Imbalance in Water Allocation Stability and Collaboration within the Nile Basin

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1. Introduction

Water is finite. Just 2.5 percent of the world's water is fresh, rather than seawater. And most of the fresh water that does exist is locked in ice caps and glaciers. Of the remaining amount, some two-thirds is "lost" to evaporation. From what is left, some 20 percent is in areas too remote for human access.[1]

The situation is even worse as 3 -4th of the remaining comes at the wrong time or place, through monsoons, hurricanes and floods, and can only be partially captured for human use.

The renewable fresh water supply on land-water made available year after year by rainfall. is less than one percent of the total water on the planet.[2] Of this tiny fraction of water available for human use, some two-thirds is devoted to agriculture, a figure that rises to more than 80 percent, sometimes 90 percent, in many developing countries, where the real water crunch is coming.[3]

[1] Dr. Kinfe Abraham, "The Nile Issue: The Psycho-Political Hurdles to an Agreement .and the Way Forward to a Rapprochement", Occasional Paper Series, No.7 Addis Ababa, EIIPD, August 1997.
[2] Yacob Arsano, "Toward Conflict Prevention in the Nile Basin," Paper Presented at the "Fifth Nile 2002 Conference" held in Addis Ababa, February 24-28, 1997.
[3] Ibid.

2. Imbalance in the Nile Basin Riparian Countries

The Nile Basin is 3.35 million sq. kms. The principal occupation of the people in the Nile Basin is agriculture. Pastoralism is a supplementary activity for both upper and lower basin countries. The upper riparians, namely, Ethiopia, Kenya, Uganda, Tanzania, Rwanda, Burundi and the Democratic Republic of Congo (DRC) have made little use of the Nile River. Whatever use they have made of the river is confined to hydro-electric power generation. However, the lower riparians, Egypt and Sudan (Egypt more so) have exploited the water resources of the Nile extensively both for irrigation and hydro-power. In short, the upper riparians have been the suppliers and the lower riparian the users of the Nile waters.

Commenting on the problem of upper riparians, Yacob Arsano, in an article entitled "Toward Conflict Prevention in the Nile Basin," writes, "the development initiatives and the enormous potential of the water resources development in upstream countries have been frustrated, among other things, by fear of strategically untimely conflicts with lower riparians."[4] Yet, the upper riparians are very much interested to utilise the waters of the" Nile. Thus a basin-wide agreement is necessary to avoid potential conflicts and harness the water resources for mutual and equitable benefits. The necessity for harnessing the great potential of the Nile is underlined by the extent of its utilization as can be discerned from the table below.

[4] Yacob Arsano, "Toward Conflict Prevention in the Nile Basin," Paper Presented at the "Fifth Nile 2002 Conference" held in Addis Ababa, February 24-28, 1997.

Table 1: Crop land and Irrigation on the Nile Basin 1975-87[5]

Country	Crop land Total Area, (in Hectares) 1975-87	Irrigated land as % of crop land 1975-77	Irrigated land as % of crop land 1985-87
Burundi	1,332,000	4	5
Egypt	2,560,000	100	100
Ethiopia	13,930,000	1	10
Kenya	2,420,000	2	2
Rwanda	1,120,000	0	0
Sudan	12,478,000	14	15
Tanzania	5,230,000	1	3
Uganda	6,705,000	0	0
DRC	000	0	0

Table 2: Hydroelectric Resources of the Nile[6]

Country	Technical Potential (in Mega Watts)	Installed capacity, 1987 (MW)
Burundi	289	12
Egypt	3,210	2,700
Ethiopia	4,000	230
Kenya	814	354
Rwanda	600	56
Sudan	380	225
Tanzania	4,000	259
Uganda	1,200	156
DRC	12,000	2,480

[5] Yacob Arsano, "Toward Conflict Prevention in the Nile Basin," Paper Presented at the "Fifth Nile 2002 Conference" held in Addis Ababa, February 24-28, 1997.
[6] Ibid.

3. Extent of Utilization of the Nile Riparians: Egypt

Egypt has made greater use of the Nile waters than all the riparian countries combined. This is due to the geographical, historic and economic circumstances which have obtained in Egypt. Except for the small Mediterranean strip and the narrow Nile Valley, the rest of Egypt is just a vast desert. Besides, as most of the Egyptian people are farmers, they depend on the Nile waters for irrigation. In fact, 98 percent of the population lives in the Nile valley. The Nile River for Egypt is, therefore, a source of life. This perhaps explains why Egypt is called "the Gift of the Nile."

More than 86% of the Nile Waters originate in Ethiopia. Hence, Egypt assigns a prominent place to her relation with Ethiopia although it has by no means been always smooth.

The Nile is dependent for the most part on Ethiopian rivers. Further, it carries fertile from the Ethiopian highlands with its annual floods. That is why when Khedive Is was asked whether he intended to annex Ethiopia, he was reported as having said nature was already sending him down the best part of Ethiopia with each flood of the that he had no desire for the residue.[7]

After colonising Egypt in 1882, and the Sudan, Kenya and Uganda in the last decade of the 19th century, Britain tried through political and legal manoeuvres to ensure the unobstructed and continuous flow of the Nile River to Egypt. It signed agreements on behalf of its colonies having them to pledge not to construct dams on the Nile River. It also signed agreements with Ethiopia, the then Italian colony of Eritrea, and King Leopold II's colony of the Congo prohibiting them from constructing dams on the Nile waters without the prior consent of the British Government. The 1929 Nile waters apportionment agreement between Britain and Egypt, for example, banned irrigation, power generation and other uses of the Nile waters by the Sudan and other British colonies without the agreement of the Egyptian government. This was to ensure that the quantity of water arriving in Egypt was not reduced.[8]

Britain signed this agreement, which failed to heed customary law as well as common sense, to soothe the anti-British nationalist anger in Egypt that had surfaced after World War I. However, this has resulted in lingering feelings of resentment against Britain and Egypt by upstream countries.

[7] Yacob Arsano, "Toward Conflict Prevention in the Nile Basin," Paper Presented at the "Fifth Nile 2002 Conference" held in Addis Ababa, February 24-28, 1997.
[8] Ibid.

On the other hand, Egypt has continued to construct barrages and dams without consulting upstream riparians. Arsano writes, "during the Nineteenth and the Twentieth centuries, the desire of the Egyptian Government was to control the Nile waters in such a way that the floods would remain within the banks, secure the availability of water through out the year for permanent irrigation and for expanding the land under irrigation."[9] Yet, the needs of the upstream riparians were not taken into account by the Egyptian Government.

In 1959, Egypt and the Sudan signed an agreement for the full utilisation of the Nile waters without including other riparians in the agreement. According to this agreement, the Sudan got 18.5 Billion Cubic Meters (BCM) and Egypt 55.5 BCM of water. After this agreement was reached the construction of the great Aswan dam went ahead as of 1960.

The Aswan High Dam is the first largest man-made lake with a reservoir which is 591 Kms long and capable of releasing 1500 tons of water every second for irrigation during times of drought. It was estimated that the new dam would expand cultivated land by 1.3 million acres (526.11 hectares) and result in the application of permanent irrigation on 700,000 acres (283.29 hectares) using the basin system. This was then envisaged to make Egypt secure from the fluctuations of the Nile waters. Moreover, the dam was designed to provide considerable hydro-electric power as well as improve navigation below it. While constructing such an immense dam, Egypt did not bother to consult upstream riparians except the Sudan. The needs of the other upper riparians were simply ignored.[10]

Further, the recently inaugurated Sinai and Kharga/Dkhala water diversion projects were constructed without prior consultations with upstream riparians. The El Salam project requires 4.45 BCM of the waters of the Nile annually in the Sinai. The new artificial lake in the valley of Kharga and Dkhala began in 1981.

The El Salam canal links the Nile and Lake Nasser to the new artificial lake with a reservoir of 600sq. kms and capacity of 120 BCM. It was also planned that 200,000 hectares of land would be under irrigation. Such unilateral actions on the part of Egypt have also encouraged upper riparians to act unilaterally in utilising the waters of the Nile.

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[9] Yacob Arsano, "Toward Conflict Prevention in the Nile Basin," Paper Presented at the "Fifth Nile 2002 Conference" held in Addis Ababa, February 24-28, 1997.
[10] Ibid.

4. Extent of Utilization by the Nile Riparians: The Sudan

The Sudan is the second country that has made greater use of the Nile waters. Modern agricultural schemes started in the Sudan in the 19205. The Gezira scheme started during the same year. It is supplied with water from the Gigantic Sennar Dam which was built on the Blue Nile in 1925. Initially a quarter of a million acres were put under irrigation.

Other dams were also built subsequently. For instance, the Jebel Awlia dam was constructed on the White Nile in 1937. The Rosaries Dam was built on the Blue Nile following the 1959 agreement with Egypt. Its storage capacity is 2.4 BCM sq. kms. It was completed in 1962 and is equipped with 250,000 Watt generators. The Khasim el-Gerba dam was completed in 1964 and has a capacity to irrigate 100,000 hectares.

The Gezira Scheme alone constitutes 12 per cent of the total area cultivated in the Sudan. It produces 75 per cent of "Long staple cotton", which is the country's main product. It also accounts for 12% of the country's production of Durra, 15% of ground nuts and 50% of Wheat.

This scheme which covers 2.3 million acres between the Blue Nile and White Nile produced about 350,000 tons of cotton in 1977/78. In addition, in the Rohad Valley a project costing US $ 34.6 million was designed in 1977 to irrigate 820,000 acres.

The Sudan also uses the Nile as a means of transportation. Egypt and Sudan had also agreed to dig a canal called the Jonge1li between Ma/aka/ and Jongelli to decrease the loss of water in the Sudan (at the Sudd) due to evaporation. This was aimed to increase the water flow to the lower Sudan and Egypt, and to draw the surface water into the bank of the canal so that swamp land could be reclaimed for agriculture in upper Sudan. Besides, the canal was intended to facilitate navigation between Jongelli and Ma/aka/. However, the canal digging activity has been disrupted since 1983 due to the civil war.[11]

[11] Yacob Arsano, "Toward Conflict Prevention in the Nile Basin," Paper Presented at the "Fifth Nile 2002 Conference" held in Addis Ababa, February 24-28, 1997.

5. Extent of Utilization by the Great Lakes Riparians

The upstream riparians in the Great Lakes region, namely Uganda, Kenya, Tanzania, Burundi and Rwanda were unable to benefit from the Nile waters during the colonial era because their hands were tied by injudicious treaties entered on their behalf by Britain with downstream riparians. For instance, "In Kenya, in the early 1950s, a small area of the Kano plain was developed for rice production. By 1957 some 4000 acres were cultivated by irrigation."[12]

A study in 1954 identified 29,892 acres of irrigable land in Kano plain. However, because of the uncooperative behaviour of Britain, the irrigation project was postponed. Hence, a small fraction of the irrigable land is cultivated.

In Tanzania, before the start of World War I, Germany had planned to develop large scale cotton farms covering two million acres in Sukumaland. The water was to be obtained from Lake Victoria via a canal or tunnel. Nevertheless, as Germany was defeated in World War I Britain became the new colonial master. But, as Britain was interested only in the benefit of downstream riparians, the irrigation plan in Tanzania was shelved to ensure that the Sudan and Egypt got an undiminished flow of the Nile Waters.

Commenting on why political consideration was important with respect to the Nile waters, Arsano writes, "when the Suez Canal crisis was at its peak, some revived the intention to take up the sukumaland project. This was not, however, intended for Tanzania's economic development, but a political consideration to punish Egypt."[13]

In Uganda, the Victoria region of the country is highly suitable for agricultural development. Nevertheless, Uganda has used her waters only for hydroelectric power. The Owen Fall Dam completed in 1954 produces 700 million Killo Wat Hours (KWH) of hydroelectric power annually. If the whole regulated flow of the Victoria Nile were available for power generation, the annual production of energy would be 921 million KWH.

[12] Yacob Arsano, "Toward Conflict Prevention in the Nile Basin," Paper Presented at the "Fifth Nile 2002 Conference" held in Addis Ababa, February 24-28, 1997.
[13] Ibid.

6. Extent of Utilization by Ethiopia

Ethiopia is the main source of the Nile waters. More than 86% of the water of the Nile originates in it. Nevertheless, it is a country that has made the least use of the Nile water. During the colonial era, Ethiopia was engaged in struggles to maintain its territorial integrity and political independence against metropolitan powers. Hence, it had neither the time nor the resources to utilise the water of the Nile.

Yet, Ethiopia has always maintained the desire to utilise the water of the Nile. In 1927 King Teferi Mokonen sent a special envoy, Workneh Martin, to the United States. One of the objectives of this diplomatic overture was to obtain American engineers for the Lake Tana development project. As a result of this effort, J.G. White Engineering Corporation was sent by the U.S. Government.

The Corporation commenced physical surveys in 1930 and estimated the total cost of the works at $8,878,000. The contract included the Lake Tana outlet and the construction of a high way from Addis Ababa to Lake Tana. However, the project failed to materialize due to opposition on the part of Britain and the impending Italian invasion of Ethiopia.

In the 1950's, Ethiopia contracted a U.S. engineering firm, Balton Hannessey and Partners, to conduct a comprehensive study of the Abbay (Blue Nile) River. The survey was conducted from 1957 to 1962. It involved studies of stream flow, soils, hydroelectric power potential, land use, marketing, communications, dams and irrigation.

At the time, Egypt and the Sudan were engaged in negotiation regarding the full utilisation of the Nile waters. Ethiopia was not included in the negotiations. The Ethiopian government then asserted the countries right for the utilisation of the water resources within the country's borders.

The Abbay (Blue Nile) River Basin has considerable irrigable land. In the face of drought induced famines that afflict Ethiopia constantly, it is necessary for the country to utilize the water of the Blue Nile for irrigation. In the 1970s, there were plans for irrigated - agriculture in the Blue Nile basin. Arsano comments, "Regarding the irrigation of the Ethiopian Nile Basin, 1,600,000 hectares of land,

including 115,000 hectares around Baro (Sobat) River and 400,000 hectares of land around Abbay (Blue Nile) was planned to be under irrigation for agriculture."[14]

Moreover, most of the rivers in the Ethiopian Nile Basin are suitable for the generation of hydroelectric power. The rivers of Ethiopia also have the potential to produce 56,000 c million KWH of hydroelectric power. Therefore, it behooves Ethiopia to harness her hydropower potential to conserve the meagre foreign exchange which it spends on imported oil. Given this situation, "Ethiopia has no option but to harness its water resources for consumptive and non-consumptive purposes. There is no legal or institutional obligation which limits Ethiopian policy makers as well as planners from fulfilling this duty in the best interest of their people."[15]

[14] Yacob Arsano, "Toward Conflict Prevention in the Nile Basin," Paper Presented at the "Fifth Nile 2002 Conference" held in Addis Ababa, February 24-28, 1997.
[15] Ibid.

7. Key Issues of Potential Conflict in the Nile Basin

One fundamental potential issue of conflict is related to the equitable sharing of the Nile water resources. Ethiopia, while providing the lion's share of the waters of the Nile, utilizes almost nothing of it. This brings the question of justice to the fore. This point is further elaborated upon by K. Abraham below:

> The predicament of other riparian countries is the same. It applies to the Sudan which, after all, sees it self as a junior beneficiary. For Ethiopia the obvious question is and for the long time to come will be: why should the country which provides 86% of the water of the Blue Nile be deprived of its fair share? Finally, nevertheless, even those countries which have endorsed the argument of historical rights which have leverage over banks and other financial institutions will vote for justice.[16]

The utilisation of the Nile waters is based neither on law nor on common sense. Yet, the lower riparians (the Sudan and Egypt), contribute almost nothing to it, but consume most of it. In contrast, the upper riparians hardly utilize anything. This happens under the circumstances of institutional and legal void.

The above status quo is untenable. The upper riparians are certainly going to use some of their water resources while the lower riparians want more water above the current levels. Describing how this may lead to conflict Arsano observes:

> With the sharp increase of population in the coming decades ...every riparian country may not only feel more need but also the obligation to utilize its water resources to maximum levels. Such demands are already soaring beyond the level of available water resources in the entire basin. Egypt and the Sudan have projected their water needs for agriculture alone at 65.5 BCM. This amount is 12.26 BCM higher than the total available water in the Nile Basin. This is a clear indication that when all riparians come up with their respective national water master plans the available water resources and national demands will be at irreconcilable variance.[17]

[16] Dr. Kinfe Abraham, op. cit.
[17] Yacob Arsano, op. cit

Population growth alone is not merely the problem, although it is one of the contributing factors. (See the table below). The other important source of conflict is that there is no basin-wide legal mechanism on the basis of which water apportionment can be made and regulated. The existing treaties are bilateral and unduly favor downstream countries. Abraham has emphasised the point in the following passage:

> The complexity of the problem of the equitable sharing and utilization of the waters of the Nile is underscored by the nature of past agreements such as the 1902 Anglo-Ethiopian agreement and the 1929 and 1959 Nile Water agreements signed between Egypt and the Sudan in which both countries agreed to allocate the net historical yield of 74 BCM at the Aswan Dam between themselves on the basis of 55.5 BCM for Egypt and 18.5 BCM for the Sudan. Ethiopia was excluded from these negotiations and none of the total amount water was made available to it. [18]

The compelling imperative of population growth which is likely to put pressure on both upper and lower riparians to demand more water need not be overemphasized. The table below which is indicative of the current situation and future trends of population growth I highlights the point very well:

Table 3: Size and Growth of Population (Million). Years and Population (Million)[19]

Country	1960	1990	2025
Burundi	2.9	5.5	13.1
Egypt	25.9	54.1	94.0
Ethiopia	24.2	46.1	112.3
Kenya	6.3	25.1	77.6
Rwanda	2.7	7.2	18.1
Sudan	11.2	25.2	77.6
Tanzania	10.0	27.3	84.8
Uganda	6.6	18.4	55.2
DRC	15.9	36.0	99.5

[18] Dr. Kinfe Abraham, op.cit
[19] Yacob Arsano, op. cit

8. Towards a Nile Accord: Nile Issues

Any future Nile accord should be predicated on international principles, consideration of the needs of the different riparians, the promotion of collaboration and complimentary as well as division of labour and specialization within the basin. The essence of this is laconically captured in the following citation:

> A future accord on the Nile should be predicated on expanding the usable yields, encouraging interdependencies and allocations of water rights. This should include provisions for apportionment of water, especially in times of scarcity and the establishment of principles to guide this... Nile water management is not strictly a zero-sum game.[20]

At present, the hurdles to a negotiated agreement on the allocation of the waters of the Nile revolve around:

1. The mood of distrust and suspicion surrounding the whole issue of the Nile;
2. The historical inability of Ethiopia and the Sudan to make credible commitments to Egypt due to their past domestic situations;
3. Sudan's problems of the recent past which deprived it of a competitive edge in negotiations;
4. Egypt's reluctance to make compromises without the assurance that ~ concessions it makes today are worth the domestic political price of tomorrow. These problems have prevented it from halting its desert reclamation program;
5. The capitalization of Egypt on its military power;
6. The absence of enough number of qualified hydrological experts in the upstream countries with knowledge and the necessary kit with technical .details on the Nile which are valuable for negotiations;
7. Lack of database on the above and fear of being outmanoeuvred by the Egyptian team of negotiators which include knowledgeable engineers and diplomats.
8. Lack of dialogue among all riparian countries; -
9. The adverse effect of propaganda on the mood of negotiations; and ~
10. The conflict of interest stemming from other sub-regional issues and interests.[21]

[20] Dale Whittington (et al.), Toward a Nile Accord, Ethioscope, Vol. I, No I, September 1994.
[21] Nile Hurdles, ibid., pp. 4-5.

9. Breaking the Psycho-Political Impasse

For better or worse, the Nile will continue to be the dominant theme on the agenda of the riparian countries during the early 21st century. More so, for the countries that are affected most by it. These include countries that contribute most to it and benefit least from it and those that cannot do without it.[22]

Silence might prolong the status quo a wee bit, but it will certainly not provide a long-term solution to the complex issues surrounding the Nile. It is therefore imperative that the following measures, inter alias, be considered:

1. The first logical step to take is breaking the code of silence by confronting the issue of the Nile candidly, openly and with a desire of finding a solution which takes stock of the needs and anxieties of all concerned. The magic words in such deliberations would be mutual trust, concern and transparency in the way issues are addressed. In this effort, the unbiased views of scholars and experts will provide many insightful clues on how the issues of equity and efficient utilization should be addressed.
2. Some of the general views mentioned earlier as ways of improving the utilization of the water of the Nile would certainly prove useful by way of making more water available to those countries which are not getting it now.
3. The above would certainly help address the key issue of equity to some extent. But, it also needs to be augmented by other water management proposals endorsed by all countries concerned individually as well as collectively.[23]
4. As noted in the introductory citation which is also quoted here, in the discussions, an attempt should be made to consider divergent views on how a new Nile waters accord should look like. For instance, according to Dale Wittington, John Waterbury and Elizabeth McClelland, the future accord should be predicated on “expanding the usable yields, encouraging interdependencies and allocations of water rights.” This should also include, “provisions for apportionment of water, especially in times of scarcity and the establishment of principles to guide this.” The authors further argue, “Nile water management is not strictly a zero-sum game.”

[22] Nile Hurdles, ibid., pp. 4-5.
[23] Ibid

There is some scope for cooperative behaviour that would increase the long- term yield and a new agreement could ensure that such possibilities are fully exploited. The most promising possibility is the construction of the Blue Nile Reservoirs in Ethiopia.[24]

The cooperative venture should be based on comparative advantages of benefits to all riparian countries. For instance, one of the numerous advantages of such reservoirs is that they would enable over-year storage to be shifted from the Aswan High Dam Reservoir so that evaporation losses are significantly reduced. In the upper Blue Nile region, evaporation rates are approximately SO percent of those in the Sudan and Egypt. Reductions in evaporation loss would be realized both through lower evaporation rates and lower surface-to-volume ratios in the canyon sites of the Blue Nile Reservoirs.[25] At present, the only crude estimates of the possible water savings available are probably in the order of 4 to 5 BCM per year. Another opportunity for regional cooperation is the elimination of the Jebel Aulia Reservoir on the White Nile, where annual evaporation losses are currently about 2.8 BCM.[26]

But to take steps of minimizing such losses the riparian countries most concerned should sit together and recognize that such losses do indeed exist and that they constitute serious problems for their future relations.[27]

As indicated above, calculation on reallocation should be based on two key assumptions -namely, that 6 BCM be derived from long-term increased yields obtained via the reduction of losses at the Jebel Aulia Reservoir in the Sudan and the construction of the Blue Nile Reservoirs in Ethiopia.

The snag about the above suggestion is that it can take decades to develop. Nevertheless, as a way out of this, Whittington (et al.) suggests that "an interim allocation stating that the new agreement could be structured in a staggered fashion should be made. This can be done so that some portion of Ethiopia's share only becomes available as the Blue Nile projects are completed in phases." [28]

This suggestion, they add "would allow Ethiopia to obtain internal financing for irrigation schemes of the Blue Nile projects without interfering with existing water use in Egypt or the Sudan". Egypt and the Sudan would then be expected to contribute to this positively.[8] The obvious rationale for positive cooperation on the part of Egypt is that impasse and delay are counter productive and that 'a problem postponed is not a problem solved.'[29]

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[24] Dale Whittington (et al.), ibid.
[25] United States Bureau of Reclamation, 1964.
[26] Whittington, E. McClelland, Opportunities for Regional and International Co- operation in the Nile Basin: Water International, Vol. XVII, 1992. .
[27-29] Ibid.

To the above must be added that the burden of climatic changes like El Nino should be equitably borne by all, unless it is caused by the long-term neglect of environmental considerations.

The authors of the article add:
Any new agreement about the allocation of the long-term yield of the river among the riparian countries could be made contingent on the completion of the two projects that would increase available water supplies.

They go on, "Various computations should be made and options looked into."[30]

The above observations make sense as a way of addressing the issue of water allocation agreement. For example, as Wittington (et al.) suggest for purposes of discussion, let us assume that the increase in long-term yield resulting from both the construction of the Blue Nile Reservoirs and the elimination of evaporation losses at the Jebel Aulia Reservoir will be six BCM. If we take a conservative estimate that none of the other water conservation projects on the White Nile could not be completed due to environmental and political constraints, then based on the historic record of the last century the available long-term yield can be estimated at about 80 BCM, measured at Aswan after deduction for the remaining evaporation losses at the reservoir.[31]

As the same authors make it clear, several key steps on ways and means of negotiating the shares of the Sudan, Egypt and Ethiopia can also be explored. One line of reasoning they put is that of making Ethiopia's share of the Nile water at least equal to that of the Sudan. The argument for this is that both countries have more potentially irrigable land than they can ever use. Given - the limited water supplies, and that Ethiopia's population is approximately twice as large as that of the Sudan, this approach can result in somewhat more water being allocated to Ethiopia. The new allocation could be: 52 BCM for Egypt, 14 BCM for Sudan and 14 BCM for Ethiopia.[32]

Another suggestion is one considered from a vantage point of splitting the differences. For the purpose of illustration let us say that Ethiopia receives 12 BCM measured at Aswan. This would give the Sudan 15.5 BCM and Egypt 52.5 BCM.[33]

The rationale for the above is underscored by the following two factors:

a. Egypt would only give 5% of its existing allocation in return for Ethiopia's recognition of Egypt's needs of a majority of the Nile waters.
b. Current Nile basin countries will retain their ~existing allocations.

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[30] Whittington, E. McClelland, Opportunities for Regional and International Co- operation in the Nile Basin: Water International, Vol. XVII, 1992. .

[30-33] Ibid.

Whether Ethiopia as the supplier of 85% of the water of the Nile would accept the 14 or 12 BCM allocations has yet to be negotiated. One optimistic signal is that Ethiopia's water needs are not as desperate as those of Egypt.[34]

Other considerations also might prompt Ethiopia to be amenable to such a proposal. One is that Cairo's energy requirement, currently growing at 6% a year, could make Ethiopia an exporter of energy to Egypt at an agreed price. The proposal on energy production will have no effect whatsoever on the volume of water which flows to Egypt. It is also among several proposals put forward for a basin-wide cooperation which Egypt considers as part of its 'multi-good' strategies.

The above proposals are very constructive and encouraging. Nevertheless, the key to their realization lies in the removal of the psycho-political hurdles and start of a candid review of the Nile issue in all its complexities. Given this change of attitude, the Nile offers great potential to all the riparian

[34] Whittington, E. McClelland, Opportunities for Regional and International Co- operation in the Nile Basin: Water International, Vol. XVII, 1992.

10. Conclusion

Setting the Tone for a Nile Agreement

An earnest effort at breaking the current impasse on the Nile should begin by removing the psycho-political roadblocks to dialogue. It should also take stock< of the commonalties. Such awareness may for instance include:

1. Recognition of the characteristics of the Nile issue as part of the socio- political, cultural and emotional history of Egypt, Ethiopia and the Sudan;
2. Awareness of the Nile as the basis of the physical survival of Egypt;
3. Cognizance of the Nile as the central symbol of Egypt's national cohesion, particularly in times of conflict;
4. Realization of the fact that the Nile is the key pillar of Egypt's foreign policy;
5. Appreciation of the positive achievements and measures taken by Egypt to improve the efficient utilization of water;
6. Recognition of the efforts being made to mitigate water wastage and improve the total water resources of the basin;
7. Freeing the Nile from becoming a hostage ,of short-term government policies and politics;
8. Genuine appreciation of the real issues at stake. This includes realizing that the bones of contention reside in the Egyptian assertion of "historical right" and Ethiopia's demand for 'equity';
9. Recognizing that neither the claim of historical rights nor arithmetic justice alone can be a good basis for compromise;
10. Seeking a middle ground. From Ethiopia's point of view, the rational for this is that 'bad justice is better than no justice';
11. Recognizing that environmental depletion in Ethiopia implies a reduction in the volume of Nile water. This will affect the proportion of water reaching Egypt;
12. Raising the awareness of all riparian states that too much 'short-termism' does not augur well for future collaboration. In fact, excessive short- termism could have dire future consequences;
13. Persuading international financial institutions to have a long-haul perspective which encourages investment in the environment, irrigation as well as soil and water conservation projects. Fortunately, this has already begun via the vehicle of the Nile Basin Initiative (NBI);

14. Convincing financial institutions that loans destined for investment in less vital sectors in the riparian countries are counter- productive for all .involved;
15. Jointly exploring and identifying mutually beneficial projects. This may .include the production of hydro-power which is of great significance to meet the rising energy demands of all riparian states;
16. Making serious efforts to persuade the riparian countries about the risks of unilateral action by anyone of them;
17. Making attempts not to Middle-Easternize the Nile;
18. Considering the food security challenges of the different countries and looking at the comparative advantages of each country for food production in the context of a basin-wide food security arrangement;
19. Realizing that the Nile is an intensely emotional issue for Egypt, the Sudan, Ethiopia and the other riparian countries, though to varying degrees;
20. Making attempts to deal with the Nile with less passion and more rationality and balance;
21. Analyzing the Nile issue and arriving at an honest recognition of the sticking points via the establishment of a regime of ownership, user rights and the balance between need and distributionCt.1 justice;
22. Recognizing that a prolonged impasse over the Nile is counter-productive to all riparian states. In this context, one should be aware of the fact that 'a problem postponed is not a problem solved';
23. Understanding that in the long run the status quo is not tenable;
24. Realizing that the Nile requires a sober recognition of the value of the peace dividends which can be derived from an early agreement by way of opening avenues of constructive cooperation;
25. Pursuing the motto 'if you want to prevent war strengthen peace';
26. Recognizing that the Nile is a case of latent conflict and not an active one.. Thus, there is a reward to the foresight of making all attempts to prevent .its escalation to an open conflict; and
27. Showing all concerned parties that a protracted conflict over the Nile will only prove the medical dictum -"The operation was successful but the patient died." This also implies that 'the means do not always justify the end.'[36]

All the above proposals should be examined individually for their merits. The catchword which underlines all of the 27 points is co-existence. The bottom line is that we can choose our friends, but not our neighbours. The common challenge that all riparian states face is one of making their neighbours their friends.

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[35] Nile Hurdles, ibid., p 47.
[36] Ibid.. pp. 49-52.

So far the perception is that Egypt could have played a more constructive role concerning the Nile issue which has impacted its relation with most riparian countries. Arguably so far Egypt's position has been one of wanting to destabilize the region to prevent the countries of the Nile from forcing her to sign an - agreement on the just allocation of the Nile waters. It is also suggested by some scholars that Egypt aims to ensure that the limited economic resources of the countries of the Nile are diverted to domestic and external conflicts and war efforts. This, it is argued, is to prevent meaningful projects from being developed on the Nile.

The above position will only help postpone the problem. It will not help solve it. Hence, Egypt needs to make a genuine attempt to accommodate the just demands of countries like Ethiopia which account for the lion's share of the waters of the Nile.

Nevertheless, although an agreement has yet to be signed on the allocation of the waters of the Nile there are new developments which show that there is a change of heart on the part of Egypt. This shows its commitment to greater cooperation among the riparian states. This is epitomized by the new Nile Basin Initiative (NBI) in which Egypt, Ethiopia, the Sudan and all the other riparian states participate. The NBI is progressing in earnest.

The current cooperation within the framework of the NBI underlines that Egypt has veered away from its earlier policy of alleged policy of destabilization. In other words, it is moving away from a win-lose situation to a win-win situation for all.

The NBI represents a positive trend of collaboration among the riparians. It also offers anew vision and framework of cooperation. It is a welcome first step along the path toward enhanced win-win possibilities.

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