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Egypt and the Hydro-Politics of the Blue Nile River

Daniel Kendie

Henderson State University

As early as the 4th century B.C., Herodotus observed that Egypt was a gift of the Nile. That observation is no less true today than in the distant past, because not only the prosperity of Egypt, but also its very existence depends on the annual flood of the Nile. Of its two sources, the Blue Nile flows from Lake Tana in Ethiopia, while the White Nile flows from Lake Victoria in Uganda. Some 86 percent of the water that Egypt consumes annually originates from the Blue Nile River, while the remainder comes from the White Nile. Since concern with the free flow of the Nile has always been a national security issue for Egypt, as far as the Blue Nile goes it has been held that Egypt must be in a position either to dominate Ethiopia, or to neutralize whatever unfriendly regime might emerge there. As the late President Sadat stated: “ Any action that would endanger the waters of the Blue Nile will be faced with a firm reaction on the part of Egypt, even if that action should lead to war.”¹

In this respect, an acute observer of the Egyptian scene recently wrote:

Egypt is a country that has not abandoned its expansionist ambitions. It regards its southern neighbors as its sphere of influence. Its strategy is essentially negative: to prevent the emergence of any force that could challenge its hegemony, and to thwart any economic development along the banks of the Nile that could either divert the flow of the water, or decrease its volume. The arithmetic of the waters of the Blue Nile River is, therefore, a zero-sum game, which Egypt is determined to win. It must have a hegemonic relationship with the countries of the Nile Valley and the Horn of Africa. When, for instance, Ethiopia is weak and internally divided, Egypt can rest. But when Ethiopia is prosperous and self-confident, playing a leading role in the region, Egypt is worried.²

In response, Marawan Badr, the Egyptian Ambassador to Ethiopia wrote:

Such political commentary, or more correctly, political trash, cannot come [except] from a sick and disturbed mind. Egyptian-Ethiopian relations are not in a crisis. We do not even have problems. There are serious issues, which need to be addressed.³

Diplomatic evasiveness aside, one cannot claim that there is no crisis in the relations between the two countries. If the Blue Nile is the backbone of Egypt, and equally crucial to Ethiopia's development, and if no less a person than Sadat could declare that Egypt will go to war to prevent any tampering with the waters of the Blue Nile, how could one say that there are no problems between Ethiopia and Egypt? Other areas of conflict could also be mentioned. The conflicting national interests between Ethiopia and Egypt in Northeast Africa; Egypt's dream of converting the Red Sea into an Arab lake; the status of the Copts in Egypt, which has always been of utmost concern to Ethiopia; as well as the conflict of entitlement to the Covenant of Dayr-es-Sultan in Jerusalem, are cases in point. Given this background, let us raise some basic questions: why have the two countries not exploited the potential of the river for mutual benefit? Apart from fears stoked by misinformed nationalism on both sides, are there other problems that prevent them from doing so? How did Egypt manage to "guarantee" the normal flow of the waters of the Blue Nile?

Geographic and Economic Facts

While the White Nile is 5,584 km long, the Blue Nile covers a distance of 1,529 km from its source in Lake Tana to Khartoum, where both join and then flow north-east before being joined by another Ethiopian river, the Atbara, or the Tekezie. The Nile then drains into Egypt—a country where there is practically no rain, and where 86 percent of the land is classified as very arid, and the rest as arid. The exceptions to the extreme aridity are the narrow bands of the Nile Valley and the narrow coastal strip, where some 150 mm of winter rain-falls. All this accounts for no more than 3.03 percent of the total land area of Egypt. As a result, 96 percent of the population is forced to live astride the Nile River, upon which the entire life of Egypt depends.⁴

Within Ethiopia itself, the Blue Nile is 960 km long and has an annual discharge of some 55,000,000 m³, constituting the major portion of the flow of the Nile. Lake Tana is situated at an elevation of 6,000 ft. above sea level. It is about 40 to 50 miles square and reaches depths in the neighborhood of 200 feet. The water as it flows from the lake contains no silt. According to engineers, by blasting a deep outlet and erecting a dam, about six billion cubic meters of water could be stored at the lake, ready for use when needed.⁵ Recent water storage estimates are not at variance with the above figures.

Over the entire year, about 86 percent of the Nile's water originates from the Ethiopian Highlands, while the White Nile contributes only 14 percent. During the flood period, however, 95 percent of the water originates from Ethiopia, and only 5 percent from East Africa. The reason for this is that the White Nile loses a considerable amount of water to swamp areas near its source, and then to evaporation during its course through arid terrain.⁶ In its transit, the Blue Nile takes decomposed basalt, rich alluvial soil and silts and converts what would otherwise have been a complete desert into a rich agricultural area. It is not without reason, therefore, that the Greek historian Herodotus (c.486–425) observed that Egypt was a gift of the Nile. To this, the British of the nineteenth century, who intended to stay in that country, and who made Egypt's interests their own, added that he who controls the Nile controls Egypt.⁷

Broadly speaking, international rivers are often the subjects of treaties providing for their shared use. States sharing common rivers usually harmonize their policies for the purpose of establishing agreed regimes. Unilateral use of the waters of such rivers by any riparian state can cause considerable damage to the other states and can lead to serious international conflicts. However, discussions and negotiations leading to agreements for their shared use usually resolve such conflicts. Hence, because of the "dual sovereignty" over such waterways, unilateral actions affecting use by other riparian states are generally discouraged.⁸

As far as the Blue Nile goes, while Egypt, Ethiopia, and the Sudan recognize its international character, there is no agreed regime governing the actions of the three states. As a result, there is no integrated plan for optimum use and development of the waters of this river, which could benefit all concerned.

There have been meetings between the officials of Egypt and Ethiopia in particular, aimed at exploring the possibilities of cooperation between the two countries on the waters of the Blue Nile. While Ethiopia advocated the principle of negotiation on water sharing, Egypt's position was for limiting negotiations to cooperation in exchanging information in the area of hydrological study. These positions, however, do not go far enough to address other simmering problems such as water shortage. Studying the development plans of these countries with regard to the use of the waters of the Blue Nile, one could say that future conflicts are possible.

The population of Egypt, which grows by more than 1,000,000 per year, could reach 85,000,000 by the year 2015. Since the annual increase in population (2.8 percent) exceeds the annual increase in food production (2.6 percent), Egypt's food imports, currently valued at more than \$3 billion, absorb most of its foreign currency earnings. Water shortage, which is forecasted to reach a deficit of 10,000 million m³ by the year 2,000, threatens Egyptian agriculture and industry. In the absence of agreements, therefore, if irrigation dams were to be built in either Ethiopia or East Africa, or if climatic change were to result in increased warming, or in droughts and increased evaporation, reduced water flow into the Nile would further exacerbate Egypt's problems, and the country could face an explosive situation.⁹

Some years ago, the lowering of the water level of the Aswan High Dam drastically affected agricultural and industrial output, reduced oil exports, and accelerated the depletion of what limited foreign exchange reserves Egypt had.¹⁰ The lowering of the water level has had serious consequences on the economy, including food production, and led to severe dislocation of normal life. Export earnings and government revenues have diminished, leading to a substantial reduction of public services, as well as in essential imports and development programs. Since the situation led to increased imports, it resulted in an enlargement of the deficit in the balance of payments, therefore reducing the rate of savings and investment and, consequently, lowering the rate of economic growth. The fall of the water level of the dams also lowered national hydroelectric power supplies, of which the Aswan High Dam alone provides 22 percent.

Hydro-Politics

Among the Egyptians of the distant past, it was widely believed that the Emperor of Ethiopia could shut off the waters of the Nile, as one would shut off a faucet.¹¹ For example, during the reign of Emperor Amde Zion (1314–1344), the Mamluk Sultan Al-Nasir Muhammad Qalauran began to persecute the Copts of Egypt and to demolish their churches. The Sultan's actions brought forth a strong protest from the Ethiopian monarch, who sent envoys to Cairo in A.H. 726 (AD 1321) to ask Al-Nasir to restore the churches and to refrain from persecuting the Copts. Otherwise, he said, he would take reciprocal measures against the Muslims in his dominions and also starve the people of Egypt by diverting the course of the Nile.¹² It was, no doubt, this incident which caused Al-Umari to write that the Ethiopians claim that they are the guardians of the course of the Nile for its descent to Egypt, and that they promote its regular arrival out of respect for the Sultan of Egypt.¹³

In more modern times, especially in the eighteenth and nineteenth centuries, Egypt's invasion and final conquest of the Sudan was largely motivated by its desire to secure control over the entire Nile system. Muhammed Ali (1769–1849), for instance, felt that the security and prosperity of Egypt could only be assured fully by extending conquests to those Ethiopian provinces from which Egypt received its great reserves of water.¹⁴ The objective of such a conquest was designed to impose Egypt's will on Ethiopia, and either to occupy it or to force it to give up the Lake Tana area. Hence, the conquest of the Sudan in 1820 served as a stepping-stone to the increased appearance of Egyptian soldiers in the western frontiers of Ethiopia, and to the subsequent Egyptian occupation of Kasala in 1834, Metema in 1838, Massawa in 1846, Kunama in 1869, and Harar in 1875.¹⁵ Khedive Ismail (1863–1879), too, wanted to make the Nile an Egyptian river by annexing to Egypt all the geographical areas of the basin. To that end, the Swiss adventurer Werner Munzinger (1832-1875), who served him, had remarked: "Ethiopia with a disciplined administration and army, and a friend of the European powers, is a danger for Egypt. Egypt must either take over Ethiopia and Islamize it, or retain it in anarchy and misery."¹⁶

Khedive Ismail decided to conquer Ethiopia. However, he lived to regret that decision. The series of military expeditions he launched in 1875 and 1876

resulted in ignominious defeats for Egypt. Between 14 and 16 November 1875, more than 2,500 Egyptian soldiers were routed at the Battle of Gundet. Similarly, from 7 to 9 March 1876, some 12,000 Egyptian soldiers were annihilated at the Battle of Gura.¹⁷ It may be interesting to note that the Egyptians even recruited foreign military officers in their campaigns against Ethiopia.¹⁸ In the same year, the Afars decimated the expedition led by Munzinger in northeastern Ethiopia and Munzinger himself was killed.¹⁹ Yet, despite the enormous debacle, Egyptian raids against Ethiopia continued. They were eventually brought to a temporary halt only when Britain occupied Egypt in 1882.

Water Agreements

The crucial importance of the Blue Nile to Egypt was not lost on Britain, which had made Egypt's interests its own. In 1902, London dispatched John Harrington to Addis Ababa to negotiate border and Nile water issues with Emperor Menelik. Article III of the 15 May 1902 Anglo-Ethiopian Treaty, which resulted from the visit, affirms:

His Majesty the Emperor Menelik II of Ethiopia, engages himself towards the Government of His Britannic Majesty not to construct or allow to be constructed, any works across the Blue Nile, Lake Tana or the Sabot, which would arrest the flow of their waters into the Nile except in agreement with His Britannic Majesty's Government and the Government of the Sudan.²⁰

Ethiopia's legitimate reasons to exploit the waters in its own territory for development purposes should be understandable. This fact alone would provide sufficient grounds for some to invalidate the binding force of the agreement. But it was never ratified, either by the British Parliament or by the Ethiopian Crown Council.

Another indication of British interest in the waters of the Blue Nile was the Anglo-Italian exchange of letters, which led to the secret agreement of 1926. Britain sought Italy's support for its plan to construct a barrage at Lake Tana, together with the right to construct a motor for the passage of stores, personnel, and so on. In turn, as a *quid pro quo*, Britain was to support Italy in its attempt to obtain from Ethiopia a concession to construct and run a railway

from the frontier of Eritrea to the frontier of Italian Somaliland.²¹ Ethiopia denounced the secret deal and brought the matter before the League of Nations.

There was also the 1929 Agreement between Egypt and Britain. It stipulated that “no irrigation or power works or measures are to be constructed or taken on the River Nile or its tributaries, or on the lakes from which it flows in so far as all these are in the Sudan or in countries under British administration, which would entail prejudice to the interests of Egypt.”²² Since Ethiopia had never been a British colony, or part of any European power for that matter, except for the five years (1936–1941) of occupation by Fascist Italy, it maintains that this agreement has no legal effect on it.

Ethiopia was a member of the League of Nations since 1923. Yet, when Mussolini invaded it in 1936, despite treaty obligations, the League remained indifferent to Ethiopia’s plight. Fascist Italy had no problems in transporting 500,000 troops through the Suez Canal to invade Ethiopia. But when it came to Ethiopia’s use, the canal was closed. By invoking Article 10 of the Covenant of the League of Nations, Ethiopia requested a loan of £10,000,000, but Britain and France opposed it. Ethiopia was even refused permission to buy six airplanes from excess government stocks in England, which it needed for legitimate self-defense. The League of Nations sacrificed Ethiopia at the altar of political expediency. The apologetic view of some that Italy had legitimate grievances was not an honorable and principled position. Mussolini was neither grateful nor appeased and joined Hitler as an ally. Nevertheless, after five years of bitter struggle against Italian Fascism, Ethiopia gained its independence. Following the restoration of Emperor Haile Selassie’s government in 1941, it repudiated the 1902 Treaty on account of British recognition of the Italian “conquest” of Ethiopia.²³ Moreover, Ethiopia also declined to recognize the 1929 agreement arguing that it had never been a British colony. But more specifically, it declared that one party reserved for itself all the rights and privileges, leaving the other party without any quid pro quo. Ethiopia maintained that the whole exercise of the agreement was geared mainly to protect and to promote Egypt’s interests without any reciprocity, and that it had not renounced its own quantitatively unspecified but existing natural right to the Nile waters in its territory. It argued that the agreements that made no reference to this fact could have no binding force. Hence, as early as 1956, Ethiopia asserted and reserved, then and in the

future, its right to utilize the waters of the Blue Nile without recognizing any limitations on its freedom of action. It also invoked its new economic needs as grounds for its release from old treaty obligations.²⁴

Similarly, Ethiopia declined to recognize the Agreement of November 1959 between Egypt and the Sudan on the division of the waters of the Nile. The agreement gave Egypt 75 percent of the waters of the river (i.e., 55.5 billion m³) and 25 percent to the Sudan (18.5 billion m³).²⁵ The very agreement which allowed Egypt to receive three times as much water as the Sudan, refers to “full utilization” and “full control of the river,” when it involved only two states. Needless to say, Egypt and the Sudan were both recipients and users and, therefore, arguably cannot have the last word on the utilization of the waters of the river.

In an Aide Memoir of 23 September 1957 addressed to the diplomatic missions in Cairo, the Government of Ethiopia declared: “Ethiopia has the right and obligation to exploit its water resources, for the benefit of present and future generations of its citizens [and] must, therefore, reassert and reserve now and for the future, the right to take all such measures in respect of its water resources.”²⁶

Despite Ethiopia’s protest, Egypt went ahead with the construction of the Aswan High Dam, which took seven years (1964–1971) to build and was completed with the help of the Soviet Union, at a cost of \$100,000,000, or 850,000,000 Egyptian pounds. As far as Egypt was concerned, the Aswan High Dam helped to reclaim 650,000 feddans and brought some 800,000 feddans under permanent irrigation. As a result, agricultural production has increased considerably and village communities have been provided with water and electricity. However, Lake Nasser, an artificial lake created by the damming of the Nile, has blocked the normal flow of the rich Nile, preventing the nourishment of agricultural lands farther down the river, and destroying the fishing industry. Vegetation in Lake Nasser also grew rapidly, clogging irrigation channels, and creating stagnant water that has become a breeding ground for a variety of disease-bearing insects and sea urchins. Hydrologists also estimate that each year the reservoir alone loses a staggering 15 km³ of water to evaporation.²⁷

Despite these negative aspects, the Aswan project has facilitated double and triple crop production, and the country’s agricultural yields have soared. Egypt still uses far more of the river’s annual flow of around 80 km³ than any of the

other eight nations along its banks, which apart from Ethiopia, Sudan and Egypt, also include Uganda, Tanzania, Rwanda, Burundi, Kenya, and the Congo. To be sure, out of an ultimate irrigable land of some 5,000,000 hectares, Egypt has already managed to irrigate nearly 3,000,000 hectares. But the question is: what will happen when countries like Ethiopia begin to utilize their waters meaningfully and substantially?

Studies on the Blue Nile

Ethiopia has long been interested in exploring the possibilities of building a dam on Lake Tana. For example, in 1927 Ethiopia reached an agreement with J. G. White Engineering Corporation of New York, for a number of engineers and experts had visited Lake Tana and studied the feasibility of building a dam at the source of the Blue Nile. The required feasibility studies were carried out for the construction of a dam at Lake Tana at an estimated cost of \$20,000,000.²⁸

The U.S. Bureau of Reclamation also accomplished substantial work, including a survey of the Blue Nile Basin (1956–1964). It proposed four major dams on the Blue Nile with a combined storage of 51 km³, equal to the mean annual flow of the Blue Nile, with a hydroelectric capacity three times that of the Aswan High Dam. Of more immediate interest was the effect of the four dams on the natural flow of the Blue Nile and, of course, on irrigation in Egypt and the Sudan. The annual flood of the Blue Nile would be virtually eliminated, the flow into the Sudan becoming constant, and the total quantity of the Blue Nile water reduced by 8.5 percent. If all the projects were completed, the amount of land put into cultivation in Ethiopia would be equal to 17 percent of the current land under irrigation in Egypt and would require six km³ of Nile water.²⁹ In 1962, the German engineering team of Lahmeyer also carried out further studies of the waters of Gilgel Abbai.³⁰

Because the Blue Nile terrain favors the construction of dams to generate power, Ethiopia could not only satisfy most of its own needs but also export electricity to the Sudan and Egypt, as well as the Arabian Peninsula. In fact, the findings reveal that the Blue Nile has a power potential of 172 billion-kilowatts, twice that of the combined national hydroelectric output of both the Sudan and Egypt. Of the 35 multi-purpose projects that the survey identified,

16 were irrigation schemes for the development of 439,440 hectares of land to help settle four million farmers, and 12 were power projects, which could utilize as much as 12 billion m³ of water from the Blue Nile.³¹ According to the experts, the amount of water available to the downstream riparian states would not be affected, even if Ethiopia were to implement the Blue Nile Plan, drawing off six km³, Egypt and the Sudan would still benefit from the construction of the reservoirs within Ethiopia.³²

Why has Ethiopia not utilized this development potential? The reason is in part because its agriculture is largely rain fed, and partly because the political strife that Egypt helped to instigate earlier forced Ethiopia to divert scarce resources from development into security and defense. But in recent years Addis Ababa has indicated its intention to do more. At present, using only 0.6 billion m³. of water a year, only five percent, i.e., 200,000 hectares, is being irrigated out of a potential 3.7 million hectares of irrigable land. With a population nearly the size of Egypt, and facing the enormous problem of feeding itself, Ethiopia will need to develop a large portion of this land for agricultural use. If, for instance, Ethiopia were to contemplate the development of 500,000 hectares, it would require 6.25 km³ of water. In this regard, Ethiopian government sources estimate that over the next half century, the country would need \$60 billion investment for irrigation and \$19 billion for hydropower development.³³

In response to Ethiopia's intention to use more Blue Nile water, Sudan's Minister of Irrigation, Sharif al-Tuhami, recently remarked that Sudan and Egypt have built all their civilizations on the Nile for 7,000 years. So both countries have priority over others. What about Ethiopia, which provides 86 percent of the water that these countries consume, but which has its own priorities of feeding its population? It is computed that by 2025, its population could be 112,000,000, double its present level.

The influential head of the Environmental Research Institute World Watch, Lester Brown, says that water scarcity is now the single biggest threat to global food security, and that Egypt is unlikely to take kindly to losing out to Ethiopia.³⁴ Dr Mohammed El Said Selim of Cairo University also contends that Ethiopia's ambitious development plans, if implemented, will pose a grave threat to Egypt before the end of the century.³⁵ His remarks are noteworthy in the sense that they reflect Egyptian official policy and imply that Egypt should

take effective measures to prevent the threat. We should note that Ethiopia has an average of 112 km³ of water annually compared to Egypt, which has 55.5 km³ per year and a projected demand of 65.5 km³, (which, if accurate, would even be higher than that of Ethiopia). The Sudan has 18.5 km³.³⁶

The End Justifies the Means

Egypt's foreign policy has, to a significant degree, been shaped by the hydro-politics of the Nile in general and the Blue Nile in particular. It is predicated upon the premise that Egypt should be strong enough either to dominate Ethiopia, or to create the conditions to prevent the latter from building dams on the Blue Nile. With that end in mind, Egypt controlled the port of Massawa from 1865 to 1885,³⁷ and occupied parts of present-day northwestern Eritrea from 1872–1884,³⁸ with a view to using these areas as bases for military operations against the rest of Ethiopia. Egypt's military adventures, as noted earlier were, however, brought to a halt, at least temporarily, by its disastrous defeats at Gura and Gundet. But by using its occupation of certain parts of what was to become Eritrea as proof of historical legitimacy, as early as 1945 Egypt instigated the Arab League to declare its intention to put Eritrea under the Trusteeship of the Arab nations. Moreover, at the Paris Peace Conference of 1946, Egypt also advanced an outright claim to Eritrea. In fact, on 15 April 1950, when the UN Commission on Eritrea visited Cairo to consult with the Egyptian Government, Foreign Minister Salah El-Din maintained: "Italian expansion in Africa was inaugurated by an encroachment upon the rights of Egypt. Egypt has been in Eritrea and in Massawa long before the Italians had driven it out, and at a time when power was the dominating factor over rights."³⁹

The historical accuracy of the above statement is certainly debatable. Italy did not drive Egypt out of Eritrea. A. Caimi, who occupied Massawa on behalf of Italy on February 3, 1885 proclaimed: "The Italian government, in accord with the English and Egyptian governments, takes possession of Massawa."⁴⁰ What is noteworthy in the Egyptian position is this: Ethiopia had successfully resisted the invasion of the Ottoman Turks and had defeated and evicted them from its Northern Provinces, but had failed to dislodge them from their strongly fortified position at Massawa. Yet, despite the fact that they had occupied the port for some time, the Ottoman Turks still recognized Massawa as Ethiopia's historical outlet to the out-

side world, and referred to the entire cost as Habeshstan.⁴¹ Since Massawa was an active outlet of the Red Sea slave trade of the time, in 1865 the Ottoman Sultan leased it to Egypt, its vassal state, at the latter's request. In approaching the Sultan for the lease of the port, Khedive Ismail argued that because of distance, Istanbul would not be in a position to check the slave trade, whereas Egypt could.⁴² As might be expected, the most important naval and commercial power of the day—Britain—supported Egypt. There were two reasons for this: First, the American civil war threatened the supply of cotton to British textile mills. Hence, in order to ensure the continued supply of cotton from Egypt, for what could be described as enlightened self-interest, Britain supported Khedive Ismail in his negotiations with Istanbul. Second, with the opening of the Suez Canal in 1868, the Red Sea had also assumed a special role in Britain's worldwide communications network, and therefore, it wanted the safety of the sea route to India. Hence, what took place at Massawa was simply a peaceful transfer of administrative authority from the Egyptians to the Italians under British supervision.

With regard to the Italian take over of Massawa, we should also note that competition between the European colonial powers was a familiar feature of the late nineteenth century. Britain invited Italy to take over the port of Massawa. In doing so, Britain was encouraging Italy's colonial ambitions with a view to using it as a counter-weight to France, which had already taken over Djibouti and was threatening British interests in the area. Ethiopia perceived the takeover of Massawa by the Italians as a violation of the Adowa Treaty of 3 June 1884, between Britain, Ethiopia, and Egypt.⁴³

What was the Adowa Treaty? Stated briefly, the Mahdist uprising in the Sudan had put a severe strain on Egypt. As a result, its soldiers were trapped and besieged in that country. According to the treaty, which was signed in the Ethiopian city of Adowa, Egypt agreed to "restore" to Ethiopia the northern Ethiopian provinces such as Keren that it had occupied in the 1860s and 1870s, in exchange for Ethiopia's assistance in relieving isolated Egyptian forces and providing them safe conduct through Massawa. Additionally, free passage was to be allowed to Ethiopian trade through the port of Massawa, in effect making the port revert back to its historic status as Ethiopia's outlet to the sea. Consequently, pitched battles were fought between Ethiopia and the Mahdist forces. The besieged Egyptian garrisons were relieved and given safe conduct through the

Port of Massawa, fulfilling Ethiopia's part of the agreement. Egypt too carried out its part of the bargain, by restoring Keren and the other provinces to Ethiopian authority. But what about Britain? Instead of carrying out its commitments, Britain invited Italy to take over Massawa. Italy then attempted to expand inland to take over the hinterland of Massawa. In the process, there were a series of military engagements between Ethiopia and Italy, which soon developed into pitched battles which led to Dogali (1887) and the historic Battle of Adowa (1896), on both counts of which the Italian army was routed.⁴⁴

Nevertheless, thanks to British support and Menelik's acquiescence, Italy consolidated itself in northern Ethiopia, and named the northern Ethiopian province of Medri Bahri as Eritrea - the Greco-Roman name for the Red Sea. Having colonized Eritrea from 1890 - 1941, Italy was defeated and evicted from the area in 1941. From 1941- 1952, Britain administered Eritrea.⁴⁵ In 1947 the Allied Powers—the United States, the Soviet Union, Britain, and France—sent a Four-Power Commission of Investigation (FPCI), to Eritrea. Among other things, the Commission reported that the great majority of the people of Eritrea favored reunion with Ethiopia.⁴⁶ Since there was no agreement between the four powers, Britain submitted the question of Eritrea's future to the United Nations. The UN in turn established its own commission of inquiry composed of the representatives of Burma, Guatemala, Norway, Pakistan, and South Africa. Since the majority of the members of the UN Commission also reported that the majority of the people of Eritrea favored reunion with Ethiopia, the United Nations decided to federate Eritrea with Ethiopia.⁴⁷

What about Ethio-Egyptian Relations?

When Egypt's outright claim to Eritrea failed, Gamal Abdel Nasser, who had subsequently come to power (1956–1970), launched a campaign for the unity of the Nile Valley. However, his "unity" proposal gave the impression that it was aimed at bringing Ethiopia, Eritrea, the Sudan, Somaliland, Somalia, Uganda, and Kenya under Egypt's control.⁴⁸ In any case, the proposal failed to materialize with Eritrea's re-unification with Ethiopia in 1952, the independence of the Sudan in 1956, and Somalia in 1960.

Since the years when Nasser was stationed in the Sudan as an Egyptian army officer, he had had contacts with the Emperor Haile Selassie. In 1941, for

instance, during the Ethiopian liberation campaign when the emperor was re-organizing the anti-Fascist forces from the Sudan, Nasser went to see him.⁴⁹ After he took power in 1952, Nasser repeatedly extended official invitations to Haile Selassie to visit Egypt. The emperor repeatedly declined the offers. In fact, in December 1956, he instructed his ambassador to the Sudan, Melesse Andom, to discuss matters with Nasser, who had not given up on the idea of the unity of the Nile Valley countries. Melesse Andom did not mince words:

You claim to be an Arab and to lead the Arab world, but you interfere in the affairs of your Arab neighbours, and have tried to cause trouble for the Governments of Iraq, Libya, Lebanon, and the Sudan. We Ethiopians do not belong to your world, although like you we drink of the water of the Nile. You have military objectives. We do not know exactly what they may be, but we have no confidence in the strength of your armed forces.⁵⁰

After this showdown, Nasser appears to have begun his effort to undermine and to destabilize Ethiopia. Egypt has never publicly admitted that one of its foreign policy objectives continues to be the destabilization of Ethiopia. To do so, would be a violation of international law. To be sure, the Egyptian authorities would classify any evidence to this effect. However, there is ample documentation, which clearly demonstrates that the question of the use of the Blue Nile waters has been an overriding concern of Egyptian governments.

Radio Cairo broadcasts started to remind Ethiopian Muslims where their “primary loyalties” lay. Providing scholarships to Muslim Eritreans at Al-Azhar University followed suit, and soon, Cairo became the center for the Eritrean Student Union in the Middle East. In 1958, a small military training camp for Eritreans opened near Alexandria, where some of the future military commanders received their initial training. Idris Mohammed Adem, the former President of the Eritrean Parliament, Ibrahim Sultan, Secretary General of the Islamic League, and Wolde Ab Wolde Mariam, President of the Eritrean Labour Unions, and others, were encouraged to go to Egypt. Wolde Ab was given a special radio programme and began to broadcast to Eritrea from Radio Cairo. He sought to undermine Haile Selassie’s Government and urged Eritreans to take up arms and to struggle for their independence.⁵¹

No sooner had Haile Selassie's government made Eritrea Ethiopia's 14th province by dismantling its UN-sponsored federal status in 1960, than Egypt took advantage of the situation to establish an office in Cairo for what came to be known as the Eritrean Liberation Front (ELF). The front started the most protracted, militarily and economically debilitating civil war Ethiopia has known in recent memory. The ensuing struggle pitted Eritrean Muslims against Eritrean Christians, highlanders against lowlanders, the ELF against the EPLF, and most of the Eritrean elite against governments in Addis Ababa, and contributed strongly to political instability, economic decline, and social turmoil. Cairo's overt and covert role in the creation of the ELF was fairly obvious. In fact, even two years before the outbreak of the rebellion, the idea that the ELF was preparing to launch its military campaigns was an open secret in Egypt. Moreover, the Ethiopian Embassy in Cairo had warned the Ethiopian Ministry of Foreign Affairs that Egypt was behind the preparation of the military insurrection of the ELF.⁵²

Also thanks to the good offices of Egypt, the April 1962 conference of the Arab League promised the ELF its full solidarity and support, because it was allegedly claimed that the Eritreans were Arabs and overwhelmingly Muslim; that they were struggling against the forces of "Zionism," "American imperialism," and "Ethiopian colonialism"; that in violation of its status as a member of the Non-Aligned Movement, Ethiopia had provided the United States with military bases to spy on the USSR and the Arab countries of the Middle East; that Ethiopia had provided Israel access into some strategic Red Sea islands like the Dahlack, where Israel had allegedly built military bases to undermine the peace and security of the Arab world; and that the Red Sea should be considered an Arab lake, because "all" the states surrounding it are Arab. The major objective of the last strategy was designed to impede Israeli navigation on the Red Sea, and also to make Ethiopia landlocked by helping its Red Sea province, Eritrea, attain its independence and join the Arab League. These and similar other reasons were provided to justify Egyptian assertiveness and malevolence, as well as the involvement of countries like Syria, Iraq, Libya, Kuwait, Yemen, and others. By internationalizing what was essentially an Ethiopian domestic affair, therefore, Egypt succeeded in converting the Eritrean problem into an extension of the Arab-Israeli disputes, and exploited Ethiopia's predicament to its advantage.⁵³

Given the imperatives of ‘cold war’ rhetoric and power politics, undermining the pro-American and pro-Israeli government of Haile Selassie was important for Egypt. But its interest in the waters of the Blue Nile figured prominently on its political agenda. Few would doubt that Egypt’s overriding motivation was the perceived need to have enough leverage to force Ethiopia to abandon some of its activities on the river, and to thwart the threat that Ethiopia posed to the Nile waters. By promoting the Eritrean insurrection, Egypt made sure that Ethiopia would divert both its efforts and its resources into quelling the Eritrean uprising—resources, which could have been utilized in tapping the waters of the Blue Nile for development purposes. By providing the necessary military, ideological, political, and diplomatic support for the insurrection, Egypt effectively undermined Ethiopia. As a result of the insurrection, which lasted 30 years, thousands of people were killed, thousands were uprooted and displaced, and millions of dollars worth of property was destroyed.⁵⁴

Needless to say, the ensuing turmoil and instability was beneficial for Egypt. Cairo was able to secure the flow of a disproportionate amount of water to its territory, and also to force Ethiopia to squander its scarce resources and, in the process, to ally with the USA and Israel at one time, and with the Soviet Union, the Socialist countries of Eastern Europe, and Cuba at another time, with all the attendant consequences that such alliances entailed.

Further Exploitation of the Nile

The development of irrigated farming in the Sinai is a particularly prominent project. In December 1975, Egypt announced that it would open pipelines to carry water across the Suez Canal to the Sinai desert for irrigation. The project was supposed to commence with irrigation of some 5,000 feddans, to be increased later to provide support and livelihood for 100,000 refugee families from the Gaza Strip. Additionally, Egypt commissioned studies of the possibility of piping the Nile waters to Jerusalem for pilgrims visiting the Holy places. This extension would add 240 miles to the length of the Nile, and is further evidence of the potential and controversial downstream uses of water. From the legal point of view, one could ask whether it requires consideration by all basin states before inter-basin transfers are effected.⁵⁵

Moreover, with Egypt's full support, planners had also begun work on a \$2 billion project which was to have diverted 4,500,000 liters of water an hour from the Atbara river to the Red Sea port of Port Sudan, and from there across the Red Sea to Riyadh in Saudi Arabia. According to the plan, Sudan would have benefited in two ways: The large barren area to the east of Atbara would have come under irrigation, and by the utilization of the resultant waterfalls near the Red Sea coast, more than 7,000 kwh of electricity would have been generated. The Saudis would have compensated Sudan and Egypt for their loss of irrigation water with investment capital for agricultural and industrial projects.⁵⁶

In the 1970s and 1980s, drought repeatedly struck Ethiopia, causing great loss of life, much human suffering and considerable loss of property. In order to reverse the situation, the government of the time had begun to take some remedial measures. To that end, in 1978, when Ethiopian engineers and economists started to carry out irrigation feasibility studies in the Lake Tana area, the late President Anwar Sadat declared: "Any action that would endanger the waters of the Blue Nile will be faced with a firm reaction on the part of Egypt, even if that action should lead to war. As the Nile waters issue is one of life and death for my people, I feel I must urge the United States to speed up the delivery of the promised military aid so that Egypt might not be caught napping."⁵⁷ No sooner had Sadat finished his threatening speech against Ethiopia than he visited Haifa and announced his plan to construct the Suez Canal tunnel and said to the Israelis:

After the tunnel is completed, I am planning to bring the sweet Nile waters—this is the sweetest of the four big rivers of the whole world—to the Sinai. Well, why not send you some of this sweet water to the Negev Desert as good neighbors?⁵⁸

The ironic contradiction of the situation should not escape our attention. On one hand, Cairo warns Addis Ababa that if Ethiopia builds dams on the river, Egypt said that it would go to war. On the other hand, Cairo offers Israel the "sweet" waters of the Nile, even without Israel asking for it. The Egyptian Minister of Irrigation, Abdul Azim Abdel Atta, repeated the same threat when he said: "Egypt would never permit Ethiopia to exploit the waters of the Blue Nile," and concluded by appealing to Arab countries to shoulder their histori-

cal responsibilities—a coded message lending itself to different interpretations. In all likelihood, he may have been appealing to the other Arab countries such as Syria, Iraq, Yemen, Libya, Kuwait, and others, to continue to follow Egypt's example and support the Eritrean insurrection in order to destabilize Ethiopia. But the Ethiopians were not impressed by Sadat's ferocious rhetoric. They quickly countered by accusing Egypt of expansionist ambitions; of creating the so-called "Eritrean Liberation Front"; of training and arming the terrorists assembled in that organization to help Cairo achieve its designs at Ethiopia's expense; of a dream to control the sources of the Nile; and of beating cold war drums to use first the Soviet Union and then the United States for the realization of its sinister agenda.⁵⁹ It should be noted that in the days of Gamal Abdel Nasser, since Egypt was an ally of the USSR, the name of the game was fighting "Zionism" and "American imperialism." But when Sadat, who served as Nasser's deputy, came to power, Egypt's policy changed 180 degrees, and yesterday's "anti-imperialists" became champions of western "democracy" and "free enterprise." In both cases, cold war drums were beaten, but the drums served as a convenient musk to conceal one essential truth—that Egypt sought to prevent Ethiopia from building dams on the Blue Nile River.⁶⁰

Despite the de-stabilizing effect of the Eritrean conflict, the first phase of Ethiopia's \$300,000,000 Tana Beles project began in 1988. The project aimed at doubling Ethiopia's hydroelectric power and provide irrigation for a settlement scheme that would take water from Lake Tana to the Beles River, across which five dams were to be built. Some 200,000 farmers were to be settled after the completion of this project. However, Egypt blocked a loan from the African Development Bank because Cairo feared that the Tana Beles project would consume too much Blue Nile water.⁶¹

Blocking a loan or not, to the dismay of the Egyptian authorities, the Nile Delta was going through an unprecedented winter drought that was seriously jeopardizing the country's wheat crop and its cotton exports. Water Resources Minister Abdul Hadi Radi informed a stormy parliamentary session in Cairo that the drought was owing to meager rainfall in Ethiopia and not to the diversion of the waters of the River Nile. Indeed, the long drought in Ethiopia had lowered the water in the Aswan High Dam's Lake Nasser to levels that threatened complete stoppage of the turbines.⁶²

While moving to impede Ethiopia's expanded use of Blue Nile waters, Egypt has recently begun an expanded use of its own. Digging has begun for the Salaam (peace) Canal—a \$1.4 billion project aimed to carry 12.5 million meters³ a day of fresh water from the Nile into the Northern Sinai, by traversing the Red Sea and the Suez Canal, in order to irrigate 400,000 acres of new farmland. It is designed to open the way for 3,000,000 or more Egyptians eventually to populate a region that is now home to only some 250,000. It is the second largest public works project in Egypt's history—second only to the Aswan High Dam.⁶³

The massive project entails constructing a canal from Lake Nasser to carry water 186 miles to the northwest. The project could cost as much as \$90 billion. By 2000, it was supposed to bring under cultivation 500,000 acres of land around the Baris Oasis. "We must expand beyond the narrow valley we have lived in for centuries. Our population is now 60,000,000, and there are only 8,000,000 acres of agricultural land," says Hosni Mubarak.⁶⁴ Even Egyptian scientists like Farouk El-Baz oppose the project on the ground that the waters of the Nile are not inexhaustible.⁶⁵ Tony Allen of the University of London calls the plan "a national fantasy."⁶⁶ Lester Brown agrees and says that, "there is already little water left when the Nile reaches the sea."⁶⁷

In the view of the Ethiopian Government, the several ambitious Egyptian agricultural projects begun within the last few years are part of an Egyptian attempt to secure even more water in disregard of the needs of other countries. Egypt is doing this in violation of the obligation to keep the Nile within its natural basin and is trying to create the conditions in which it becomes the sole beneficiary of the Nile. Ethiopia has been consistent in opposition to this policy position. At the UN Conference at Mar Del Plata in 1977, for example, it asserted its rights to the waters of the Blue Nile, and in June 1980, at the OAU Economic conference in Lagos, Nigeria, Ethiopia charged Egypt with planning to divert the Nile waters to the Sinai illegally.⁶⁸

Ethiopia claimed that Egypt's policy of hostility was also visible in its attempt to convert the Red Sea into an Arab Lake,⁶⁹ adding that Egypt's unfriendly acts were also manifested in other areas as well. According to the constitution of the Arab League: "The League of Arab States is a voluntary association of sovereign Arab States designed to strengthen the close ties linking them and to coordinate

their policies and activities and direct them towards the common good of all the Arab countries.”⁷⁰ The people of Somalia and Djibouti do not consider themselves to be Arabs, and no anthropologist has argued otherwise. Given this fact, it would be reasonable to ask: Why did Egypt sponsor their membership in the Arab League? Could it be religious solidarity? Granted that the majority of the people in the two countries are Muslim, religious solidarity alone would not appear to be a sufficient justification for membership. Afghanistan, Bangladesh, Iran, Pakistan, and Turkey, for example, are all Muslim states, but none of them are members of the Arab League.

The truth is, Egypt has a long established involvement in the affairs of Somalia. The official Egyptian line is that its role has been solely to promote cultural and educational exchanges and to work for peace. But a closer analysis suggests a very different motivation. If as advanced previously, Egypt’s policy was designed to prevent the use of the waters of the Blue Nile, Cairo’s intervention on the side of Somalia and subsidization of Somalia’s attempts to annex a good portion of eastern Ethiopia, was certainly not inconsistent with such a policy objective. Thus, in the series of armed conflicts that raged between Ethiopia and Somalia in 1960, 1964, and from 1977 to 1979, Egypt was involved in support of Somalia. Since Somalia also laid claim to Kenya’s territory as part of what it called “Greater Somalia,” Kenya announced that it would fight “side by side” with the Ethiopians to beat back what it described as Somali “aggression.”⁷¹ In May 1978, Egyptian planes carrying weapons for the Somali army warring against Ethiopia were forcefully landed at Nairobi international airport by the Kenyan air force.

No doubt, from 1964 to 1978, Somalia received extensive military aid from the Soviet Union. But Egypt also provided military training and weapons in order to help Cairo maintain leverage over Ethiopia, and to prevent Ethiopia from achieving stability. For example, in 1978 Egypt gave Somalia millions of dollars worth of Russian equipment. Sadat was also quoted as saying that in addition to sending arms, Egypt might send troops to help Somalia.⁷² According to Ethiopian Government sources, 100,000 fully equipped Somali soldiers armed with very sophisticated modern weapons attacked Ethiopia from 1977 to 1979. As a result, Ethiopia argued that thousands of defenseless people were killed; and thousands were uprooted and made destitute, and development projects in

eastern and southern parts of the country worth millions of dollars were destroyed. Schools, hospitals, bridges, farms, power plants, water supply systems, industrial plants, and even UN financed settlement projects for nomads were not spared. Whole villages and towns were razed to the ground.⁷³

Recently, the Siad Barre regime of Somalia collapsed, plunging the country into a tragic civil war where anarchy and the establishment of clan fiefdoms have become the order of the day. An exception is the northern part of Somalia, which has declared itself the independent state of Somaliland. Presently, however, Cairo is investing a lot alongside Libya in setting up a new administration in the southern province of Mogadishu.⁷⁴ To that end, the Egyptian press published an official statement by the Egyptian Foreign Office, contending that Cairo would be willing to organize, arm, and actively assist military action against Somaliland, if the objective of reconciliation and unity between the factions becomes successful.⁷⁵ In response, the President of Somaliland, Mohammed Ibrahim Egal, said: "We must react to the statement of the Egyptian Foreign Office for the sake of the safety and security of the Republic of Somaliland. We see the Egyptian statements as a declaration of war against Somaliland, and we resolve to defend ourselves in every way and by all means."⁷⁶ Addis Ababa claims that apart from presenting itself as a leader of the Arab/Muslim world, Egypt's objective is to arm a united Somalia state to wage war against Ethiopia.

The regime of Mengistu Haile Mariam of Ethiopia, too, has fallen, leading to the independence of Eritrea - a small state that is attempting to shoulder tasks which are clearly beyond its capabilities.⁷⁷ It is at loggerheads with Yemen, Djibouti, Sudan, and now, Ethiopia. In the recent Ethio-Eritrean border dispute too, there is evidence that Egypt is involved. For example, according to recent global intelligence sources, it is alleged that Egypt is supporting Eritrea with arms and expertise.⁷⁸ The Economist magazine's Africa editor, Richard Dowdson, says that part of Egypt's motivation for supporting Eritrea in its conflict with Ethiopia is its mistrust of Addis Ababa's plan for the Blue Nile.⁷⁹ Ethiopian newspapers have also reported that light and medium arms and explosives captured from Eritrean forces were manufactured in Egypt and were paid for with Egyptian, Libyan, or U.S. money. Egypt claims that it has not armed Eritrea, and that the military equipment made its way to Eritrea through

third parties. However, sources close to the opposition in Eritrea claim that Egypt is providing the Eritrean regime with military advice and intelligence through military experts masquerading as diplomats at Egypt's embassy in Asmara and Egyptian spies in Addis Ababa.⁸⁰

Likewise, Ethiopian newspapers, no doubt, reflecting public opinion, contend that Egypt needs and loves the Nile so much that it has a predisposition for hating the people inhabiting the land from which this great river originates. Since geography prevents Cairo from directly expressing this hatred in practical terms, it has to resort to assisting all forces bent on undermining Ethiopia.⁸¹

It was also reported recently that two Somali factions accused the government of Eritrea of sending five planeloads of weapons to warlord Hussein Mohammed Aided to arm Ethiopian dissidents. The sources describe Egypt as the architect, Libya as the financier, and Eritrea as the executor, and the Somali factions as instruments in a design targeting Ethiopia.⁸²

To Ethiopians, these seemingly unrelated acts reinforce the idea of Egypt's wider objective to secure hegemony in the Red Sea and the Horn of Africa region. They say that Ethiopia is indeed the main target within this larger regional strategic scheme, and that in the eyes of the Egyptians, Ethiopia was to have been encircled and destroyed by the Sudan, the various Eritrean movements, Somalia, and Djibouti.

A Step in the Right Direction

According to Marawan Badr, the Ambassador of Egypt to Ethiopia, "Egypt recognizes that each state has the right to equitable utilization of its waters in accordance with international law. Egypt further recognizes that existing water agreements do not hinder the utilization of the Nile waters by any of the riparian states. Egypt is ready to cooperate with Ethiopia in exploiting its huge hydro-electric power potentials, and did not object to the construction of small scale water dams."⁸³

If so, the qualification of "did not object to the construction of small dams" notwithstanding, there seems to be a change of policy. But has Ethiopia's attitude also changed? Ethiopia repeatedly declared that it did not regard itself bound by Nile water treaty obligations, arguing their inadequacy and irrelevance since they run contrary to the present exigencies of development. It has been

argued that its territory is the source of some six-sevenths of the waters of the Nile, and that its waters have nourished Egypt for centuries without it getting any compensation, and that billions of tons of top soil is being eroded each year which sustains Egyptian livelihood, and that Ethiopia will need a lot of investment to rehabilitate the ecology of the land through reforestation and soil preservation schemes.

Nevertheless, if Ethiopia is to exploit its river resources, it will have to develop the necessary civil and irrigation works, which will require a decade or more of effort and investment. In order to bring this about, Ethiopia's internal conditions and its external economic and political relations, especially with Egypt—a neighboring country with which it shares strong historical ties, cultural affinity, and economic, political, and strategic relations will have to be transformed. The two countries should not continue to look at each other through the prism of distorted lenses. Egypt and the Sudan in turn will have to be convinced that by cooperating with Ethiopia, they can achieve reciprocal benefits. After that, it will be necessary for the states involved to devise a framework for evaluating regional water budgets and the benefits and drawbacks of upstream development in both economic and resource security terms.

Egypt has been living beyond its water means. So far, it has attempted to solve its economic problems by playing the game of hydro-politics, and by the political device of subordinating its regional position to the United States, in return for the provision of the means to obtain commodities to fill its food gap. But Washington may not have the economic strength, or will, to take on additional burdens on the scale of Egypt. Egypt could also be outliving its usefulness to Washington in both political and strategic terms. The Sudan will certainly "run out" of Nile water in 10 or 20 years.⁸⁴ In such a situation, Ethiopia could very quickly develop an internationally acceptable volume of Nile water.⁸⁵ So what is the way out?

Nile waters appear to have a convenient unity. If Egypt's diversion attempts were to be brought to a halt, and if politics would allow the overall resources of the river to be considered as a whole, then a number of economically rational and environmentally sensible decisions could be made, which would maximize the returns to the limited water resource of this international river.⁸⁶ Exploiting the Nile's resources requires a new and imaginative approach by all

states concerned. An integrated approach is required that will bring about studies of the environment as well as of appropriate institutional, political and legislative arrangements, which will enable mutually agreed upon water management policies.

If agreements were to be reached on the regulation of water and power generation, Ethiopia is the natural place to regulate the Blue Nile flow. The construction of dams and barrages in the Ethiopian highlands would increase the total amount of water deposited on the door of Egypt.⁸⁷

Indeed, if properly managed, water stored in the four Blue Nile reservoirs could be released in May to Egypt when its water requirement is the highest without sustaining the great loss by evaporation now experienced at Aswan. Egypt, however, would no longer benefit from additional water in years of high flood, which would be stored and regulated in the Blue Nile reservoirs. Moreover, lowering the level of Lake Nasser in order to limit the evaporable loss would concomitantly reduce available hydroelectric power at the beginning. But after speedy adjustments are made, Egypt would receive additional water for irrigation and electricity from Ethiopia.⁸⁸

Positive Developments

Water Ministers from the Nile Basin countries met in Addis Ababa, in May 1999 for talks focusing on sharing Nile waters, on ways to exploit the underutilized Nile tributaries, on the estimated 40 percent rainfall in the region that is currently not exploited, and on more cooperation in joint water projects.

As a result, the Nile basin countries—Burundi, Congo, Egypt, Ethiopia, Kenya, Rwanda, Sudan, Tanzania, and Uganda have agreed to unite in common pursuit of sustainable development and management of the Nile. To that end, they have established a Nile Basin Initiative Secretariat at Entebbe, Uganda. The secretariat will be the nucleus for planning and coordination of activities. It serves both the Technical Advisory Committee and the Nile Council of Ministers. The chairmanship of the council is rotated annually. Since the development of the Nile waters will require substantial external funding, member states have called upon the international community to provide support. As a result, donors include the World Bank, UNDP, CIDA, FOA, Italy, Netherlands, Britain, Germany, Norway, and Sweden.⁸⁹

Egypt, Ethiopia and the Sudan have also agreed to design a project that will enable them to jointly utilize the Tekezie, Baro, Akobo, and Nile rivers effectively and equitably. They have already approved an accord for the equitable use of the waters of the rivers for irrigation and electric power projects and backed the principles of integrated sustainable development. Feasibility studies are also planned for joint projects.⁹⁰

In the power sector the interests of Egypt, Ethiopia and the Sudan are compatible. The energy that is available would be so huge that Ethiopia alone does not have the absorptive capacity. With regard to water, there is the problem of evaporation loss, which is 3 percent in Ethiopia, and 12 percent in Egypt.⁹¹ If present trends continue, Egypt will have to seriously look at the problem of increased evaporation and seepage losses of 10 billion m³; and silt loss and associated channel erosion problems. The building of the dams in Ethiopia can mitigate the problem. Hence, reduction of evaporation and transmission losses; availability of regulated flow; control of flood hazards; possible development of river transport; increased water storage facilities; and generation of surplus energy for the benefit of the three countries are some of the advantages of cooperation.

Egypt, Ethiopia, and the Sudan are at different levels of development. Nevertheless, the goal of any economy is to feed the population, which cooperation on the Blue Nile can facilitate. When surplus is produced, part of it can be used to develop handicrafts and small industries that meet local needs and that capitalize on local raw materials. This will assist in saving foreign exchange and in stabilizing the currency. As one builds up savings, one could move into light industry and heavy industry. Even in this area and in the area of trade, they can accomplish more in cooperation than they would through competition.

Notes

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12. Spencer Trimmingham, *Islam in Ethiopia*, (London: Oxford University Press, 1952), 70–71.
13. As quoted by Trimmingham, *Islam in Ethiopia*, 71.
14. Trimmingham, *Islam in Ethiopia*, 115.
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16. Sven Rubenson, (1976) *The Survival of Ethiopian Independence*, (London: Heinemann, 1976) 200.
17. Zewde Gabre-Selassie, *Yohannes IV of Ethiopia: A Political Biography*, (Oxford: Clarendon Press, 1975), 54–83.
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19. Op. cit., G. S. Zewde, *Yohannes IV of Ethiopia*, 62–63.
20. United Nations Legislative Series, *Legislative Texts and Treaty Provisions Concerning the Utilization of International Rivers for Purposes other than Navigation*, (New York: 1963), 112; See also E. Hertslet, *Map of Africa by Treaty*, II, (London: Frank Cross, 1967), 585.
21. P. P. Howell and J. A. Allan, eds. *The Nile: Sharing a Scarce Resource: An Historical and Technical Review of Water Management and Economic and Legal Issues*, (Cambridge: Cambridge University Press, 1996), 347.
22. United Nations Legislative Series, 102–106. See also Bonaya Adhi Godana, *Africa's Shared Water Resources Legal and Institutional Aspects of the Nile, Niger and Senegal River Systems*, (Boulder: Lynne Rienner Publishers, 1985), 106–117.
23. Godana, *Africa's Shared*, 156.
24. Majorie D. Whiteman, *Digest of International Law*, Vol. 3, (1964), 1011–12.

25. For a historical study of the 1959 Nile Waters Agreement between Egypt and the Sudan, see I. H. Abdalla, "The 1959 Nile Waters Agreement in Sudanese-Egyptian Relations," *Middle East Studies* [Great Britain], 7 (1971): 329–341.
26. See the full text of the Aide-Memoire in M. Whitman *Digest of International Law*, Vol. 3, (Washington D.C.: Department of State, 1964), 1011–1012. 1 feddan = 1.04 acres. With regard to the accomplishments as well as the problems, see Fahim Hussien, *Dams, People and Development: the Aswan High Dam Case*, (New York: Pergamon Press, 1981).
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69. See the editorial of Mohammed Hassanien Haikal in *Al-Ahram* (Cairo, October 27, 1973) in which he claims that the Red Sea should be considered an Arab Lake.
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79. See Ashot Swain, "Ethiopia, The Sudan, and Egypt: The Nile River Dispute," *Journal of Modern African Studies*, 35 (1997): 675–694.
80. *The Reporter* (Addis Ababa), 5 April 1999.
81. *The Reporter* (Addis Ababa), 5 April 1999.
82. *Addis Tribune*, 5 April 1999. See also *Africa Confidential*, 40, no. 4, (19 February 1999).
83. See Marawan Badr, "Egypt and the Horn of Africa: The True Perspective," parts I and II, *Addis Tribune*, 7 and 14 August 1998.
84. *The Nile: Sharing a Scarce Resource*, 386.
85. *Ibid.*, 386.
86. *Ibid.*, 310.
87. Robert Collins, *Waters of the Nile, Hydropolitics and the Jonglei Canal, 1900–1988*, (Princeton: Markus Wiener Publishers, 1996), 24.
88. *Ibid.*, 281–282.
89. *Africa News Online*, No. 9, 18, 1999
90. *BBC World Service*, 19 November 1999.
91. *The Nile: Sharing a Scarce Resource*, 368.