Sudan is the world's leading country with a total of 15 million cows, 20 million sheep and 25 million goats. Most communities of Greater Bahr el Ghazal and Greater Upper Nile region are agro-pastoral communities engaged in cattle rearing. They depend directly on cattle for: *bride wealth, pride, food (milk and meat)* notwithstanding the economic boom from other animal by-products such as hooves and hides in leather tanning industry expected to emerge when the country stabilizes. These communities also sell animals to access education, medicine and business. The swamps of the Nile forms a cyclic pattern of pastures and water for their animals. If dredging happens, swamps will dry up and their animals will be no more. This will not happen in a day but it is a medium-long term permanent destruction of their livelihoods.

## IV. Shortage of aquatic foods

Fish is an aquatic food hosted mainly in swamps/wetlands, not main channel of a river. When the rivers are dredged, swamps will dry up and as a result, fish will migrate northwards following the water current. Numerous Nilotic inhabitants have depended on Nile various fish species for food over the years. Dredging will now be to their disadvantage. It is only in South Sudan where a fish dies of old age because her Fishing Industry is not yet developed. If our Food Processing and Fishing industries are later developed, fish surplus can be exported thus providing revenue to govt. It is therefore an infinite source than finite oil.

## V. Overdependence of South Sudan

If dredging does occur, South Sudan will not be allowed by the same Egypt to construct a dam on her territory for hydroelectric power generation. ***Lack of Dam and hydroelectric power will:***

- Keep us daily dependents of Regional countries in terms of Electricity importation.
- Since Electricity is absent, industrial development will be constrained.
- Agricultural sector will not take a step forward. Food supplies will continuously flow from Egypt, Uganda and Kenya thus boosting their economies. These foods are imported at

higher cost and needs hard currency. The issue of hard currency keeps the economy in limbo.

- Medicine and Health products will be on the mercy of Egypt's meager donations.
- Education sector will not progress as we continue to depend on Egypt's unbearable scholarships. In history, no country has ever attain educational prosperity through scholarships; it is only home-grown education that can liberate a country. One wonders why Egypt does not want to construct a big university in South Sudan but resorts to scholarships.

## **VI. Poor Regional and International Diplomacy.**

Since Nile is a transboundary natural resource involving 12 countries, its ownership lies within these members grouped under the Nile Basin Initiative (NBI). Egypt and South Sudan cannot decide unilaterally on behalf of the 12 members without their prior notice. The unilateral action by the two countries to dredge and channel the water northwards will badly taints their image in the face of the other neglected ten members. Regionally and internationally, South Sudan is portraying bad image of diplomatic cooperation on a shared resource. The outcome of this unilateralism will be lack of trust leading to regional disunity especially if the ten members are not factored into the equation of sharing Nile resources. South Sudan can suffer drastically when later isolated. Not forgetting that Egypt is the most developed country on the continent while South Sudan leads from the bottom in terms of development. It is therefore unacceptable to be misled by the persistent interest of one greedy country over the Nile waters.

## **VII. Lost of Patriotism and Vision by the SPLM**

SPLM is the best liberation Movement in Africa that liberated South Sudanese from the bondage of slavery, social, political and economic marginalization. It stopped the dredging of Nile and Jonglei Canal in 1984. If today SPLM reverses "*all what it went to the bush for*", through the influence of the very cults it once fought, the entire citizens of South Sudan will lose hope in SPLM vision of taking towns to the people at the grassroots.

### **1.9. DEMANDS BY SOUTH SUDANESE (THE WAY FORWARD)**

**(i).** River Nile has to flow under natural conditions, implying no dredging of rivers and canal in South Sudan.

**(ii).** The government of South Sudan through its relevant departments (Ministry of Water and Irrigation, Ministry of Wildlife Conservation and Tourism, Ministry of Environment and Forestry, National Parliament and the Judiciary) to immediately enact legislations/regulations and laws governing South Sudan water resources, environment and wildlife.

**(iii). Government to provide capacity building to citizens in water resource management**  
The government has to train the citizens in water engineering and water management courses to be watchdogs in managing our water resources for full utilization. This can be done by establishing departments of water and subsequently introducing water-related courses at public universities.

**(iv). Construction of Dams and other water reservoirs by government of South Sudan**

Egypt's constant demand for excess water should not preclude the natural rights of other members to using Nile waters.

South Sudan should construct at least two dams for hydroelectric power generation, for if it does not happen, there would be no reason why Nile naturally passes in South Sudan. Not only is dam a remedy to flooding, it equally electrifies the whole country. Electricity is the engine for any industrial development. It will attract investors in all sectors, thus reviving our economy. Electricity too, can be exported to any neighboring country that lacks it thus generating revenue to government. Existing flooding is never a justification to dredging. South Sudan does not need Egypt's permission to build a dam for hydroelectric power but a polite notice to the other 10 member states is a genuine prerequisite because Nile is a shared transboundary natural resource, whose responsibility lies in the hands of all the 12 members. There is no single country that should claim a lion's share on Nile Waters while neglecting the natural rights of others.

**(v). Avoid tribalism in dredging and canal**

Dredging is a national tragedy. It should never be hell-bent on political, regional or tribal lines as the bribed hardliners would want the uninformed citizens to believe. It is a protection for a generational cause that is being exercised and preached by the gallant patriots who envisage South Sudan a thousand years ahead with bullish.

**(vi).** Government of South Sudan should not consult with Egypt and the British experts over the Nile waters because the two countries have a historical vested consistent but greedy interest that arrogates the natural rights of other Nile Basin Member states. A neutral body led by local/national experts backed by regional and international experts (other than Egypt & Britain) on Nile Waters and agreements as far as transboundary natural resources are concerned should be constituted to conduct scientific studies. The Dredging of the Nile tributaries and digging of Jonglei Canal in South Sudan should occur if and only if the effects fitted the best simulation studies verified by scientific evidence but not emotional political theories.

**(vii). Government of South Sudan should fund the studies aimed at conducting Environmental, Social and Economic Impact Assessments before any project of such magnitude.** The Environmental Impact Assessment (EIA) will ascertain the underlying consequences of the project on the environment by identifying the adverse environmental effects both short-term and long term. EIA will also propose the effective mitigation measures undertaken to suppress the resulting negative effects of the Project in question as well as predicting whether there will be significant adverse environmental effects after mitigation measures are implemented. Social impact assessment, this will find out the consequences of dredging on the communities. Economic impact assessment to evaluate the benefits to the government and the entire citizens. Awareness of the masses about national projects. This will make the citizens own the projects and builds confidence in their government.

**(viii).** For better mutual bilateral relation between the two countries, Egypt has to assent to South Sudan's construction of dams in her territory for Hydroelectric power generation and Irrigation. Other Nile Basin members have unanimously considered South Sudan natural rights but it is only Egypt that hesitates.

(ix). If dredging is a necessary evil, the government has to suspend it until such times when our country is capable in technical expertise as well as economically and politically stable.

(x). South Sudan should call for the meeting of all the Nile members to renegotiate the flawed colonial treaties and agreements to clearly define our rights on Nile waters.

## **2.0. Conclusion**

Nile resources (water, fish, plants and animals) are very scarce and need to be shared with equity guided by Pan-African cooperation. Egyptians should first commit themselves to win the trust of the other African countries by doing what defines them as true Africans. Other Africans are never safe while in Egypt for reasons associated with human organ trafficking and racial discrimination since Egypt annexes herself as an extension province of the Middle East. All Nile basin member countries have to now go for negotiations to dismantle all the colonial agreements and reconstitute new articles that incorporate the natural rights of each member states. I wish all fellow South Sudanese a Happy 11<sup>th</sup> Independence Anniversary and may the souls of all the fallen heroes and heroines continue to rest in eternal peace. I vow to protect our nation!

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