

# LEGAL AND POLICY REGIME OF LAKE VICTORIA AND NILE BASINS

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## I. INTRODUCTION

The Nile River and Lake Victoria together constitute one of the world's largest fresh water basins. This view takes into account the fact that Lake Victoria is the second largest freshwater lake in the world, after Lake Superior, and that it also has the longest shoreline of all Lakes in the world. The Nile, likewise, is the second longest river in the world, after Mississippi. If one considers that the Nile was central to the development of Egyptian civilization, then one has to conclude that the Nile as a river has had one of the oldest and most critical set of uses in all history. Beside Egypt, there are eight other coriparians of the Victoria and Nile. They are : Sudan, Ethiopia, Zaire, Uganda, Kenya, Tanzania, Rwanda, and Burundi. One estimate suggests that the whole catchment area totals 2,900,000 square kilometers, which represents one-tenth of the area of Africa.<sup>1</sup>

Therefore, the Nile and Victoria system should have attracted widespread and detailed scholarly and policy studies as an instance of shared natural resources whose legal regime is now a subject of serious debate inside and outside the United Nations system.<sup>2</sup> No doubt, for the basin states such studies should have been enhanced and encouraged by the fact that water, like land, is a high priority subject in any development planning. As such, the African countries to which development planning is a priority concept should have had extensive studies on how the fresh waters of Lake Victoria and the Nile could be used by each of the basin states without necessarily injuring the interest of or jeopardizing the opportunity of using the water by the other basin states.

Yet, since 1960, the eve of independence of the majority of the riparian states, no agreement has been concluded on the uses of the Nile. The years 1959 and 1960 saw one agreement and protocol, respectively, between Egypt and Sudan on the utilization of the Nile waters.<sup>3</sup> Before the 1959 Agreement there

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1. Camponera, D.A., "The Nile River Basin Legal and Technical Aspects" mimeo, paper of August 1958 being an English translation of an Italian version, "II Bachino Internazionale Del Nilo Consideration Giuridiche" in *La Comunita Internazionale*, Vol. XIV, Jan. 1959, pp. 45-66.
2. See a general compilation of this development since the turn of this century in Camponera, D.A., *The Law of International Water Resources* Background Paper No. 1 Rev. 1 (Legislation Branch, Food and Agricultural Organization of the United Nations, Rome, 1978); International Law Commission, *Legal Problems Relating to the Non-Navigational Uses of International Water Courses* (Report by the Secretary General of U.N.) Y.B.I.L.C., 1974, Vol. II Part II, p. 265, being a report of the 26th Session ILC. and the Report of the Intergovernmental Working Group of Experts on Natural Resources Shared by Two or More States, UNEP/GC.7/7 of 14th June 1979, p.139.
3. That was within two years after Sudan became independent. The agreement on the Full Utilization of the Nile Waters was signed by Sudan and Egypt at Cairo on 8 Nov.

were about eleven agreements focusing on the White Nile and the Egyptian interest as we shall see later.<sup>4</sup> Understandably, the concentration on Egyptian interests was a part of the historical factors mentioned above and the fact that the White Nile had a source in a reliable water storage— Lake Victoria. Let us observe here, first, that since 1960 all the states sharing the Nile and Victoria basins have received their political independence. Therefore, if the treaties referred to above purported to apply to their territories, the provisions might require a fresh look. This suggestion assumes that political independence and complete change in the governance and society might so change the circumstances that the application of the treaty provisions might be called in question.

Secondly, since 1960 the range of uses to which the water is being put in the basin states may have increased or that there may be so many more plans in store for the utilization of the waters that the safeguards in the pre-1960 treaties may be either inadequate, irrelevant, or contrary to the present exigencies of development in the basin states.

Thirdly, the Nile River forms some kind of a belt that should transmit and promote elements of cooperation between Arab States in northern Africa and the Black African States to the south of the Sahara. In this region the relationship that has prevailed between states has been largely one dictated by the legacy of colonialism in Africa. These relationships have to change and are in fact changing. One should expect that the pattern of changes in the relationship that are linked to the use of the waters of the Nile Basin are changing correspondingly. But are there any changes that we can actually discern by analysing the legal instruments for cooperation in the use of the Nile waters?

This paper is intended to raise questions and to provide a framework for consideration of some of the answers. The main focus is to analyse the range of the instruments that have been signed in attempts to create cooperation in the consumptive uses of the waters of the Nile Basin. But that analysis will be preceded by a summary of the international legal principles governing internationally shared water resources. The adequacy of the existing treaties to cope with the full range of possible and actual uses of the Nile and Victoria waters may then be viewed with the applicable law in mind. Some recent developments in terms of actual or intended projects in the basin states will clearly suggest that there is urgent need for an up-to-date framework for dealing with the Nile and Lake Victoria waters.

## II : GEOGRAPHICAL AND TECHNICAL PERSPECTIVES

Lake Victoria sits on the eastern African plateau at an elevation of 900

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1959. It was the Protocol Concerning the Establishment of the Permanent Joint Technical Committee for the implementation of that Agreement which was signed by the two states at Cairo on 17 Jan. 1960. See text in United Nations Legislative Series, *Legislative Texts and Treaty Provisions Concerning the Utilization of International Rivers for Other Purposes than Navigation*, ST/LEG/SER.B/12 (1963), pp, 143-149,

4. See Section IV below.

meters and surrounded by relatively low-lying land averaging 1100 meters around its shores.<sup>5</sup> The total area of the Lake is approximately 68,800 square kilometers of which the Kenyan share is about 10 per cent, Uganda 40 per cent and Tanzania's, 50 per cent. The surface water contributed by rivers is entirely from the Kenyan and Tanzanian areas on the eastern and southern sides, respectively. The most significant rivers, in terms of size, are Kuja (Kibuon), Miriu (Sonde), Nyando, Yala, Nzoia and Sio in Kenya; and Mara (which crosses into Kenya), and Kagera in Tanzania. Of these, the Kagera River is significant in that it drains also the territories of Rwanda and Burundi, a fact that has made it a subject of a special international basin commission comprising the three governments,<sup>6</sup> and also because it extends the limits of the Nile Basin further to the South-West.

The only important river linked to the Lake in Uganda is the Nile which is the only drainage outlet from Lake Victoria. It is at this outlet that the Uganda industrial town of Jinja is located. The exit discharge passes through the Owen Falls Dam which was commissioned in 1954<sup>7</sup> to provide the Century Storage as an insurance against scarcity for Egypt, and also to produce hydro-electric power for Uganda.

Accordingly, one group of experts maintains that the construction and commission of the dam constitute the most reliable estimates of the exit discharge from Lake Victoria. The releases from the dam are in two parts, namely, (i) releases through the turbines which generate electricity, and (ii) releases through the sluices. These discharges from power generation and the balance of flow released through the sluices constitute the total discharge downstream conforming to the "natural regime of the river at Jinja"<sup>8</sup>.

This is the way the system is supposed to work and the "natural regime" here means the same rate at which water flowed out of Lake Victoria before the Dam was constructed. We shall return to this issue later.

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5. Ongweny, G.S., "Water Resources of the Lake Victoria Drainage Basin in Kenya" in Okidi (Ed), *Natural Resources and the Development of Lake Victoria Basin of Kenya* (University of Nairobi, IDS/OP No. 34 1980).
  6. The treaty between Tanzania, Burundi and Rwanda which was signed in 1977 will be discussed later. See report in *The Standard* (Nairobi), Nov. 1977, p. 4 and *The Standard* (Nairobi), 17 Oct. 1978, p.8.
  7. The agreement for the construction of Owen Falls Dam was reached through exchange of notes between Britain, the colonial administrators of Uganda, and Egypt. The construction started in May 1949 when the agreement was reached.
  8. Report of the *Hydrometeorological Survey of the Catchments of Lakes Victoria, Kyoga and Albert* (Burundi, Egypt, Kenya, Rwanda, Sudan, United Republic of Tanzania and Uganda), Vol. 1, *Meteorology and Hydrology of the Basin* (Geneva: United Nations Development Programme and World Meteorological Organization. 1974 RAF. 66-025 Technical Report No. 1), p. 578.

Agreement to constitute the Survey was signed on May 31, 1967 between the above-mentioned states and the UNDP and WMO, the latter being the executing agency. See this background in United Nations, *Management of International Water Resources: Institutional and Legal Aspects*, ST/ESA/5 (New York, 1975), p. 142.

The stretch of the Nile from Jinja to Lake Kyoga is called the Victoria Nile. Between Lake Kyoga and Lake Albert now called Mobutu Sese Seko, it is called the Kyoga Nile. The river leaves Kyoga as a sluggish broad stream until it is interrupted by rapids at Kamdini, after which it flows over a series of small rapids to the Murchison Falls which is the largest waterfall in the White Nile system<sup>9</sup>. Then the river reverts to the broad and sluggish flow until it enters Lake Mobutu Sese Seko in a swampy delta. It exits from this lake on the northern toe, flowing northwards in what has been referred to as the Albert Nile, which is the only outlet to that lake. It is at Lake Albert (Mobutu) that Zaire, as a basin state of the Nile, becomes prominent because River Semiliki flowing from that territory enters the lake at its Southern toe.

Between this point and Malakal in Sudan the river is known as the Bar el Jebel part of the White Nile. The slope down the stream is gentle making for a broad sluggish and swampy river. This is the area of the well known Sudds of Southern Sudan where a lot of water is said to be lost in evaporation and soakage. Several tributaries of the Nile also join the mainstream around this area, including the Sobat from the Ethiopian highlands, and this reinforces the Sudd. According to Albert Garretson, of the twenty-four milliards of water that flow downstream from Lake Albert (Mobutu Sese Seko) and the East African highlands, twelve million are lost by evaporation and soakage in the Sudd area of Southern Sudan.<sup>10</sup> The suggestion is that this area is a massive swamp the main concentration of which is between Jonglei in the south and Malakal in the north. It is the "loss" of water by evaporation and soakage that has justified construction of the Jonglei Canal considered in the last section of this paper.

Beyond Malakal the White Nile flows directly northwards upto Khartoum where it is joined by the Blue Nile. The latter drains the Lake Tsana which sits on the Ethiopian highlands. Then about one hundred and eight miles to the north, it is again joined by the Atbara from the Eritrean highlands. It then makes one gentle loop southwards then northwards, crossing the border at Wadi Halfa into Egypt where it is ushered gently to its delta on the Mediterranean. There, the Nile completes its course estimated at about 4,180 miles from the Jinja exit.

For purposes of international legal and policy perspectives of the Nile basin there are further geographical-cum-hydrological facts that should be assembled or underscored. These include especially the volume of water each of the riparians contribute to the Nile which might be taken into account in the consideration of how much water a riparian might properly abstract or divert for its national use. In terms of proportions, Gamal Moursi Bard of Egypt estimates that of the total annual Nile discharge 84 per cent is contributed by Ethiopia and only 16 per cent comes "from the Lake Plateau of Central

9. *Meteorology and Hydrology of the Basin*, n.8, p. 524.

10. Garretson, "The Nile Basin" in Garretson, Hayton and Olmstead, *The Law of International Drainage Basins* (Dobbs Ferry, N.Y. Oceana Publications, 1967), pp.256,258.

Africa".<sup>11</sup> That is to say, 16 per cent would be the total contribution to the Nile anywhere south of Sobat by Uganda, Zaire, Kenya, Tanzania, Burundi and Rwanda, together. Garretson, on the other hand, offers the estimate that at the peak of its flood (April-Sept.), the Blue Nile alone supplies 90 per cent of the water passing through Khartoum, but that in the low season (January-March) it provides only 20 per cent.<sup>12</sup> Generally, one might submit that these figures are both too broad and vague. However, in terms of proportions they are illustrative. At this point we could probably content ourselves with the estimate that the "Lake Plateau of Central Africa" contributes between 15 and 25 per cent of water flowing north of Khartoum while 75 to 85 per cent is contributed by Ethiopia.

To Egypt as lower riparian, which depends on the Nile waters for its survival, the contribution from Lake Victoria must be minute, relative to what comes from Ethiopia, on an annual basis. However, the Lake Plateau water is of a major advantage in that it is reliably steady throughout the year because of the nature of the storage and the control of the Owen Falls Dam.

One commentator has pointed out that it was because of the imbalance in the annual flooding, due to the Ethiopian contribution, that Egypt decided to construct the High Dam or Sudd el Aali at Aswan to regulate the supply and to provide regular storage for Egypt rather than depending on the remote reservoirs of Lake Tsana and the Central African lakes<sup>13</sup>. The same commentator further points out that Sudan had preferred regulation of the flow of Nile waters by a series of smaller dams rather than following the Aswan model which would, in any case, only assure steady supply to Egypt (and not Sudan) and also where the reservoir extending into Sudan would have flooded the town of Wadi Halfa. But one has to keep in mind that beside the flow control, the dam was also to be used for hydro-electric power generation to the tune of ten million KWH. Finally, the Egyptian interests prevailed, and the dam was constructed and completed between 1961 and 1964.

All environmental effects of the dam aside, how the regulation of flow by the Sudd el Aali has helped Egypt meet the irrigation needs it desired is a fact that should be ascertained because it may have a bearing on Egypt's dependence on the waters of Central African Lakes at present. Of course, it should be pointed out, too, that the volume flowing out of Ethiopia also depended on whether or not Ethiopia might also decide to use some of the water on its territory. Dante Camponera, an FAO consultant in Ethiopia during that period, wrote that "Ethiopia intends to reserve for her own future hydraulic development plans a share of the Nile waters located in her territory."<sup>14</sup>

11. Bard, G.M., "The Nile Waters Question: Background and Recent Development", *Revue Egyptienne de Droit International* No. 15-1959, p.2. This nearly agrees with the figure given by Ethiopia as 85%. See *The Ethiopian Herald* (Addis Ababa), 21st May 1978 or Camponera, n. 1.

12. Garretson, n. 10, p. 259.

13. Batstone, R.K., "The Utilization of the Nile Water", *International and Comparative Law Quarterly*, Vol. 8, 1959, pp. 523-525.

14. See note 1, at p. 4.

The Sudan contributes no water to the Nile. But apart from what it consumes for irrigation there is the volume "lost" in the Sudd zone. It might be asserted safely, too, that Uganda and Zaire also make fairly minute contributions, but a share which, nonetheless, should be expressed as a percentage of the total contribution from the Lake Plateau of Central Africa. The rough estimate given above was that the Lake Plateau's contribution is between 15 and 25 per cent of the water flowing at Khartoum. That proportion we understand to include the contribution of Zaire, Rwanda, Burundi, Uganda, Kenya and Tanzania.

A conclusion was reached here earlier that, apart from precipitation, only the southern and eastern parts of the Lake Victoria basin contribute its water. The Lake's contribution to the Nile is also easy to determine since it is the total discharge through the turbines and sluices at Owen Falls. Therefore, for purposes of policy in Kenya and Tanzania the whole hydrological information should specify the exact proportion of the annual out-flow at Owen Falls which is contributed by Kenya and Tanzania, separately.

Let us emphasize here that we prefer that this line of analysis should use the proportions or percentage of the volume of water contributed, rather than the absolute quantity or volume. The reason is that when an upper riparian decides to abstract or divert the water of an international basin flowing through its territory, any fear of deprivation or injury expressed by a lower riparian is clear when expressed in terms of proportions. This expresses the degree of the injury that may be alleged.

Thus, if for purposes of argument, Kenya's contribution to the outflow at Owen Falls is only 16 per cent, then if Kenya decides to divert five per cent of that contribution and use it for irrigation the degree of injury or deprivation which Kenya would threaten on the lower riparians would be less than one per cent of the outflow at Owen Falls. This links with what we shall discuss later. The law, it will be seen, relating to uses of such waters takes into account the degree of injury or what is equitable—both of which are questions of relative proportions.

The final question that we should dispose of in this section is whether the Lake Victoria and River Nile system constitute one basin or not. A drainage basin has been defined as "The entire area, known as the watershed, that contributes water, both surface and underground, to the principal river, stream or lake or other common terminus."<sup>15</sup> Sometimes, instead of the term "watershed" the word "Catchment" is preferred. But this does not alter the substantive meaning of the term, basin.

In the Lake Victoria and Nile systems the situation presented is rather complex. While the River Nile and its tributaries flow directly into the Mediterranean Sea, Lake Victoria drains directly with the Nile thus also contributing water toward that one terminus. Therefore, this writer would prefer a simple

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15. International Law Association, *Uses of Water of International Rivers*, Report of the Fifty-Second Conference, Helsinki, 1966, p. 485. (Referred to as The Helsinki Rules).

reference to Lake Victoria as a part of the Nile basin and as constituting one system which may have only sub-parts. The effects of regulation of the flow through Owen Falls, make for some semi-autonomy for Lake Victoria sub-basin which could be managed as a sub-part. But it can be argued that this is the same as saying that, hydrologically, a basin may be dammed where it is most convenient. This point, in turn, might make for some logic as to why the countries around Lake Victoria, especially Kenya and Tanzania, might have a unique cluster of interests in the Lake, which could be poised against those of the lower riparians, especially Sudan and Egypt, in any attempt to work out an up-to-date legal regime for the Victoria and Nile waters.

### III: BACKGROUND TO APPLICABLE LAW

#### A. Introduction

International law regarding utilization of natural resources shared by two or more states is a controversial subject area partly because of the value of national resources in national policy and partly because states often invoke legal rules and principles favourably only if such rules are supportive of their natural policy or diplomatic interests. The danger in this bias is that it would make the state invoking the doctrine blind to the possible injuries that the other states might suffer or possible compromise solutions where the situation is not one of zero-sum game. It is because of this kind of bias, too, that some states might argue that the law with regard to internationally shared resources is either uncertain or non-existent<sup>16</sup>. Such controversies often force legal analysis to go into great details to expound and appraise state practice over long periods of time; provisions of existing treaties; judicial opinions expressed by courts and tribunals; opinions and studies issued by international organizations; and views of scholarly commentators.

In this study we shall not undertake such a systematic analysis of the sources of law or evidence of law as regards utilization of international rivers. Rather, we shall only highlight the applicable principles as well as point out those principles that have commanded acceptance by states whenever states decide to establish systems for rational use of the resources shared by two or more of them.

#### B. Competing Interests

A drainage basin is international if it straddles two or more state territories or if it forms part of the boundary of states. It is, therefore, a special kind of natural resource shared by two or more states; its "resource" character is given to it by the water which flows in the basin and in which the respective states share an interest for purpose of conservation, domestic industrial and agricultural use, access and the prevention of disasters such as flooding. All these

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16. See reference in UNEP/GC.6/19 of June, 15, 1978, p. 99.

questions may arise on the use of a river because it traverses two or more states or because it flows along the territorial boundary of the states so that the jurisdiction of the states is along the thalweg<sup>17</sup>.

The problems of law may relate to the interest of lower or upper riparians of the basin and may involve change in either the quality or quantity of the water which may arise from the activities or uses to which the upper or lower basin state puts the water while the drainage passes through its territory. These problems may be sketched as follows :

(a) Complaints by upper riparians seldom occur but one instance would be where a lower riparian dams a river causing back-water effect and possible flooding on the territory of the upper riparian. This is illustrated by the effect of the High Aswan Dam on Wadi Halfa in Sudan discussed earlier. Another example is the question raised on the possible relationship between the Owen Falls Dam and the rising level of Lake Victoria discussed later in this paper.

(b) Complaints by a lower riparian, against an upper riparian are more frequent. One set may regard qualitative changes in the water which amount to pollution detrimental to the interests of that riparian. A classic illustration of this kind of problem occurred in 1969 when an estimated two hundred pounds of pesticide endosulfan discharged upstream the River in West Germany killed about one hundred tons of fish downstream and also polluted the water for the Netherlands downstream. Well before that period, the relationship between Mexico and United States was seriously strained because of the increasing salinity of River Colorado waters, arising from activities in the United States. With increasing industrialization such instances will begin to appear in the developing countries of Africa.

(c) A lower riparian may also complain that an upper riparian abstracts or diverts and uses such large quantities of the river water that the former is deprived of the quantity of water it needs for its own use. As evidenced in the *Lac Lanoux* arbitration,<sup>18</sup> diversion of the water which is later restored to its course before the river reaches a lower riparian does not constitute a proper basis of complaint.

Irrigation by an upper riparian is likely to lead to complaints under this category. The presumption is not that an upper riparian may not use the water if the lower riparian also needs some or vice versa, but how much of the available quantity of water either party should use given the fact that the amount of water available is finite. Because the "quantitative" question relates

17. Where the boundary river changes its course a unique problem related to territorial boundary, rather than use of the water, may arise. See the Mexico and United States dispute over the changing boundary because of the "restless" Colorado and Rio Grande Rivers in Friedmann, Lissitzyn and Pugh, *International Law Cases and Materials* (St. Paul, Minn: West Publishing Co. 1969), pp. 268-270. Mueller, J.E., *Restless River: International Law and The Behavior of the Rio Grande* (El Paso: Texas Western Press 1975).

18. See Lauterpacht, *International Law Reports*, Vol. 24 (1961), pp. 101-142 and *American Journal of International Law*, Vol. 53 (1959), pp. 156-171.



to consumption of a natural resource by the state on whose territory it is available at a given point of time the development of law has been influenced by the positions nation states have taken depending on their interests at that point of time.

### C. Contending Theories of Rights to River Waters

There are four theoretical positions of legal rights which some states have adopted in their claims over rights to waters of international drainage basins. Detailed exposure of the theories, with historical developments have been dealt with elsewhere<sup>19</sup>. Therefore, in the present section a synoptic expose will suffice the purpose of providing context for discussion of the Nile waters.

(a) **Territorial Integrity** : This is the concept applied to a theoretical position analogous to the old common law doctrine of private water rights whereby a lower riparian claimed the right to demand continued natural flow of river waters but where that state, for its part, did not accept to permit the continuation of the natural flow of the river passing through its territory. This would apply to both quantitative as well as qualitative considerations. This theory, in its practical effect, leads to claims of rights without corresponding responsibility. In fact, occasions on which it has been involved are extremely rare<sup>20</sup>.

Generally, the instances where the theory has been asserted have reflected the political conditions of their situation. In large measure, the lower riparians are aware that they can not enforce their claims as asserted by means other than cooperation of the upper riparians or military invasion and occupation of the strategic territory of the upper riparians. In modern international relations the theory is not workable in absolute defiance of the upper riparian.

#### (b) **Absolute Territorial Sovereignty** :

Underlying this concept is a simple theory that a state is free to use and dispose of the natural resources within its territory according to its needs and wishes and under no restraint whatsoever from external sources. It asserts that a riparian state is free to dispose of the waters of an international drainage basin flowing through its territory. Therefore, the state claiming the right, has a conflict *vis a vis* the lower, and not upper, riparian.

The notion of absolute sovereignty over natural resources on the territory

19. See especially, Lipper, *Equitable Utilization in Garretson et al*, note 10 at pp. 18-40 on which the discussion of this sub-section largely depends. See also Berber, F.J., *Rivers in International Law* (London, Steven and Sons, 1959), and the *Helsinki Rules*, note 15.

20. Lipper, n. 19. One version asserted by Egypt was to a Commission looking into water relations between Egypt and Sudan as regards the Nile. The Commission Report is annexed to the letter of 7th May 1929 from Egyptian Government to the British Government, forming part of the 1929 Egypt-U.K. Agreement on Uses of the Nile Waters. The clauses referred to are in paragraphs 37 and 38. Text in League of Nations, *Treaty Series*, Vol. 92, p. 44 or ST/LEG/SER. B/12 at pp. 100, 104. Pakistan also asserted a version of the theory in disputes with India. See Baxter, R.R., "The Indus Basin" in *Garretson et.al.* n. 10, pp. 443-453.

of a state is recognized within the United Nations diplomatic lexicon under the title of "permanent sovereignty over natural resources" by which states mean complete freedom of action in determining the use of those resources for national development.<sup>21</sup> But the rule, which is designed to give greater latitude to the capital-importing countries as they choose options for their development, is understood to refer only to resources exclusively situated within the given country. That is to say, application of the rule does not affect a state other than that which actually has economic operations on the territory of the state invoking the rule. A drainage basin traversing two or more states would present a very different set of facts and circumstances and application of the rule would have implications different from those indicated above.

The theory of absolute territorial sovereignty, even though very powerful for nationalistic sentiments has been rarely invoked, and from the very beginning, it was invoked in instances that reflect the political sentiments of the moment. In the few instances where the theory has been invoked it has quickly given way to cooperation generally, and within treaty framework in particular.<sup>22</sup> These instances are numerous enough to conclude that the states that once adopted the theory of absolute territorial sovereignty have abandoned the position and have agreed to sign agreements allowing for a framework for sharing the basin water within a legally binding framework. We conclude with Guillermo Cano that this concept is no longer valid in any field as it is subject to regulation and to *jus cogens*.<sup>22</sup>

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21. The debate on this subject which implies also freedom to nationalize foreign interests in national public interest has been long and fierce but does not concern us here. For an early development on that, see Hyde, J.N. "Permanent Sovereignty Over Natural Wealth & Resources," *American Journal of International Law*, Vol. 50 (1956), pp. 854-67. For a survey on the concept, see Report of the U.N. Secretary General, *The Exercise of Permanent Sovereignty Over Natural Resources and the Use of Foreign Capital and Technology for Their Exploitation*, U.N. Doc.A/8058 of 14 Sept. 1970. On permanent sovereignty and nationalization, see Adede, A.O., "International Law and Property of Aliens: The Old Order Changeth", *Malaya Law Review*, Vol. 19, pp. 175-193 (1977).
22. For the Harmon Doctrine, see *Opinions of the Attorneys-General*, Vol. 21, pp. 274, 283 (1895), (Washington, DC: U.S. Government Printers). But the position soon gave way to the practice of cooperation, rejecting the absolutist position. See Austin, "Canadian-United States Practice and Theory Respecting the Law of International Rivers: "A Study of the History and Influence of the Harmon Doctrine", *Canadian Bar Review*, Vol. 37, pp. 393-443 (1959). For instances of cooperation between the United States and Mexico where the absolute territorial sovereignty was first declared, see resolution to the Rio Grande question in Mueller, *supra*, note 17; the solution of the question of salinity of Colorado River in Brownell and Eaton., "The Colorado River Salinity Problem with Mexico", in *American Journal of International Law*, Vol. 69 (1975) pp. 255-271 which discusses the 1973 treaty on "Permanent and Definitive Solution to the International Problem of Salinity of the Colorado River," in *International Legal Materials*, Vol. 12 (1973), p. 1105. On the U.S.-Canada cooperation, see Bilder, "Controlling Great-Lakes Pollution: A Study in U.S.-Canada Environmental Cooperation", in Hargrove, *Law Institutions and the Global Environment*, Dobbs Ferry, N.Y.: Oceana Publications, (1972), pp. 294-341, and Johnson, "The Columbia Basin" in Garretson et al, pp. 167-255.

(c) **Community of Coriparian States :**

This theory suggests that the basin should be regarded as an economic and geographic unit irrespective of state boundaries, and that the water vested in the community at large to be divided among the coriparian states by agreement. The theory considers that as a hydrological unit the river ought to be managed as an integrated system because very often the ideal locations for construction of dam for storage, hydroelectric power, or flood control may not be within the state in need of such structures. Thus the agreement may, in some instances, provide for the construction of structure by a lower riparian in the territory of an upper riparian. And, depending on the end product of the structure so constructed, the agreement may include sharing of costs and benefits among the states involved. In some instances, the financing of the projects may involve external donors as was the case in the Indus Waters Treaty<sup>22</sup> backed by the Indus Development Fund, which resolved a long-standing water dispute.

We may also classify under the same category the 1964 Columbia River Treaty between Canada and the United States<sup>23</sup> and the 1929 Nile waters Agreement between Egypt and Sudan (as between the two parties) which we shall discuss later. Generally, however, serious instances of "community of coriparian" are still a rarity because of the nature of the international system. States prefer to manage water within their own territories provided that they can agree with other basin states on the share of water each state should be entitled to under given circumstances.

(d) **Limited Territorial Sovereignty :**

This theory is akin to, but does not extend as far as that of "community of coriparians." It was akin to the "community of coriparians" notion in that it gives each coriparian a right to "reasonable" use of the waters of a river flowing through the states territory. In essence, the theory is opposed to that of absolute territorial sovereignty which rejects any consideration of the interests of other states. This theory posits that even though the coriparians may neither have joint management nor share in the costs or benefits, they are under obligation to permit equitable and reasonable access to each co-riparian. Like the "community of riparians" theory, it permits international cooperation and suggests that vagaries of geography, such as the Egyptian situation of being both

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Also, in the relationship between India and Pakistan for the resolution of the problem through the Indus Water Treaty, see 419 *UNTS* 125 (1962); for the Development Fund Agreement see 444 *UNTS* 259 (1962). The Ganges question between India and Bangladesh was also resolved by the agreement reprinted in *International Legal Materials*, Vol. 17, (1978), p. 103. Cano, G.J., *A Legal and Institutional Framework for Natural Resources Management*: (Rome; FAO, 1975), p. 27.

23. See Johnson, note 22 and Lipper, note 19.

the lowest riparian as well as in the hot desert, necessarily so militate as to result in the extinction of that state. By the same token, it would be untenable if a lower riparian demanded an absolute right to all the water of a river and to exclude the right of an upper riparian to a share of the water.

#### D. A Consolidated Legal Framework

The first two of the theoretical positions discussed above have been rejected both analytically and in state practice. The last two, and more particularly the last one, have been favoured for cooperation in the utilization of international basin waters. Underlying those theoretical positions are two principles in international law which can be said to consolidate the legal framework to guide the conduct of states. The two principles are outlined hereunder, briefly :

(a) The first is the principle that a state should use the resources located in its territory in such a manner as to ensure that its activities do not cause injuries beyond the limits of its national jurisdiction. This is an articulation of the age-old Latin maxim : *sic utere tuo ut alienum non laedas*, which has been acknowledged as a rule of general international law to facilitate good neighbourliness and to prevent abuse of rights.

Perhaps the most widely quoted pronouncement of this rule is in the opinion of the Tribunal in the *Trail Smelter* Arbitration between Canada and the United States where even though the compromise was clear that Canada had accepted liability for the damage caused by sulfur fumes within the United States, the Tribunal saw it fit to state that "Under international law.....no state had the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties of persons therein..."<sup>24</sup>

It has also found acceptance in more than twenty-four different conventions and declarations of governments and international legal institutions within this century.<sup>25</sup> Of the international declarations one that has become very popular was adopted as Principle 21 of the Stockholm Conference on Human Environment which states that :

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not

24. United Nations, *Report of International Arbitral Awards*, Vol. 3, pp. 1965-1966 (Hereinafter UNRIAA),

25. See Capponera, D.A., *The Law of International Water Resources: Some General Conventions, Declarations and Resolutions adopted by Governments, International Legal Institutions and International Organizations on Management of International Water Resources* (Rome: F.A.O. 1978).

cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.<sup>26</sup>

This principle has been cited and referred to in several international instruments including Article 30 of the Charter of Economic Rights and Duties of States adopted by the General Assembly in December 1973<sup>27</sup>. More recently, an identical wording was adopted as Principle 3 of the principles drafted by the Intergovernmental Working Group of Experts on Natural Resources Shared by Two or more States and later forwarded by the U. N. General Assembly to its member states for comment.<sup>28</sup> With specific reference to international rivers the principle was adopted by the well-known Helsinki Rules of 1966 where Article X stated that—

- (1) Consistent with the principle of equitable utilization of waters of an international drainage basin, a State:
  - (a) must prevent any form of water pollution or any increase in the degree of existing water pollution in an international drainage basin which would cause substantial injury in the territory of a co-basin State, and
  - (b) should take all reasonable measures to abate existing water pollution in an international drainage basin to such an extent that no substantial damage is caused in the territory of a co-basin State.<sup>29</sup>

It seems clear that these rules of state responsibility are widely accepted and continue to be reflected in international agreements.<sup>30</sup>

(b) *Equitable Utilisation*: The second principle in the theoretical package already discussed requires that basin states allow one another reasonable and equitable sharing of the waters of the basin. The Principle relates not only to the qualitative aspects of the water resources as in the *sic utere tuo* rule discussed above, but it largely covers the wider question of sharing of the quantity of water for consumptive uses such as irrigation.

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26. Report of the Conference is in Doc. A/CONF. 48/14 of July 3 1972. See also Recommendations 51-55, 59 in that Volume for discussions on use of water resources.

27. U.N.G.A. Res. 3281 (XXIX) adopted on 12 December 1974 by rollcall vote of 120 in favour to 6 against with 10 abstentions.

28. See the Draft Principles adopted by Sixth Session of UNEP Governing Council in UNEP/1.G. 12/2 of Feb. 8, 1978 and the Council's decision in UNEP/GC. 6/19 of June 15, 1978, pp. 99-101. For the UNGA decision, see UNEP/GC. 7/7 of Feb. 14 1979, p. 139.

29. For a Survey in The Helsinki Rules, see pp. 496-7.

30. See Propositions VIII by Asian and African Countries, see note 33, pp. 229-230.

The concepts of "equitable and reasonable" utilization raise intractable problems for law since they do not lend themselves to formulation of precise rules. The cornerstone in the consideration of application of the concept is the idea of "conflicting needs" of the basin states which compete for the limited quantity of water available. And this is the point that has been emphasized in the several inter-governmental and non-governmental international legal bodies which have made recommendations and draft principles to guide states on this issue. Again, as was noted in the discussion of the *sic utere tuo* principle, all these studies and recommendations have included the principle of reasonable and equitable utilization.

Of these recommendations, the work of the International Law Association and its draft articles adopted at Helsinki in 1966 (referred to as the Helsinki Rules) has commanded broad agreement among scholars, governments and international organizations.<sup>31</sup> After stipulating in its Article IV that "each basin State is entitled, within its territory, to reasonable and equitable share in the beneficial uses of the waters of an international drainage basin", the Helsinki Rules proceed in the following article, to enumerate a list of factors that ought to be considered in order to satisfy conflicting needs in the waters of a drainage basin.<sup>32</sup> At its ninth session in 1967,<sup>33</sup> the Asian-African Legal Consultative Committee (AALCC) accepted the rules as a basis for discussion. After about six years of study the AALCC adopted factors that were substantially the same as those of Article 5 in the Helsinki Rules. These were reflected in the Committee's Proposition III which is quoted here *in extenso* :<sup>34</sup>

1. Each basin state is entitled, within its territory, to a reasonable and equitable share in the beneficial uses of the waters of an international drainage basin.
2. What is a reasonable and equitable share is to be determined by the interested basin states by considering the relevant factors in each particular case.
3. Relevant factors which are to be considered include, in particular :

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31. See Canjonera, note 25, Bilder, "The Settlement of Disputes in the Field of the International Law of the Environment", Hague Academy of International Law, *Recueil des Cours*, Vol. 1-1975, pp. 141-183; International Law Commission, *Legal Problems Relating to the Non-Navigational Uses of International Water Courses* (Twenty-Sixth Session), Y.B.I.L.C. 1974, Vol. II, Part II, p. 265.

32. See note 15, at p. 486.

33. Asian-African Legal Consultative Committee, *Report of the Ninth Session* in New Delhi, 1967, Chapter V, pp. 51-59. However, there was one reservation expressed by the Pakistani delegate who said that the Rules were drawn up by European lawyers who were unaware of Afro-Asian problems, *ibid.*, pp. 55-56. But it ought to be pointed out that out of the 36 members of the Drafting Committee of ILA 9 were from Afro-Asian countries. Out of the 9 there were 3 Pakistanis, 3 Indians, 2 from Sudan and 1 from UAR. See note 15, at pp. 532-3. No reservations were expressed in discussions which followed the Article.

34. AALCC, *Report of the Fourteenth Session*, New Delhi, 1973, p. 100.

- (a) the economic and social needs of each state, and the comparative costs of alternative means of satisfying such needs.
- (b) the degree to which the needs of a basin state may be satisfied without causing substantial injury to a co-basin state.
- (c) the past and existing utilization of the waters.
- (d) the population dependent on the waters of the basin in each basin state.
- (e) the availability of other water resources.
- (f) the avoidance of unnecessary waste in the utilization of waters of the basin.
- (g) the practicability of compensation to one or more of the co-basin states as a means of adjusting conflicts among uses.
- (h) the geography of the basin.
- (i) the hydrology of the basin.
- (j) the climate affecting the basin.

These are all subject areas in which law claims no competence. Indeed, it would seem that all that the lawyers did in drafting the articles was to recommend a comprehensive outline for negotiation which would involve non-lawyers too. The suggestion is, therefore, that law is incapable of prescribing precise rules directing how the water should be divided but that by accepting these rules as binding on them the states accept an obligation to consult the other basin states and to inform them of the intention to use or consume a share of the basin water. Then every basin should be treated according to its unique circumstances.

It is that last sentence that carries the cornerstone of regulation and management of internationally shared drainage basins: the obligation to inform and consult with other basin states on intended projects on utilization of the basin. None of the factors listed above is given any weight above others but the set is to be considered as a package.

The question of what rules of international law are actually accepted as binding on states generally is often a troublesome one. However, stipulations of Article 38 of the Statute of the International Court of Justice offers some guidance by showing the sources of law the Court will apply.<sup>35</sup> Our analysis

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35. Article 38 states:

- (1) The Court whose function is to decide in accordance with International Law such disputes as are submitted to it shall apply:
  - (a) International conventions, whether general or particular, establishing rules expressly recognized by the contesting states;
  - (b) International custom, as evidence of general practice accepted as law;
  - (c) The general principles of law recognized by civilized nations;
  - (d) Subject to the provisions of Article 59, judicial decisions and the teachings of the most highly qualified publicists of the various nations, as subsidiary means for the determination of rules of law.
- (2) This provision shall not prejudice the power of the Court to decide a case *ex aequo et bono*, if the parties agree thereto.

of this point shows that the above rules of law are widely accepted in state practice and in international legal institutions. State practice is also reflected in international agreements. An author reports :

There are now some 300 international agreements dealing with particular rivers, lakes or drainage basins,..... [S]cholars.....have collated these provisions and suggested certain broad features. Almost all of these agreements reflected acceptance in some form of the principle of equitable utilization. Over 60 of them refer to water pollution .....<sup>36</sup>

The main weakness in the foregoing legal system is that in the absence of a treaty framework the various interests and legal positions are heard only after a dispute has arisen. Unfortunately, once a water dispute has arisen it is notoriously difficult to consult one another. This then is the reason for the clear necessity for a treaty framework which provides for a system of exchange of information, research and consultation which have dispute-avoidance function, provided that the treaty includes an obligation to inform and consult one another, as well as procedures for settlement of disputes.<sup>37</sup> A treaty for a specific drainage basin and including all coriparians would also stipulate criteria for resolving problems that are unique to that basin according to the factors relevant to equitable and reasonable utilization.

The postulates and rules outlined in this section will be taken into account as we review the agreements that have been concluded on the River Nile and Lake Victoria system.

#### IV : AGREEMENTS ON THE NILE AND LAKE VICTORIA WATERS

##### (a) Introduction :

This section will outline the treaties that have been concluded on the use of Lake Victoria and Nile waters, but we shall limit ourselves to agreements dealing with consumptive use only, leaving out those on navigational uses as well as agreements using the basin or river courses purely for demarcation of boundaries and spheres of influence.<sup>38</sup> In discussing each of the treaties

36. Bilder, note 31, at p. 168.

37. For further discussion of the basis for obligation to inform and consult, see Utton, A.E., International Environmental Law and Consultation Mechanism, *Columbia Journal of Transnational Law*, Vol. 12, pp. 56-72 (1973).

38. According to what this author could ascertain, the first ever 'agreement' on the Nile dealt with navigational use of the river. It was expressed, in form of a unilateral declaration (Notification) issued by the Viceroy of Egypt, under the Ottoman Empire, on October 13, 1841, granting to foreigners the privilege of building ships for navigation on the Nile. For brief information on all the agreements, see *Systematic Index of International Water Resources Treaties, Declarations, Acts and Cases by Basins* (Rome: Food and Agricultural Organization of the U.N. Legislative Study No. 15, 1978), especially pp. 45, 129, 135, 137, 146-7, 157-161.



comments and questions will be raised as to their present legal status.

Certainly, one of the foremost considerations of the treaties on the Nile waters is that Egypt, as a desert state, has always depended on the Nile waters for its survival. But it is also clear that Egypt, as the lowest riparian of the Nile, depends on the cooperation of the upper riparians for an assured supply of water throughout the year. Ideally, this set of facts should have been reflected in each of the agreements. Egypt logically therefore would be expected to be a party to each of the treaties, especially those dealing with consumptive use of the waters, and all the upper basin states should be involved at different stages in history. However, the pattern does not readily reflect that.

There are about ten agreements dealing with consumptive use of the waters of the Nile and Lake Victoria. An interesting feature is that those agreements done before the World War I show a dominance of Britain rather than Egypt as contracting state. The United Kingdom, then the administering colonial power over Sudan, signed an agreement with Italy (1891); Ethiopia (1902); the Independent State of the Congo (1906); and with Italy and France in 1906. There is a further agreement which Britain signed with Italy in 1925. Beyond those there was some change in participation after the World War I. From then on, Britain and Egypt signed all the agreements on the Nile waters beginning with the 1920 agreement which dealt with the Egyptian rights generally *vis-a-vis* those of the Sudan, to the agreements for the construction and maintenance of the Owen Falls Dam done by exchange of notes between 1949 and 1953.

The year 1953 is significant, historically, in that it saw the change in the government of Egypt, after the revolution by Nasser and therefore, a change in relations with Britain (even though the *de facto* break did not come till the Suez crisis of 1956). Sudan also became independent of Britain in January 1956. It is after that time that we have the fourth and, apparently, final set of agreements signed on the Nile waters to date; Egypt and the Sudan signed an agreement on the utilization of the Nile waters in 1959 and followed it with a protocol establishing a joint technical committee in 1960.

In the rest of this paper the agreements will be discussed in the above order.

#### (i) The Pre-World War I Agreements :

(i) Italy and the United Kingdom signed a Protocol for the demarcation of their respective spheres of influence in Eastern Africa at Rome on April 15, 1891. What interests us in the treaty is a provision in Article III which stipulates, *inter alia*, that the Government of Italy undertakes not to construct on the Atbara any irrigation, or other work which might sensibly modify its flow into the Nile.<sup>39</sup> It can be properly assumed that the agreement, by its very nature,

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39. See text in ST/LEG/SER. B/12 (1963), pp. 127-128.

expired with the end of the Italian and British colonial era in the region.

(ii) At Addis Ababa, on May 15, 1902, Ethiopia and the United Kingdom (for Sudan and Egypt) signed a treaty regarding the frontiers between Anglo-Egyptian Sudan, Ethiopia and Eritrea. Article 3 of the treaty provided as follows :

His Majesty the Emperor Menelek II, King of Ethiopia, engages himself towards the Government of His Britannic Majesty not to construct, or allow to be constructed, any work across the Blue Nile, Lake Tsana, or the Sobat 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.

The views of the present government in Ethiopia towards agreements signed by the imperial government are not clear but one would expect that the binding force of such agreements cannot be taken for granted. It is particularly doubtful that the present government would agree to be bound by the treaty if the Haile Selassie government did not accept them either. Dante Componera once observed that Ethiopia questioned the validity or binding force of the agreements for the following reasons :

1. The agreements .....between Ethiopia and U. K. have never been ratified. Customary rights which might appear from the behaviour between lower riparians and Ethiopia would not be binding on this latter country if a purely positivistic approach toward the interpretation of the sources of international law would be upheld.
2. Ethiopia's "natural rights" in a certain share of the waters in its own territory are undeniable and unquestionable. However, no treaty has ever mentioned them. This fact would be sufficient for invalidating the binding force of these agreements, which have no counterpart in favour of Ethiopia. An international agreement is a contract freely subscribed between two or more sovereign states, between which the maxim *do ut des* (reciprocity) should automatically be a prerequisite for its validity. The existing agreements much resemble that Roman Law called *pactus leoninus*, in which one party reserved for itself rights and prerogatives leaving the other party without counterpart, reciprocal concessions, or compensations. In Roman law such a pact would be null and void; it is likewise in international law. This is explainable by the international political conditions of Ethiopia in 1902.
3. The agreements were signed between Ethiopia and the U.K. (for Egypt and the Sudan). Since the latter countries either question the validity of their own water agreements .....Ethiopia, which had not one single benefit from them, had even greater reason for claiming their unfairness and invalidity. The search for new agreements by Egypt and Sudan demonstrates the non-viability of these agreements.

4. The U. K. in 1935 recognized the annexation of Ethiopian Empire by Italy...U. K.'s recognition of annexation is an act which invalidated all previous agreements between the two governments. Ethiopia has never asked for renewal of the Nile agreements after such recognition.<sup>40</sup>

All the points listed here are important if only because they underscore the fact that Ethiopia did not, in 1950s, recognize the treaty as binding on them. That one might not find some of the arguments persuasive is a different matter. For example, there is nothing in international law which prevents any state from entering into a treaty which benefits only one of the parties. An extension of this point would perhaps include treaties which extend rights to third parties<sup>41</sup>. On the other hand, the argument about the British recognition of Ethiopian annexation might be the most forceful, even though generally, the legal consequences of hostilities or war are not always clear.

It is important that since the 1902 treaty there does not seem to be any agreement between the lower riparians of Sudan and Egypt, with Ethiopia. As noted above, Egypt and the U. K. for Sudan signed other agreements from 1929 but in no instance is Ethiopia a party, even though 85 per cent of the Nile waters reaching Egypt originate from Ethiopia.

(iii) The United Kingdom and the Independent State of the Congo signed an agreement at London on May 9, 1906 to redefine their sphere of influence in Central Africa.<sup>42</sup> But they also include a provision which would protect the interests of Sudan over waters flowing down Albert Nile. Article 3 provides as follows :

The Government of the Independent State of the Congo undertakes not to construct, or allow to be constructed, any work on or near the Semiliki or Isango Rivers, which would diminish the volume of water entering Lake Albert, except in agreement with the Sudanese Government.

Again we can assume that like the first British and Italian treaty of 1891, this one also expired with the end of the British and Belgian colonial era in the region. May be it would only have significance as an indicator of how far back the interests of Sudan and Egypt over the Nile water have been protected. But it is unlikely that Sudan would want to rely on it for its Nile water rights or that Zaire would accept its binding force. Certainly, there is no reason why the two countries cannot conclude a fresh agreement rather than rely on a provision tied to a treaty on the colonial spheres of influence.

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40. Camponera, note 1, at pp. 13-14.

41. See Articles 36 and 37 of the 1969 Vienna Convention on the Law of Treaties. See also discussions referred to in notes 80-82.

42. Relevant articles in ST/LEG/SER. B/12 (1963), p. 99.

(iv) Great Britain, France and Italy signed a set of tripartite Agreement and Declarations in London on December 13, 1906.<sup>43</sup> This agreement and declarations among the three colonial powers came up after Italy had failed to establish control over Ethiopia and the three governments accepted to maintain *status quo* with regard to the future of Ethiopia. This was a confirmation of the terms of their previous agreements, including the Protocol of April 1891 and the Agreements of May 1902 both of which have been discussed above. In the tripartite agreement the three governments, at the instance of Britain, provided in Article 4 as follows :

“In the event of the *status quo* being disturbed, France, Great Britain and Italy shall make every effort to preserve the integrity of Ethiopia. In any case, they shall concert together on the basis of the agreements enumerated (herein) in order to safeguard :

(a) The interests of Great Britain and Egypt in the Nile Basin, more especially as regards the regulation of the waters of that river and its tributaries (due consideration being paid to the local interests...)”.

The same position was to be reiterated in the 1925 agreement between Great Britain and Italy. But the agreement itself had no validity beyond the colonial era where it had a purpose.

(c) An agreement by exchange of Notes between Great Britain and Italy, done in December, 1925<sup>44</sup> at Rome, was actually a follow-up to the tripartite agreement done on December 13, 1906. Again here two imperialist powers were agreeing with one another on how they would use their influences to benefit from Ethiopian highlands as well as in Sudan and Egypt. Britain pressed Italy to support her in her effort to get concessions from Ethiopia to construct a barrage at Lake Tsana to store water for use down the Blue Nile in times of scarcity while Italy tried to marshal the support of Britain in securing control and economic influence including the construction of a railway line from Eritrea to Somalia across Ethiopia.

In this exchange the first letter, dated December 14, 1925, was from Britain which stated, *inter alia* :

“I have therefore the honour, under instructions from His Majesty’s Principal Secretary of State for Foreign Affairs, to request your Excellency’s support and assistance at Addis Ababa with the Abyssinian Government in order to obtain from them a concession for His Majesty’s Government to construct a barrage at Lake Tsana, together with the right to construct and maintain a motor for the passage of stores, personnel, etc. from the frontier of the Sudan to the barrage”.<sup>45</sup>

43. Hertslet, *Map of Africa by Treaty* (London, Frank Cass, 1967), No. 165, p. 442.

44. 50 LNTS 282 (1926).

45. *Ibid.*, p. 284.

The Note added that as a *quid pro quo*

His Majesty's Government in turn are prepared to support the Italian Government in obtaining from the Abyssinian Government a concession to construct and run a railway from the frontier of Eritrea to the frontier of Italian Somaliland.<sup>46</sup>

The full gist of the pre-negotiation agreement is found in the following Note from Britain :

“In the event of His Majesty's Government, with the valued assistance of the Italian Government, obtaining from the Abyssinian Government the desired concession on Lake Tsana, they are also prepared to recognize an exclusive economic influence in the West of Abyssinia and in the whole of the territory to be crossed by the above-mentioned railway. They would further promise to support with the Abyssinian Government all Italian requests for economic concessions in the above zone. But such recognition and undertaking are subject to the proviso that the Italian Government on their side, recognizing the prior hydraulic rights of Egypt and Sudan, will engage not to construct on the headwaters of the Blue or White Niles or tributaries or effluents any work which might sensibly modify their flow into the river. It is understood that the above proviso would not preclude a reasonable use of the water in question by the inhabitants of the region, even to the extent of constructing dams for hydro-electric power or small reservoirs in minor effluents to store water for domestic purposes, as well as for the cultivation of the food crops necessary to their subsistence.”<sup>47</sup>

Italy, in a Note dated December 20, 1925<sup>48</sup>, accepted the foregoing stipulations as an accurate outline of what the two countries had agreed upon as their common position in the anticipated negotiations with Ethiopia. The only other important stipulation not yet reflected above is that in the event that either of the parties, Italy or Britain, succeeded in achieving her goal in the negotiations with Ethiopia, then it would continue to press Ethiopia to grant concessions towards the goal of the other party.

It should be clear from the outline that the 1925 Agreement could not have been intended to be binding on Ethiopia. As stated earlier, this agreement was a classic imperialist design over Ethiopia to allow for colonial control over its territory. Therefore, to simply list it alongside with other instruments on the Nile without pointing out its proper background and substance<sup>49</sup> may

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46. *Ibid.*, p. 285.

47. *Ibid.*

48. *Ibid.*, p. 291.

leave the impression that the agreement might have some legal effect for Ethiopia which will be very misleading.

(d) **Post-World War I Agreements** (U. K. and Egypt)

(i) *The 1929 Nile Waters Agreement* : Background : The first important agreement on the Nile waters in the post-World War I period was concluded in 1929 between Egypt and the United Kingdom (acting for the Sudan and its Eastern African dependencies). That agreement was based on two studies initiated by Egypt and which form an important background to the agreements. Therefore, it is important that those studies be examined before the agreements are discussed.

There had been several hydraulic projects proposed or executed in Egypt and Sudan and they are discussed elsewhere.<sup>50</sup> But for the purpose of this study it is sufficient to take off from 1920 when the Egyptian Minister of Public Works issued a report on the scheme for control and use of the Nile waters. That report, which suggested five dams and reservoirs on the Nile : (at Jebel Awlia; Sennar; Upper Blue Nile; Lake Albert and the Sudd Channel Project; and Nag Hammad), was strongly criticized and finally rejected by the Egyptian government which favoured one dam at Saad el Aali at Aswan.

The Egyptian government decided to appoint a Nile Project Commission that same year, and asked the Commission to "give to the Egyptian Government its opinion on the projects...with a view to further the regulation of the annual supply to the benefit of Egypt and Sudan..." and more especially, to report upon the propriety of the manner in which, as a result of these projects, the increased supply of available water provided by them will be allocated at each stage of development from Egypt and Sudan".<sup>51</sup> These terms of reference are important to the extent that they show that Egypt was concerned about interests of the Sudan but never desired to know the best way of cooperating with either Ethiopia or the central African States within the upper basin including those around Lake Victoria.

In its report the Commission pointed out, *inter alia*, that Egypt's rights were limited to a supply "of water sufficient to irrigate an area equal to the largest area which has been irrigated in any single year since the Aswan Dam in its present form was completed, and that Egypt has an established claim to receive this water at the particular seasons when it is required." They added further that the largest area to which Egypt might thus claim would be 5 milliard feddans which was under cultivation in 1916-17.<sup>52</sup>

49. See discussions by Garretson, "The Nile Basin", n. 10, pp. 278-8 and Camponera, note 1, pp. 10-11.

50. Garretson, n. 10, pp. 264 *et seq.*

51. *Ibid.*, p. 268,

52. Quoted at *Ibid.*

There were three members of the Commission: A nominee of Indian Government (chairman), a nominee from Cambridge University; and a nominee of the USA government. The American nominee, H.T. Cory, submitted a separate report but in substance the details are not important for the present analysis.

This opinion is significant to the extent that it stipulated the amount of water to which, historically, Egypt was entitled to in the Nile waters. That is, later in this study it will be necessary to examine what exactly is meant by the "historic rights" of Egypt. But over the report of the Commission, generally, there was no agreement within the Egyptian government where the matter got embroiled with the political future of Sudan. However, when the British Governor-General of the Sudan was assassinated in Cairo in 1924, the British government in Sudan acted tough and threatened to increase the irrigation uses of water in Sudan.<sup>53</sup>

Following the confrontations, Egypt sought a fresh study for which a new Nile Waters Commission was set up in January 1925. The Commission consisted of a Dutch Engineer as an independent chairman, a British and an Egyptian member. Their recommendation provided the basis of the 1929 Nile Waters Agreement and was, in fact, annexed to the agreement. It is to this agreement we shall now turn.

*The Agreement.* The agreement was done by exchange of notes between Mohamed Mohmoud Pasha, the President of Egyptian Council of Ministers, and Lord Llyod, the British High Commissioner in Cairo, on May 7, 1929 and came into force the same day.<sup>54</sup>

In the first paragraph of the letter from Pasha to Llyod, the Egyptian government pointed out, first, that by conceding and accepting to enter into an agreement with Britain on utilization of Nile waters before political settlement was reached on the future of Sudan, Egypt reserved the right to renegotiate the issue at the time of consideration of the future of the Sudan. This point should be considered in light of the earlier point that Egypt attempted to resist an agreement with Britain on the matter until the political future of Sudan was decided but that after the 1924 assassination of the Governor-General, Britain threatened and forced Egypt to enter into agreement. But in that paragraph Egypt made it clear, as a matter of principle, that the 1929 agreement was to be temporary, and therefore, its terms should also be viewed as conditional on future political developments. This point is restated emphatically in the last paragraph of Pasha's letter where he wrote: "5. The present agreement can in no way be considered as affecting the control of the river, which is reserved for free discussion between the two Governments in the negotiations on the question of the Sudan!". No doubt, the statement is important as it is the only point in the agreement which indicates for what duration the agreement was to remain in force.

Pasha submitted, secondly, that :

2. It is realized that the developments of the Sudan require a quantity of water greater than that which has so far been utilized by the Sudan.

53. See Batstone, n. 13, p. 528.

54. ST/LEG/SER.B/12 (1963), pp. 100-107.

As your Excellency is aware, the Egyptian Government has always been anxious to encourage such development and will therefore continue that policy and be willing to agree with His Majesty's Government upon such an increase of this quantity as does not infringe Egypt's natural and historical rights in the waters of the Nile and its requirements of agricultural extension...

On this paragraph some authors<sup>55</sup> have laid a great deal of emphasis on the reference to Egypt's "natural and historic rights" in the waters of the Nile. In the present analysis our view is that the significance of the paragraph is that Egypt recognized the Sudanese right to develop and to use the Nile waters for that purpose. Certainly, that is a significant departure from the position Egypt had taken before the 1925 Commission, which position had been rejected as a negation of the right of Sudan to exist as a viable state<sup>56</sup>. To the extent that Egypt had accepted the right of Sudan to increase the quantity of water for its development Egypt had also accepted that the rights to use the different quantities of water would depend on the *needs at the moment of negotiation*. For these reasons, it seems that natural and historical rights would simply refer to the fact that in all history Egypt has had to depend on the Nile water for its survival. Indeed, that was a natural situation. The quantity would change with time and that would be consistent with the doctrine of equitable utilization.

That this should be the correct interpretation seems to be supported by the fact that the 1920 Commission, faced with the question of how much Egypt was entitled to, simply suggested that Egypt must claim the quantity necessary to irrigate 5 milliard feddans under cultivation in 1916-17<sup>57</sup>. There was no "natural" figure discernable over history. Supposing that Egypt was to claim that the quantity found to be highest in 1916-17 was the true "natural and historic" rights, then even if its population changed, and therefore the need for water in greater quantity than that used in 1916-17, it would not change its position. Any request to the upper basin states to allow Egypt a greater volume of water would be unjustified. It is partly for this reason that the principle of prior appropriation which one commentator has suggested<sup>58</sup> as an ideal interpretation of natural and historic rights is not really helpful. Prior appropriation would only refer to the precise quantity that had been appropriated and no more. Changing circumstances such as additional need would have to be negotiated separately and according to what is equitable and reasonable at the time. Similarly, if for any reason additional quantities of water were available such as by draining the Sudds in Southern Sudan, then the division of that new quantity would have to be negotiated separately.

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55. Batstone, note 13, at p. 529; Garretson, n. 10, p. 284; and Bard, note 11, at p. 4.

56. See discussions referred to in note 20.

57. Reference of note 52 above.

58. Batstone, n. 13, p. 540



Egypt did not object to the construction of works or irrigation in the Sudan for use of the Nile waters as such. They did, however, insist on prior consultation and, in fact, explicit agreement on what such a construction would entail. Thus, Pasha added in paragraph 4 (b) of his letter to Llyod that :

Save with the previous agreement of the Egyptian Government no irrigation or power works or measures are to be constructed or taken on the River Nile and its branches, or on the lakes from which it flows, so far as these are in the Sudan or in countries under British administration, which would, in such a manner as to entail any prejudice to the interests of Egypt either reduce the quantity of water arriving in Egypt, or modify the date of its arrival, or lower its level.

As between Egypt and Sudan, the situation would therefore seem quite clear, namely, that the two countries would have to agree before Sudan could utilise the water of the Nile to the extent that would change the quantity flowing to Egypt. Sub-paragraph 4 (c) of Pasha's letter stated that Egypt would carry out a complete study of the hydrology of the River Nile in the Sudan and that Sudan would provide all the necessary facilities and access. In this regard, Sudan permitted Egypt to construct and maintain, in Sudanese territory, any structures it may need for study of the hydrology of the river. To this effect, Pasha added :

- (d) In case the Egyptian Government decide to construct in the Sudan any works on the river and its branches, or to take any measures with a view to increasing the water supply for the benefit of Egypt, they will agree before hand with the local authorities on the measures to be taken for safeguarding local interests. The construction, maintenance and administration, of the above-mentioned works shall be under the direct control of the Egyptian Government.

If "local authorities" in the above passage means local government units within Sudan, then the agreement certainly gave Egypt far-reaching and extraordinary rights within the Sudanese territory because the provision would suggest that Egyptian authorities were free to by-pass the central government in Sudan, proceed to construct, maintain and administer the enclaves provided that the local government of the area did not object.

In the event of any dispute arising on the interpretation and application of the agreement the parties would, in good faith, seek a mutually acceptable solution. If that fails, the matter would be referred "to an independent body with a view to arbitration." [para.4 (f)].

The response by Lord Llyod, also dated May 1929<sup>59</sup>, confirmed the accuracy of Pasha's letter, as a reflection of the agreement they had reached. He assured

59. Text of Llyod's letter is reprinted in ST/LEG/SER.B/12 (1963), p. 107.

Egypt that the agreement was directed toward regulation of irrigation agreements of the Nile and had no bearing on the status quo in the Sudan. But with regard to the rights to the waters Llyod repeated the vague phraseology when he wrote that "His Majesty's Government. . . have already acknowledged the natural and historical rights of Egypt to the waters of the Nile". He added,

I am to state that his Majesty's Government in the United Kingdom regard the safeguarding of those rights as a fundamental principle of British policy and to convey to your Excellency the most positive assurance that this principle and the detailed provisions of this agreement will be observed at all times and under any conditions that may arise.

Based on the discussion of the 1929 agreement, the following conclusions may be suggested :

(1) That Egypt had overwhelming rights, as against Sudan, in the utilization of the Nile waters. This is evidenced by the rights given to Egypt, by agreement, to conduct hydrological surveys as well as to construct, maintain and administer installations on Sudanese territory. It is further evidenced by the fact that explicit agreement with Egypt was necessary before Sudan could undertake any consumptive use of the waters.

(2) The quantity of water to which Egypt was entitled was not specified. Natural and historical right seemed only to underscore the Egyptian natural dependence on the Nile waters—a fact which was also historically correct. As to the specific quantities at a given point in time, that would be subject to agreement, considering the needs of Sudan too.

(3) The agreement did not have a specific duration. However, Egypt considered that it was temporary and subject to negotiation with the change in the political future of the Sudan. Sudan became independent in 1956 and in 1956 the two countries signed an agreement for the Full Utilization of Nile Waters, the details of which are discussed later.

The next pertinent question is, then, what is the status of the agreement *vis a vis* the former British dependencies referred to in paragraph 4 (b) of Pasha's letter quoted above? Because there was no occasion, the agreement was never invoked and applied in Kenya or Tanzania to restrain any irrigation or other consumptive uses of the water. In Uganda, one could cite the Owen Falls Dam as the kind of installation envisaged in 1929. But then the Owen Falls agreement did not depend on that agreement for its validity.

With regard to Kenya, Tanzania and Uganda specifically, the following conclusions may be suggested :

The position of Tanzania with respect to the 1929 Agreement is absolutely clear in that Tanzania did not agree to be bound by it. Seaton and Malit have assisted researchers by recording that the newly independent Tanganyika Government took the view that an inherited agreement that purported to bind Tanganyika for all time to secure consent of the Egyptian Government before it undertook irrigation or power works or other similar measures on Lak

Victoria or its catchment area was clearly incompatible with Tanganyika's status as an independent sovereign state. Therefore on July 4, 1962, the Tanganyika Government addressed identical Notes to the Governments of Britain, Egypt and Sudan outlining the policy of Tanganyika on the use of the Waters of the Nile River and copies of the Note were sent to the governments of Kenya and Uganda. The Note which is consistent with the Nyerere Doctrine on state succession to treaties is quoted here in full:

The Government of Tanganyika, conscious of the vital importance of Lake Victoria and its catchment area to the future needs and interests of the people of Tanganyika, has given the most serious consideration to the situation that arises from the emergence of Tanganyika as an independent sovereign State in relation to the provision of the Nile Waters Agreement on the use of the waters of the Nile entered into in 1929 by means of an exchange of Notes between the Governments of Egypt and the United Kingdom.

As the result of such considerations the Government of Tanganyika has come to the conclusion that the provisions of the 1929 Agreement purporting to apply to the countries "under British Administration" are not binding on Tanganyika. At the same time, however, and recognizing the importance of the waters of the Nile that have their source in Lake Victoria to the Government and peoples of all the riparian States, the Government of Tanganyika is willing to enter into discussions with other interested Governments at the appropriate time, with a view to formulating and agreeing on measures for the regulation and division of the waters in a manner that is just and equitable to all riparian States and of the greatest benefit to all their peoples.

In the meantime the Government of Tanganyika for its part attached considerable importance to a continuation of the present arrangements whereby technical experts from the United Arab Republic, the Sudan and the Three East African countries of Tanganyika, Kenya and Uganda meet at intervals to discuss common technical problems connected with the use of the waters of the Nile.<sup>60</sup>

Tanzania maintained further that since the 1929 Agreement applied to territories under British administration the treaty lapsed *ipso facto*, in relation to Tanganyika when it became independent because the country ceased to be British territory.

On November 21, 1963, Egypt in a Note replying to Tanganyika's Note simply submitted that pending further agreement, the 1929 Nile Waters Agreement remained valid and applicable. It added further that Egypt was in favour of the continuation of the unofficial talks between the technical experts from Egypt

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60. Seaton, E. E. and Maliti, S.T., *Tanzania Treaty Practice* (Nairobi: Oxford University Press, 1973), pp. 90-91.

and Sudan on the one hand and Tanganyika, Kenya and Uganda on the other and sent copies of the Note to Sudan.<sup>61</sup> But Sudan made no reply to either communication.

In summary, Seaton and Maliti, as the legal officers in Tanganyika's Ministry of Foreign Affairs, held the view that the 1929 Nile Waters Agreement was neither a 'real' nor a dispositive agreement and therefore had no legal effect on independent Tanganyika (Tanzania).

We have not found any communication from Kenya in response to the Note from Tanganyika or the response of Egypt. This should be understandable since the British Government whose colonial days commitment was being questioned had not left Kenya. They could have found it convenient to remain silent on the matter and leave it to Kenya to sort it out after independence. But at the time of her independence, Kenya adopted a position similar to the Nyerere Doctrine of succession to treaties which maintains that former colonial countries had no role in the formulation and conclusion of treaties done during the colonial era, and therefore they must not be assumed to automatically succeed to those treaties. Like Tanganyika, Kenya at the time of independence declared that the Government of Kenya was willing to grant two years grace period during which the treaties would apply on the basis of reciprocity, or modified by mutual consent. But those treaties which were not so modified or negotiated within two years and "which cannot be regarded as surviving according to the rules of customary International Law [will be regarded] as having terminated."<sup>62</sup>

Taking this line of argument it may be concluded that this treaty ceased to have effect with respect to Kenya as from December 12, 1965. But we may also argue with Seaton and Maliti, as well as Mutiti<sup>63</sup>, that the treaty simply became obsolete since Kenya, like Tanganyika, ceased to be "territories under British administration" as stipulated under the 1929 Agreement. And perhaps the territories being under British administration was the crucial basis of application of the 1929 Agreement to the East African territories, prompting Seaton and Maliti to conclude that the Nile Waters Agreement of 1929 was neither a 'real' nor a dispositive agreement.<sup>64</sup> It seems that Egypt never considered the agreement as 'real' or dispositive either, having urged only that the treaty remains valid and applicable, pending further negotiations.

The same arguments applying to Kenya would apply to Uganda too, especially since its position relative to succession to treaties as expressed in its Independence Declaration on Treaties, which reflected the Nyerere Doctrine.<sup>65</sup>

The position of Sudan would have a bearing on that of Kenya, Tanzania and Uganda, since Sudan was more directly involved in the treaty via the

61. *Ibid.*

62. Kenya Independence Declaration on Treaties is reproduced in *ibid.*, pp. 148-149.

63. Mutiti, M.A.B., *States Succession to Treaties in Respect of Newly Independent African States* (Nairobi: East African Literature Bureau, 1976), p.23.

64. Seaton and Maliti, n. 60, p. 91.

65. *Ibid.*, Appendix V.

hydrological control and construction requirements that were imposed on the Sudanese territory by the agreement. At the time of its independence in 1956, Sudan declared that it "was not bound to take over an Agreement to which it was not a party and which was any way considered unfair."<sup>66</sup> Outright, Sudan declared that the 1929 Agreement was obsolete and was prepared to negotiate a new one.<sup>67</sup> There is no reason why the three East African countries only remotely referred to in the treaty should be expected to remain bound.

Finally, Egypt's position with regard to the preconditions to the agreement are important as to the life of the 1929 Nile Waters Agreement. It was pointed out earlier that Egypt considered the 1929 Agreement temporary, pending determination of the political future of the Sudan. If it was temporary for Egypt and Sudan there is no reason why the agreement should have longer life for Kenya, Tanzania and Uganda. It is important to note in this regard that Sudan became independent in 1956—that being the resolution of Sudan's future; then in 1959 the two countries signed a comprehensive agreement followed by a protocol for its implementation in 1960.

(i) **The Owen Falls Dam Agreements. Background :** Attempts by Great Britain, on behalf of Egypt and Sudan, to secure an agreement with the upper riparians, especially Ethiopia, to construct major storages for water in those upper reaches of the Nile had been evident in the fact that over 80 per cent of the Nile waters reaching Egypt originate from Ethiopia. However, the upper reaches of the White Nile were not entirely ignored. In 1946, the Ministry of Public Works drew up a comprehensive plan for the full future development of the Nile, of which the main components were a dam at the Great Lakes of Equatorial Africa; construction of the Jonglei Canal in Sudan; Lake Tsana Reservoir, and a dam at Merowe near the fourth cataract on the Nile.<sup>68</sup> We are concerned here with the dam proposed for the Great Lakes.

The idea here was to find an ideal site for the construction of what H. E. Hurst, the Controller of the Physical Department of the Egyptian Ministry of Public Works called the "Century Storage" of water for Egypt.<sup>69</sup> In the first proposal, the dam in the Great Lakes was to be constructed at the outlet from Lake Albert, with only a small regulating dam on Lake Victoria. But it was hydrologically concluded that for Lake Albert to store water to the required capacity of 155 milliard cubic feet it would flood a considerable area around it, most of which lies in the territory of Uganda and the Belgian Congo. The government in Uganda objected to the idea very strongly especially because

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66. Bard, note 11.

67. Mutiti, n.73, p.23.

68. Hosni, *Legal Problems of the Development of the River Nile*, pp. 60-66.

69. Hurst, H.E., *The Nile: A General Account of the River and the Utilization of Its Water*, (London: Constable, 1952), p. 301.

70. *Ibid.*

the flooding would lead to unhealthy conditions, displace the population, and would result in loss of valuable land in large areas usually under cultivation along the Victoria Nile. The Belgian Congo also objected vehemently.

It was found that the reason for this certain extensive flooding was because Lake Albert was very narrow. Its total area is only 5,300 square kilometers<sup>70</sup>; other sources give the dimensions as 100 miles long and 30 miles wide.<sup>71</sup> So Egypt advanced an alternate proposal for a dam at the outlet of Lake Victoria. The advantages of this site over Albert were considered to be enormous: more water would be stored than in the original plan, since Lake Victoria has a total area of 68,000 square kilometers with the dimensions as follows: from Port Bell in the north to Mwanza in the south, the distance is 200 miles, and the greater breadth from east to west is 170 miles.<sup>72</sup> It was estimated that the average depth of the Lake was 40 metres with the maximum depth of 70 metres.<sup>73</sup> Britain, which was the administering power over the three states around Lake Victoria, was not opposed to the level of the Lake rising by a maximum level of 1.3 meters, or about 4 feet.<sup>74</sup> The consequence of this rise in the level of the Lake was recounted by Hurst as follows:

The rising level of Lake Victoria will necessitate some changes in the lakeside ports, and will cause the removal of a certain number of huts and embanking of a few cultivated areas, for which compensation will be paid<sup>75</sup>

Uganda was to benefit from the dam in that it would produce 20 metres of head capable of producing hydroelectric power up to 15,000 kilowatts for industries and domestic consumption.<sup>76</sup>

With this background in mind we can now look at the agreements leading to the construction of the dam.

### The Owen Falls Agreements of 1949, 1952 and 1953:

The agreement for the construction of the Owen Falls Dam at Jinja was concluded by Britain, (acting for Uganda) and Egypt by exchange of Notes between the two governments. It was done in three forms: first, there was an agreement regarding the construction of the dam, secondly, there was an agreement on the granting of contract for construction of the dam; and thirdly, there was an agreement on financial arrangements for the construction and maintenance of the dam.

71. *The New York Times*, Jan. 28, 1953.

72. Hurst, *The Nile*, n. 69, p. 154.

73. Hurst, *The Lake Plateau Basin of the Nile* (Cairo: Ministry of Public Works, Physical Department Paper No. 21), p. 17.

74. Hurst, *The Nile*, n. 69, p. 301.

75. *Ibid.*, p. 302.

76. *Ibid.*

The first of the three agreements above is the core of the formal treaty. The first letter, written on May 30, 1949, was by the British Ambassador at Cairo to the Egyptian Minister for Foreign Affairs.<sup>77</sup> In it, Britain had emphasized that it reflected completed negotiations and that the agreement was in accordance with the spirit of the Nile Waters Agreement of 1929. The purpose was two-fold : to control the flow of the waters of the Nile and production of hydro-electric power for Uganda. It stated further that even though the Uganda Electricity Board would invite tenders and place contracts for the construction, specifications for the work had been prepared in full consultation with approval of both, the Egyptian and Uganda authorities. The flow, which is a total of what goes through the turbines and what is allowed through the sluices, was to be supervised by Egyptian resident engineers at the dam. Paragraph 4 of the British letter stipulated as follows :

The two Governments have also agreed that though the construction of the dam will be the responsibility of the Uganda Electricity Board, the interests of Egypt will, during the period of construction, be represented at the site by the Egyptian resident engineer of suitable rank and his staff stationed there for the purpose by the Royal Egyptian Government, to whom all facilities will be given for the accomplishment of their duties. Furthermore, the two Governments have agreed that *although the dam when constructed will be administered and maintained by the Uganda Electricity Board, the latter will regulate the discharges to be passed through the dam on the Instructions of the Egyptian resident engineer* to be stationed with his staff at the dam by the Royal Egyptian Government for this purpose in accordance with arrangements to be agreed between the Egyptian Ministry of Public Works and the Ugandan authorities pursuant to the provisions of agreements to be concluded between the two Governments<sup>77a</sup>.

Informal sources indicate that there is still an Egyptian resident engineer at the Owen Falls Dam to date. So it would appear that the agreement is still in force according to these terms. The British letter had made a provision that the Uganda Electricity Board could take any action it considered desirable before or after construction of the dam provided that such measures were taken with the prior consultation and agreement with the Egyptian government. Any dispute which could not be solved by negotiation or conciliation would be referred to arbitration in accordance with agreement by both parties.

The reply by the Egyptian Minister for Foreign Affairs, dated May 31, 1949, confirmed the formal agreement and it came into force that day. As provided for in the formal agreement, the Uganda authorities granted the contract for the construction of the dam. About ten companies were listed with their

77. See text of both letters in ST/LEG/SER.B/12 (1963), pp. 108-109.

77a. Emphasis added.

respective fees. These were forwarded to the Egyptian government on December 5, 1949, which indicated approval on the same day, and which also constituted an agreement.<sup>78</sup>

The final round of the Owen Falls Agreement concerned financial arrangements for the construction and was also done by exchange of notes. The first note dated July 16, 1952, was from the Egyptian Minister for Foreign Affairs to the British Charge d'Affaires at Cairo.<sup>79</sup> The Egyptian letter laid emphasis on the value of Lake Victoria, at whose outlet the Owen Falls Dam was to be constructed, as storage of water for Egypt. The carefully-worded undertaking was as follows :

The Royal Egyptian Government—

(i) Will bear that part of the cost of the dam at Owen Falls which is necessitated by the raising of the level of Lake Victoria by the use of Lake Victoria for storage of water.

The ordinary meaning of this provision would suggest that the engineers who designed the dam anticipated that as a result of the construction of the dam, the level of Lake Victoria would rise beyond its regular level. This would be because of the very nature of the "storage" function of the dam which would cause back-water effect, depending on how closely the dam is built to the natural lake. The implication, it seems, is that the construction of the dam and the storage function, would affect the natural outflow from the lake, temporarily or permanently. The consequences of that factor could be numerous.

The agreement took care of the effect of the rising level of the lake as a result of operation of the dam, as anticipated in the background at the beginning of this section. Egypt undertook to compensate those around Lake Victoria that might be affected by the change in the level of the Lake waters. The second paragraph of the letter said that the Royal Egyptian Government :

(ii) Will bear the cost of compensation in respect of interests affected by the implementation of the scheme or, in the alternative, the cost of creating conditions which shall afford equivalent facilities and amenities to those at present enjoyed by the organizations and persons affected, and the cost of works of reinstatement as are necessary to ensure a continuance of the conditions obtaining before the scheme comes into operation, such costs to be calculated in accordance with the arrangements agreed between our two Governments.

The ensuing paragraph suggested further that the flow of water through the dam would be controlled for purposes other than hydro-electric power generation. The Egyptian government specified that there could well be occasions when the

78. See *ibid.*, pp. 110-111.

79. See *ibid.*, pp. 114-115.



control of the flow could be to the detriment of electricity supply to Uganda. For that purpose Egypt agreed "to pay to the Uganda Electricity Board the sum of £980,000 as compensation for the consequential loss of hydro-electric power, such payment to be made on the date when power for commercial sale is first generated at the Owen Falls Dam." It might be concluded that the "storage" function for water as needed by Egypt, would determine the allowable flow through the sluice as well as the turbines. That would justify Egypt's acceptance to pay compensation as stated above. Egypt went further and stipulated the conditions resulting from the rising level of the lake which would be constructed under their responsibility. Thus, in conclusion, the Egyptian government agreed that for purpose of calculation of the compensation under the provisions of sub-paragraph (ii), all flooding around Lake Victoria within the *agreed range of three metres* shall be deemed to be due to the implementation of the scheme.

In his response of January 5, 1953, the British Ambassador concurred in the obligation undertaken by Egypt, and the Owen Falls Dam was commissioned in 1954.

What may be surmised from the substantive provisions of the treaty is that the regime worked well since it provided Uganda with the hydro-electric power they needed and also since the storage function in the interest of Egypt continued to the latter's satisfaction. It is also safe to assert that the agreement remained binding on Uganda, whatever the change of government, so long as Uganda continued to enjoy the power-supply provided that there was no new agreement on the subject and neither party had renounced it.

Egypt has a further obligation which she accepted *vis a vis* the other two riparians of the Lake : Kenya and Tanzania. That is, in event of any physical or environmental change suffered on the territory of the states around the Lake resulting from the rising level of the Lake, Egypt would pay compensation. There does not seem to be any event that has changed the binding force of that obligation even through Kenya and Tanzania have since secured their independence from Britain. The important consideration is simply that the rising level, if any, must be established to have been caused by the implementation of the Owen Falls scheme, as stated in paragraphs (i) and (ii) of the Egyptian letter.

That Kenya and Tanzania, after their independence, may not have acceded to the Owen Falls agreement is not of any legal consequence as regards the obligation Egypt undertook towards two states under the Owen Falls agreement. In international law treaties are generally *res inter alios*, that is binding only among parties. Thus, treaties do not impose obligations on third parties.<sup>80</sup> However, a treaty may include third-party beneficiary provisions. This age-old practice has been outlined in the 1969 Vienna Convention on the law of Treaties where Article 36 states that :

- (1) A right arises for a third state from a provision of a treaty if the parties to the treaty intended the provision to accord that right either to

80. The general rule of *pacta tertiis nec nocent nec prosunt* is expressed in Article 34 of the Vienna Convention on the Law of Treaties.

the third state, or to a group of states, to which it belongs, or to all states, and the third state assents thereto. Its assent shall be presumed so long as the contrary is not indicated unless the treaty otherwise provides.<sup>81</sup>

It seems, therefore, that under the Owen Falls Dam Agreement, Egypt and Uganda might be under obligation to compensate Kenya and Tanzania in case the latter states suffer environmental or physical injuries caused by operation of the Dam. The law of treaties requires, further, that should Egypt and Uganda decide to modify or revoke the stipulations relating to these third party rights, they are under obligation to seek concurrence of Kenya and Tanzania<sup>82</sup>.

### (iii) Agreement for Co-operation in the Meteorological and Hydrological Survey, 1950

During the negotiations and exchange of notes on the Owen Falls Dam, the Egyptian government saw a need for research, observation and recording of meteorological and hydrological data from the basin of East African Lakes including Lake Victoria. This was the subject of another agreement done by exchange of Notes between the Egyptian Ministry of Foreign Affairs and the British Ambassador in Cairo (for Uganda), before the agreement on Owen Falls Dam was concluded.

The substance of the agreement was contained in the Egyptian letter to the British Ambassador on January 19, 1950<sup>83</sup> and it indicated the degree of cooperation which Uganda had promised to Egypt because the data would help Egypt to determine the amount of water it could expect from these upper reaches of the Nile. According to the letter, the Ugandan authorities had agreed to establish data collection posts to the extent that was marked in an enclosed map, but that the number of posts would not be varied without prior consultation with the Egyptian Ministry of Works.

Further, it had been agreed that the Resident Egyptian Engineer at the Owen Falls Dam and his assistants would have access to all the posts situated in Uganda. The intention was that they would carry out periodic inspection of the posts "to assure themselves that the posts are being satisfactorily maintained and the observations regularly collected". Egypt would contribute toward the expenses incurred in obtaining and calculating the hydrological and meteorological data.

81. An identical text with commentary detailing the background to the provision is in United Nations, *Official Records of the United Nations Conference on the Law of Treaties*: First and Second Session, Vienna 1969. A/CONF/39/11/Add 2 (New York, 1971), pp. 47-49. (art. 32).

82. For background to the law of treaty requirement that "when a right has arisen for a third state in conformity with Article 32, the right may not be revoked or modified by the parties if it is established that the right was intended not to be revokable or subject to modification without the consent of the third states", see *ibid.*, pp. 49-50. But See discussions on the fluctuations in the level of Lake Victoria, Section V. (D).

logical data to an amount to be agreed upon, but, in any case no less than £E. 4,200 and no more than £E. 4,500. The British reply, dated February 28, 1950, confirmed Uganda's undertakings as outlined in the Egyptian note. The agreement entered into force on March 1, 1950.

Perhaps the one interesting feature of the agreement was that Egypt was well set to use hydrological and meteorological data of the East African Lakes region well ahead of the countries within that catchment areas. The agreement also gave Egypt rights to take possession of the data and information which could also guide their policy towards the catchment of the Lakes: Victoria, Kyoga, Albert and Edwards. The same area was to be covered by a plan for hydro-meteorological survey which is discussed below.

#### (iv) Agreement for the Full Utilization of the Nile Waters-1959

This agreement ushered in a new era in the history of the Nile basin which has been analysed above. As noted earlier, Sudan, in reference to the 1929 agreement particularly, had contended that as an independent state it would only accept the binding force of an agreement it had signed. The obvious implication was that Sudan was ready to negotiate a new agreement on the Nile waters and it was the ensuing negotiation that led to a new agreement. Egypt and Sudan signed the agreement for The Full Utilization of the Nile Waters at Cairo on November 8, 1959.<sup>84</sup> The preamble states clearly that this agreement was to be different, in its intent and substance, from the preceding ones applicable to the two states. It stated that the 1929 Agreement had "only regulated a partial use of the natural river and did not cover the future conditions of a fully controlled river supply". On the other hand, the preamble argued, the full utilization of the Nile waters for the benefit of the two republics "required" the implementation of projects for the full control of the river and the increase of its water supply and the planning of new working arrangement "on lines different from those followed under the present conditions".

A number of observations are apparent from these principles expressed in the preamble. First, to refer to "full utilization" and "full control of the river" when there are only two states involved in the agreement rather than all the basin states, especially the upper ones, seems patently anomalous. There is no evidence that Ethiopia, which contributes about 85 per cent of the gross annual flow at Khartoum, or the other East African States, were invited in any of the negotiations. The two parties to the agreement were to be those that are simply recipients and users dependent on water from central Africa and Ethiopia. They needed the cooperation of those upper basin states if the goal of full control and utilization of the Nile waters was to be realized. Secondly, they declared the clear principle that the new agreement was not only more comprehensive but also different in spirit, from preceding ones, especially

83. Text in ST/LEG/SER./B/12 (1963), pp.112.113.

84. Text in ST/LEG/SER. B/12 (1963), pp. 143-148.

the 1929. They were, therefore, beginning nearly with *tabula rosa* as far as the utilization and control of Nile waters was concerned with regard to treaties between their states.

Substantively, the parties started by distinguishing their "established rights" over quantities of water used by either party before the control works established by the Agreement. For Egypt it was to be 48 milliard cubic meters and for Sudan only 4 milliard cubic meters per year, in either case, measured at Aswan. The basis on which the respective volumes of water were determined are not clear from the text. The two states negotiated and agreed on the quantifications of their respective rights. Ordinarily, it would be assumed that they considered what would be equitable and reasonable under the circumstances as we analysed earlier. Bard looked at the relative figures for Egypt and Sudan and concluded that: "A State is at liberty to accept less than is due to it, should it so decide, for considerations of policy of which it is the judge. But the exercise of such a liberty in an international treaty . . . . makes it inadvisable to draw legal conclusions from such an instrument or to consider it a precedent in international law".<sup>85</sup> He thus accepted that there was really no historical or legal basis for the proportions set aside for Egypt and Sudan in this agreement.

The control works under the Agreement were outlined in Section 11 of the agreement. Perhaps the most important features of this section are the provision for the construction of Sudd el Aali, or the High Dam at Aswan. Its important function was to store water for Egypt and to prevent the flow of excess volumes of water to sea, which Egypt would consider a waste. At the same time, the Dam would also cause back water flooding the territory of the Sudan, especially the town of Wadi Halfa. Under paragraph 6 of the section, Egypt agreed to pay fifteen million Egyptian pounds to Sudan as full compensation for damage to the Sudanese property as may be caused by the storage of water at the Sudd el Aali Reservoir. Details of the modalities for payment of such compensations were outlined in Annex II to the Agreement. Sudan also undertook to transfer its population whose property were affected by the storage effect of Aswan from Halfa and the surrounding areas, prior to July 1963.

To enable Sudan to exploit its share of the water, the Agreement provided that she would construct Roseires Reservoir on the Blue Nile and any other works deemed necessary by the Sudan for that purpose. To Sudan, this was a major concession because, it will be recalled that during the negotiations leading to the 1929 agreement, Egypt has strongly opposed such works in the Sudan. Perhaps the changed position was because Sudan had undertaken not to exceed the volume stipulated in the Agreement. It is important to note further that Egypt had become nervous about possible Sudanese intentions because in 1924 Britain had threatened to increase the irrigation and consequent consumption of water in Sudan. The political atmosphere in 1959 was different.

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85. Bard, note 11, p.20.

But it is still noteworthy that even though the two states could agree on the construction of Rosieres Reservoir on the Blue Nile they never involved Ethiopia as a party to the treaty in order to assure themselves of the volume of water from Ethiopia.

The same attitude of neglect applied to the states of the Upper Nile Basin ; this comes out clearly in Section III of the Agreement. The emphasis in that Section was on water lost in the Sudds within Sudan. The Sudan government agreed to increase the supply of water flowing down the Nile and to prevent losses by draining the swamps. Central to this set of commitments is the well-known Jonglei Canal project which would run from the village of Jonglei, in the south, to Malakal in the north. Presumably, this would open more agricultural land for Sudan. The two countries agreed to share the cost of the construction as well as the water released from the swamp.

The anticipated projects for the use of the Nile waters under the Agreement were to be backed by a system of technical cooperation between the two parties. Thus, they agreed in Section IV of the Agreement to constitute a Permanent Joint Technical Committee composed of an equal number of members from both Republics. The Committee would be responsible for supervision of all the working arrangements in the Agreement as well as to carry out necessary hydrological studies to facilitate adequate policies. These would also include preparation of work implemented in the territories outside Sudan by agreement with their concerned authorities.

The general provisions in Section V broadened the aspects of the agreements dealing with third parties. Paragraph (i) commits the parties to a common front in any negotiation with such states. It reads :

In case any question connected with the Nile waters needs negotiations with the governments of any riparian territories outside the Republic of Sudan and the United Arab Republic, the two Republics shall agree beforehand on a unified view in accordance with the investigations of the problem by the committee. This unified view shall then form the basis of instructions to be followed by the committee in the negotiations with the governments concerned.

The Permanent Joint Technical Committee is responsible for supervising the implementation of any agreement emanating from such a negotiation. Should any third state lay claim to any quantity of water which would alter the regime as viewed in the agreement, the two contracting states were bound under this agreement to study the claims and adopt a unified position as advised by the Permanent Joint Technical Committee.

It should be recalled that at the time of this agreement there was a nine-year old agreement between Egypt and Britain (for Sudan) for the hydrological study of the basins of the central African lakes. Therefore, in terms of basic hydrological data on the Nile and Lake Victoria basins, the two states were evidently ahead of the other basin states. The advantages in the event of any

negotiations anticipated in this agreement, would be enormous for Egypt and Sudan.

**(v) The Protocol Concerning the Permanent Joint Technical Committee**

Section IV(3) of the 1959 Agreement required the parties to form a technical committee to fulfil the functions already analysed above. That purpose was met by a Protocol signed by the two states at Cairo on January 17, 1960,<sup>86</sup> which was to be an integral part of the Agreement. Four members were appointed by each party. There was a stipulation in the Protocol that should there be a need to alter any aspect of it then that would be done by exchange of letters between the parties.

**(vi) Agreement for the Hydrometeorological Survey of Lake Victoria, Kyoga and Albert (Mobutu Sese Seko)**

A plan of operation for a hydro-meteorological survey of the above area was signed by five countries, namely, Egypt, Kenya, Sudan, Tanzania and Uganda, as well as the United Nations Development Programme (UNDP) and the World Meteorological Organization (WMO) on different days of May 1967 and the Project declared operational with effect from 17 August 1967.<sup>87</sup> The purpose of the project was to evaluate the water balance of the Lake Victoria catchment in order to assist in any control and regulation of the Lake level as well as the flow of water down the Nile. The financial assistance for the project came from the UNDP while WMO was the executing agency; hence their agreement with the countries which are territorial in the area of operation and/or interested in the results of the study. But the background to the 1967 agreement has a great deal to explain in the objective and scope of the project.

Egypt and Britain, if one may recollect, has signed an Agreement for co-operation in meteorological and hydrological survey of the Lake Victoria catchment by exchange of Notes in January and February 1950. The Agreement entered into force on March 1, 1950. Following that the three East African countries, Kenya, Tanganyika and Uganda set up an East African Nile Waters Co-ordinating Committee in 1965. The specific purpose of the Committee was to establish and maintain "a common East African case and a point of view on the Nile waters."<sup>88</sup> To this extent it may be perceived as having been a British attempt to create a kind of counterpart to the framework of the 1950 agreement.

Theoretically, the Committee was to consist of the three Ministers concerned, or their Permanent Secretaries. But in fact, the Ministers never met together

86. Text in ST/LEG/SER.B/12 (1963), pp. 148-149.

87. *Hydrometeorological Survey*, note 8, Vol. 1, Part. 1, p.9.

88. Seaton and Maliti, n.60, p. 91; Fahmy, S.H., *International Aspects of the River Nile*, (Cairo; Ministry of Irrigation, 1971). Produced as conference paper UN. Doc. E/CONF/TP. 22 of 15 Jan 1977, p.8.

as a Committee. Instead, the participants were technical and administrative officers. On a few occasions, the members of this Coordinating Committee, on the one hand, and Egypt and Sudan (as members of the Permanent Joint Technical Committee of Nile), on the other, held consultative meetings at which such matters as control of discharge at the Owen Falls Dam, the future storage of water at Lakes Victoria and Albert, and irrigation requirements of the East Africa countries from the Lake drainage area were discussed.<sup>89</sup> The Coordinating Committee after the preliminary discussions, had by 1960 endorsed the need for a survey of the hydrometeorology of the catchment area of Lake Victoria. And in 1961<sup>90</sup>, the three East African Governments requested the United Nations Expanded Programme of Technical Assistance for aid to conduct a preliminary hydrometeorological survey of the catchment of Lake Victoria. In response, a team of three consultants from WMO and FAO undertook a preliminary survey from January to April 1962, and submitted a report to the three governments in 1963.

A discussion of the report convinced the three governments that the survey should be extended to include Lakes Kyoga and the Albert catchment and that they should invite Egypt and Sudan as participants. A review of the proposal by consultants financed by the U.N. Special Fund in 1965 approved the project and from then on Egypt and Sudan were invited as participants in the hydrometeorological survey of the catchment of Lakes Victoria, Kyoga and Albert. At a meeting in Nairobi in August 1965 of representatives of the five countries, a Project proposal was formulated and submitted to the Special Fund, later to be adopted by the United Nations Development Programme for funding.

That is how the 1967 Agreement came into being. As the project progressed, the five participants had consultations with Rwanda and Burundi successfully urging that the project area be extended to cover the Lake Victoria catchment in Rwanda and Burundi as well.<sup>91</sup> Thus, the total catchment area under the project is 378,000 square kilometres of which approximately 325,000 square kilometres is in Kenya, Tanzania and Uganda, leaving about 53,000 square kilometres to Rwanda, Burundi and Zaire.<sup>92</sup>

The project Director is a Sudanese national and his Deputy is an Egyptian, with a Canadian technical advisor. The first phase was completed and a report published in 1974 to give an analysis of the hydrology and meteorology of the basin. This was followed by the second phase, to work out a mathematical model of the flow in and out of the Lakes, to facilitate their control. The first report was to be discussed in Nairobi in June 1979 and a full report presented to the representatives of the seven governments in Nairobi from 11-14 March, 1980.

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89. Seaton and Maliti, n. 60, p. 92.

90. Fahmy, *International Aspects of the River Nile*.

91. *Hydrometeorological Survey*.

92. Fahmy, *International Aspects of the River Nile*, pp. 7 and 13.

(vii) **The Agreement for the Establishment of the Organization for Management and Development of the Kagera River Basin**

This agreement was signed by Burundi, Rwanda and Tanzania in 1977. Although this agreement was signed by only these three countries it is provided in Article 19 that the "agreement is open to accession by Uganda" at any time.

Operation of the agreement is to be within the framework of the Organization suggested in the title and established under article 1. The *ratione loci*, article 3 of the agreement, provides as follows :

The territorial jurisdiction of the Organization is drained by the Kagera River and its tributaries and subtributaries.....

Provided that the Governments may, by mutual agreement assign to the Organization other geographical areas in order to facilitate or make possible the full and proper study of, and comprehensive planning for the implementation of the projects, works and programmes entailed in the harmonious development of the Basin, or where services are to be provided to or from the Basin.

But the terms of the agreement, *ratione materiae*, include just about all the sectors of development one can possibly imagine. Since this is a new agreement it is probably proper that we should quote article 2 here, *in extenso* :

The objective of the Organization is to deal with all questions relative to the activities to be carried out in the Kagera River Basin, notably :

- (a) Water and hydropower development;
- (b) The furnishing of water and water-related services for mining and industrial operations, portable water supplies for other needs;
- (c) Agricultural and livestock development, forestry and land reclamation;
- (d) Mineral exploration and exploitation;
- (e) Diseases and pest control;
- (f) Transport and Communications;
- (g) Trade;
- (h) Tourism;
- (i) Wildlife conservation and development;
- (j) Fisheries and aquacultural development;
- (k) Industrial development including fertilizer production, exploration and exploitation of peat;
- (l) Environment protection.

Most projects are expected to be national in the sense of operating exclusively within one national jurisdiction. But Article 2 adds further that : "A project, work or programme shall be considered of an inter-state nature in terms of this Article when

1. it involves the territory of more than one of the members states;



2. the services or benefits to be derived may be transmitted through, or received entirely or partially in the territory of member states or state, other than that of the state where the project, work or programme is to be undertaken,
3. it is likely, in the judgment of the Organization, to produce substantial effects, whether these be beneficial or prejudicial, in the territory of a State or States, different from that of the State where the project, work or programme is to be undertaken.

seems then that a project may be considered inter-state even when one of the states involved is not party to the agreement.

This agreement is one that is truly geared to development of the drainage basin rather than simply a regulatory one. But Article 7 gives the Commission of the Organization regulatory powers including assessing and, where appropriate, approving project proposals. Before these project proposals are presented to the Commission for consideration, the Secretariat has the task of assessing and compiling the proposals into one comprehensive plan. In these tasks the Secretariat is assisted by three departments, namely, Research and Statistics; Projects, Planning and Execution; and Management and Administration.

The administrative budget is contributed by members in the proportions of 5 per cent, 35 per cent, and 40 per cent for Burundi, Rwanda and Tanzania, respectively. But the provisions as to the sources of development budget are not absolutely clear. It seems from Article 7 (b) which gives powers to the Commission

to submit requests to, and sign agreements and assume obligations with international institutions regional or otherwise, and other governments for technical assistance and financing

that development budget would be met from miscellaneous donor sources. Member states may also request technical assistance and finance from the Organization and, as stipulated in Article 11, these shall be approved by the Commission.

Upto now very little has been published on the work or plans under the Kagera Basin Agreement. So far two major projects have been reported. The first one is a Tanzanian sugar project to cost an estimated 68 million dollars to construct.<sup>93</sup> It was anticipated that the project should commence operation in 1980 with a daily output of 250 tons of sugar. And that it will be financed by the Government of India, The Netherlands, two Indian Commercial Banks, the Abu Dhabi Fund for Arab Economic Development and the Tanzanian Government.<sup>94</sup> The second project is the construction of a dam at Rusumo Falls for hydroelectric power. The feasibility studies for the project were completed in 1979 and it has been estimated that the project should produce some 100 mega-

93. *The Standard* (Nairobi), 17th October 1978, p.8.

94. *Ibid.*

watts of electricity.<sup>95</sup> But the final decision on the project, including the exact height of the dam, was to be taken at a meeting of the Kagera River Development Commission at Kigali during the last week of January 1980. While earlier reports had said that the hydroelectricity project would be financed with aid from Belgium, it has been noted too that the Commission was to discuss the matter with a multi-donor mission in February, 1980.<sup>96</sup>

## CONCLUSIONS

Important agreements on utilization of the Nile were not concluded until after the first World War. But even then, the 1925 agreement was an unusual one without direct relation to territorial state and certainly void in relation to Ethiopia then and now. The first full-scale agreement on the Nile came in 1922. Again the background of the treaty was so riddled with political complications that it evidently came as a temporary agreement assuring Egypt of its water needs until a more stable one was done in 1959. The latter, between Egypt and Sudan, is certainly in force as between the parties.

Similarly in force too, is the Owen Falls Dam Agreement signed between Egypt and Britain (on behalf of Uganda). The obligation seems to have devolved on Uganda by virtue of its continued enjoyment of hydroelectric power from the Dam and because it has not renounced the treaty responsible for the generation of power. Egypt, for its part, is interested in the storage value of the Dam and Lake Victoria. It is because of that continued force of the treaty that we conclude that Kenya and Tanzania retain the third state rights extended to them in the event of injuries resulting from the rising level of the Lake. Under the treaties examined here Ethiopia, Kenya and Tanzania do not seem to be under any obligations as regards use of waters flowing to the Lake Victoria and Nile Basins. At least it is clear that there has been no agreement on the utilization of the waters of Lake Victoria directly involving all the riparian states. Tanzania clearly rejected the 1929 Agreement and Kenyan position seems arguable in like manner. Similarly, we have not seen any treaty imposing any kind of obligation on Zaire, Rwanda and Burundi to the extent that they are basin states. All these states may, however, be under limited obligations only under general international law to permit the lower riparians an equitable share of the water but then the exact modalities are subject to fresh negotiations.

## V: RECENT DEVELOPMENTS

The last agreement on the Nile basin and with any relevance to the Victoria catchment area was signed in 1959 with a supporting Protocol in 1960. Since then there must have been several policy actions taken and implemented by the basin states without complete publicity. Among those there must be some

95. *Sunday News* (Dar-es-Salaam), 20th January, 1980.

96. *Ibid.*

policies involving consumptive uses of the waters to the extent that would affect the hydrological and meteorological regime of the Lake Victoria and Nile drainage basin. We presume that such policy measures might necessitate consideration of a legal regime beyond what is analysed above.

In this section some of those policy statements and measures are outlined briefly. No order of priority is attached to the following outline but they are discussed by the country where the policy is adopted :

## 1. Egypt

It can be assumed that the regular rise in population in Egypt may raise the country's needs for irrigation for good production beyond what was necessary in 1959. With Sudan, Egypt has probably agreed on quantities of water for their respective use.

There are, however, two considerations that might drastically increase Egypt's need for water. In December 1975, Egypt opened six pipelines to take water across the Suez Canal to the Sinai desert for irrigation.<sup>97</sup> The project was originally proposed by UNRWA to provide 10,000 refugee families from the Gaza strip with livelihood but was never implemented by the United Nations agency. The project beginning in 1975 was supposed to commence with irrigation of some 5,000 acres to be increased later on.

How much water was needed for this and subsequent reclamation programmes was not published. But it is indicative of the increasing needs of greater quantities of water by Egypt.

Secondly, it is understood that Egypt has directed hydrologists to study the possibility of piping "The Nile Waters to Jerusalem for Jewish Christian and Moslem pilgrims visiting the holy places."<sup>98</sup> This extension would mean an additional 400 kilometres or 240 miles to the length of the Nile. This is another evidence of the increasing needs of Egypt for water. There are probably other needs under consideration. From the legal point of view there may be the question of whether Jerusalem and the Sinai desert are properly within the Nile catchment area. And if they are not then there may be questions about whether or not it ought to be of concern to the basin states.

At the general level there have been some press speculations about how extremely nervous Egypt has been about possible control of Uganda by unfriendly governments. The Nairobi-based *Weekly Review* (April 27, 1979, p. 21) remarked that Egypt went a long way in giving military aid to the armed forces during the liberation of Uganda in April 1970. The hypothesis developed was that all the old animosities aside, Egypt believed that Idi Amin's resistance forces backed by Libya with the support of the Soviet Union might put Egyptian interests in jeopardy, given Egypt's hostility towards Russia. This may be so.

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97. See *The New York Times*, Dec. 14, 1975, p. 28 and some comments in Batstone, n. 13, p. 554.

98. *The Nairobi Times*, 16 December, 1979.

But the theory does not address the previously publicized reports that the Arab states supported Amin's regime through the eight years of reprehensible misrule.

Be that as it may, the speculations point to the fact that Egypt continues to be fairly nervous about the political regimes in the upper Nile basin states that might affect the security of water supply.

## 2. Sudan

Sudan has decided to undertake a major project called the Jonglei Canal construction. Essentially, the project consists of draining the Sudd area of Southern Sudan beginning from a village called Jonglei in the south to Malakal in the north. It would therefore be entirely within Sudanese territory but it will be of major significance in that more water will flow to Egypt. The rationalization is that this will stop the waste of water through evaporation over the Sudd.

The idea of the Jonglei Canal is an old one and has been a subject of some engineering and ecological studies.<sup>99</sup> However, in the past two years its merits have been the subject of considerable controversy largely initiated by those who hypothesize that the project would be an ecological catastrophe.<sup>100</sup> Most of the commentators condemn the project for the social and environmental problems it will cause for Sudan, particularly. Certainly, there are matters that those not resident in Sudan may be concerned with from a moral standpoint. However, there are also some hypotheses about the kinds of trans-territorial environmental problems that are envisaged and these are still only hypothetical and speculative. But they point at the reasons why there should be broad international concern with the project. Those problems may be listed under the following three broad categories.

First, there is the hypothesis that draining the Sudd will change the weather, including rainfall pattern in the entire region surrounding Southern Sudan. This is postulated on the proposition that the heavy evaporation from the Sudd contributes to rainfall in the region. The weather modification may or may not actually occur. But there have been no responses from Sudan to give contrary information, even though they may have carried out studies to challenge the hypothesis. But if the hypothesis was verified by actual results later on then the neighbouring states could argue that Sudan is liable for trans-territorial environmental injuries pursuant to the doctrine of *sic utere tuo* analysed earlier.

Secondly, it has been hypothesized that the combined volume of water, amounting to 20 million cubic meters, flowing down the Jonglei Canal and the regular flow of the Sobat River would change the rate of flow of the Sobat water as the river approaches Malakal. This, it is argued, would cause back-water-effect and flooding of the Sobat Valley in Ethiopia.

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99. See especially the five volume study, *The Equatorial Nile Project And Its Effects in the Anglo-Egyptian Sudan: Being the Report of the Jonglei Investigation Team* (1964).

Oscar Mann, writing a report for the Nairobi-based Environmental Liaison Centre, said :

A 'backwater effect' manifests itself as a damming-up of one river caused by a powerful flow across it from another river, as at the junction of two rivers. In this case the large volume of water flowing into the River Sobat from the tail of the Canal may cause this river to rise and accentuate the flood hazards upstream. The combined canal water and Sobat flow may cause a backwater effect on the Nile increasing flooding on the Ghazal, Jebel and Zeraf river systems.<sup>101</sup>

Again, how probable this threat is, remains uncertain. If it was to happen then the affected states might bring action against Sudan, or it might simply precipitate an international crisis between Sudan and the injured state (s).

The third hypothesis arises from the foregoing. It suggests that in an effort to reduce the threat of flooding as described above some observers have suggested that cooperation of Uganda would be sought in future control of out-flow at the Owen Falls Dam. Such an action would promote the role of Lake Victoria as a storage-head in the interest of Egypt. As discussed earlier, Egyptian resident engineers are presently placed at Jinja under the Owen Falls Dam agreement. Thus, the resident engineer would see to it that the sluices and turbine flows are controlled accordingly.

The problem is that such a control would cause backwater effect, raising the level of Lake Victoria and the attendant physical and ecological injuries to the states riparian to Lake Victoria. Some consequences of this set of problems are discussed in the section on Kenya below. Very simply, these problems related to whether the rising level of Lake Victoria might entitle Kenya and Tanzania to damages under the Owen Falls agreement or action pursuant to the rule of *sic utere tuo* in general international law.

In every one of the three instances there would be international problems created which might pose serious threats to international peace or good neighbourliness. The consequences might be waste of resources in the process of negotiations, conciliation or arbitration. May be Sudan has revealed its studies countering these hypotheses at their secret ministerial consultations which occur annually, especially with Kenya. But it is certainly warranted that such explanations should be forthcoming to avoid the kinds of speculations about Sudano-Egyptian irresponsibility in undertaking a project with several international consequences without consultation with those states. Egypt and Sudan might even be accused of arrogance if they carried further their attitude that is

100. *The Weekly Review*, March 9, 1979, pp. 26-27; May 5, 1978, p.2; May 12, 1978, p. 2; April 28, 1978, p. 24.; *African Business*, Nov. 1978, pp. 14-16.; *Earthscan Briefing*, Doc. No. 8.; *The Jonglei Canal: Environmental and Social Aspects* by Oscar Mann (An Environmental Liaison Centre Report, Nairobi, August 25, 1977).

101. See, *The Jonglei Canal: Environmental and Social Aspects*, note 100.

manifested in the existing treaties especially the 1959 agreement and the 1960 Protocol whereby they totally ignored the upper basin states whose cooperation they should seek for continued water supply.

### 3. Ethiopia

The Ethiopian plans for use of the Blue Nile or Sobat waters for consumptive purposes are not available to this writer. However, there is evidence that Ethiopia was considering utilization of the Nile to the extent that Egypt found threatening its interests.

Available reports on the issue are sketchy. According to the Egyptian newspaper *Akbar el Yom* of May 13, 1978, "Egypt and the Sudan were studying with great interest feasibility studies being conducted by the USSR around Lake Tana, where about 85 per cent of the Nile water originates. Egypt will not allow the exploitation of the Nile waters for political goals, and that it will not tolerate any pressure to bear on it or to foment disputes between itself and its neighbours."

The Ethiopian Ministry of Foreign Affairs issued a series of terse and non-conciliatory responses directed largely at Egypt and partly at Sudan.<sup>102</sup> Essentially, the Ethiopian position was that even though international rivers had both international and national personality, "Ethiopia has all the rights to exploit her natural resources". The statements also purported to remind Egypt that even though it received 85 per cent of the Nile waters from Ethiopia it had never shown friendship nor sought cooperation from Ethiopia but shown hostility to independent Ethiopia in every aspect of international existence. In summary, the Ethiopian statement implied hostility to Egypt unless the latter changed its attitude and sought cooperation.

Perhaps with this kind of exchange one might now want to ascertain the reasons why Egypt and Sudan had decided to ignore Ethiopia in the agreements for utilization of the Nile waters. As the Ethiopian statement points out, Egypt went ahead and built the Aswan Dam which was to depend on the Blue Nile waters "without even consulting Ethiopia". In the ultimate analysis then, the situation here illustrates a trend which develops if basin states do not consult with one another or develop a framework for cooperative utilization of the waters of an international river. And when such a hostile stage is reached it becomes almost impossible to establish a framework of cooperation.

### 4. Tanzania

The Republic of Tanzania is understood to be planning two major development projects utilizing the Lake Victoria Basin waters: One is to use the waters of River Kagera which has been discussed above and the other is to use the waters of Lake Victoria itself for irrigation of the Vembere Steppes in Central Tanzania. Only the latter remain to be discussed here.

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102. See, *The Ethiopian Herald* (Addis Ababa), of May 14, May 21, and June 2, 1978.

Tanzania may have considered more than one approaches to utilization of waters of Lake Victoria for irrigation of its arid central mainland but the one proposal that stands out in history was narrated by H.E. Hurst of the Egyptian Ministry of Works who, at the urging of a South African geologist, went to Tanganyika in 1926 to ascertain if there was indeed such a plan for irrigation. He recounts the plan as follows :

“I found out that the Germans had, before the 1914-18 war, a project to take water from Smith Sound, along inlet at the south end of Lake Victoria, over the low country which separates the lake from the land sloping down towards Lake Eyassi. The water would have been used to irrigate arid land on the Vembere Steppe for the growing of cotton. The scheme, which was not a government one, was to start on a small scale with a dam at Manyonga River to store its flood water and irrigate a small experimental area. From this pilot project data would be obtained for a larger scheme, in which another dam would be built on the Manyonga, and hydro-electric stations at the dam would supply power to pump water from Lake Victoria. After passing through the turbines the water would irrigate land lower down and finally drain into Lake Eyassi.”<sup>103</sup>

The area planned for irrigation in this project was 230,000 hectares, or 550,000 fedans. To what extent this project has actually been seriously considered in modern Tanzania is not certain. But a recent commentary on the project by a Government advisor was rather critical. In his report, evaluating Tanzania's development programmes, Professor Rene Dumont wrote :

“The Smith Sound project, aiming to bring water at great cost from Lake Victoria to the South, will probably be worth studying towards the end of this century, to be finally carried out at the beginning of the next century. For the moment, the whole of small and medium-scale irrigation certainly has priority, especially in the spirit of the Arusha Declaration. I call attention to the Davidoff project from the era of Stalin, aiming to take into Central Asia, water from the great Siberian rivers; it has been put off to a very distant date, very wisely”.<sup>104</sup>

Professor Dumont had very serious reservations about the Kakoma multipurpose scheme involving irrigation in the Kagera Valley; but he may find it acceptable if the hydroelectric power component is amplified.<sup>105</sup>

Egypt and Sudan as desert states that depend on the Nile waters most, might have some problems with the Smith Sound project depending on the quantity of water to be extracted. Hurst thought the estimate at the time of his visit to

103. Hurst, n.69, p. 156; Hurst, n.73, pp. 6-10.

104. *Tanzania Agriculture after the Arusha Declaration: A Report by Professor Rene Dumont* (Dar-es-Salaam: Ministry of Economic Affairs and Development Planning, 1969), p. 48.

be about 92 cubic meters of water per second<sup>106</sup> or "90 tons a second could make no appreciable difference to the Nile."<sup>107</sup>

Ironically, while for Kenya a level of the Lake higher than the 1960 level, has posed problems, as well be discussed below, for Tanzania a higher level of the lake might result in lower pumping costs and larger areas of irrigation. Therefore, in fact, Tanzania might at one point be found in agreement with Egypt which encourages the storage value of Lake Victoria, as noticed in the analysis of Owen Falls Dam Agreement. Yet at other points, Egypt might disagree with the Tanzanian project for consuming too much water. For Kenya, the Tanzanian project may be appropriate, if the rising level of the lake continues to be the nuisance it has been since 1961. However, Kenya might view the project with reservation if Kenya also intends to expand irrigation using the Lake Victoria waters. So there are several "ifs" which would only be resolved in a negotiating context and after the countries concerned have determined the development plans intended to use the Lake Waters and how much water they intend to abstract from the Lake.

One further problem that might arise relates to trans-basin transfer. Other Lake Victoria basin and Nile basin states not intending similar uses of the basin waters might argue that the water of the basin should be used only within the basin unless enough is available for all uses. On this, there is no clear-cut rule of international law, and we doubt that the argument could exclude the Tanzanian project, if it was finally drawn up. Rather, the basic considerations such as equitable utilization, including the country's contribution to the basin water pool, the stage of development, alternate water resources available, among others, would be appraised as against the same factors for the opposing states. It was noted above, for instance, that Egypt has in fact considered transferring Nile waters for irrigation of the Sinai peninsula and has another plan for Jerusalem. Such trans-basin transfers could be considered in the broad context including other uses within the basin.

## 5. Kenya

There have been three categories of events related to Lake Victoria waters. There is (a) the rising level of the lake; (b) the creation of the Lake Victoria Basin Development as a basin project; and, (c) a mooted possibility of irrigation of arid areas of Kenya using the Lake Victoria waters. Each is discussed briefly below.

(a) The issue in the first instance is that although the level of Lake Victoria is known for several monthly and annual fluctuations, a special trend started in 1961 and culminated in 1964 with a maximum rise of two-and-a-half meters. This is an unusual and unprecedented rise,<sup>108</sup> and the consequences in Kenya

106. Hurst, n. 73, p. 9.

107. Hurst, n. 69, p. 156.

108. See Volume 1, Part II of *Hydromet Survey*, note 8, pp. 744-753, especially graph on p.752.



have been easily noticed. First, there is loss of large tracts of land around the lake, covered under water. Most of that land had been used for several small-scale agricultural activities, largely for horticultural products. Secondly, the breeding grounds of some of the fish species went under water and the resulting change in the ecology is viewed as possible contributor to the disappearance of some of the fish species especially the *Tilapia esculenta* and *proto-pterus*.<sup>109</sup> Thirdly, the increased flooding and swamps around the Lake have provided breeding grounds for mosquitoes, thereby creating a special health problem. Finally, the raised level of the lake resulted in submergence of pier facilities at Kisumu, Kenya Bay, Homa and Asembo Bay. Throughout 1960s temporary pierage facilities had to be deployed at each of the above centres till the piers were rehabilitated in 1974 at a cost to the East African Railways Corporation. There may well be similar consequences realized in Tanzania and Uganda but these have not been publicized.

It does not seem as if Kenya ever sought to ascertain the reasons for the increased volume of water or the raised level of the lake. But the Railways authorities at Kisumu continued to receive data on the level of the lake, first from the Uganda Ministry of Water Development, and after 1967, from the Hydrometeorological Survey headquarters at Entebbe.

But on June 22, 1973, Orinda Sibuur, a Kenya member of East African Legislative Assembly raised the issue at the Assembly and squarely blamed the control of the outlet at the Owen Falls Dam for withholding too much water in the lake and causing the high level of the lake.<sup>100</sup> The Ugandan delegates denied that there was any causal relations between the Owen Falls Dam outlet controls and the rising level of the lake. But at a resumed debate on the issue on 25 June 1973 Joseph Nyerere of Tanzania joined Orinda Sibuur in blaming the Owen Falls for the problems. The Ugandan representative maintained that the level of the lake had resulted from the heavy rainfall of 1961. At the end of the day a resolution was adopted calling on the three governments to ascertain the cause of the problems and to find speedy solutions. Nothing has been published on that, if the three governments ever acted on that resolution.

The problem of the rising lake level might be attributable to the control of sluices at the Owen Falls Dam because it started in 1961, the same year that the Dam started operation. This line of argument rejects the rainfall hypothesis on the grounds that the increase was too high for what might result from the rainfall, and that it lasted until nearly 1969 before a slight decline was noticed.

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109. Welcome, "The Effects of Rapidly Changing Water Level in Lake Victoria Upon Commercial Catches of Tilapis (pisces: Cichlidae) in Obeng, (Ed) *Man-Made Lakes: The Accra Symposium* (Accra: Ghana University Press, 1969) pp 242-249; Kongere, P.C., 'Production and Socio-Economic Aspects of Lake Victoria Fisheries, Seminar Series on Lake Victoria, No.6, University of Nairobi, IDS, April, 1979; and Odera, N., "Fish Species, Distribution and Abundance in Lake Victoria", Seminar Series on Lake Victoria, No. 11, University of Nairobi, May 1979.

110. See, *The East African Standard* (Nairobi), June 23, 1973, p.5.

But what might be further interesting is if the volume of water contained in the  $2\frac{1}{2}$  meters increase can be estimated. For instance, if the rise of  $2\frac{1}{2}$  meters accounted for about 175 billion cubic meters, then that would be equivalent to about twenty times the total annual inflow into the lake by all the Kenyan rivers together. Hydrologists and meteorologists should calculate if, with a natural out-flow at Jinja, the rainfall could still have forced the lake to store that much water.

The theory that the control of outflow at Jinja are responsible for the increased lake level are strengthened by the background information on the construction of the dam which was to make the lake into century storage head. As evidenced in the background to the agreement discussed above, the dam was expected to result in the rising level of the lake to the margin realized; the agreement itself allowed for such a rise and for compensation to injured parties. Therefore, any submission that the dam *could not* have caused the rise in the level of the lake is, in our view, suspect and perhaps, misleading. The hydro-meteorologists should have given an opinion of what in their view caused the rise.

Meanwhile, a Kenyan cabinet minister recently submitted before Parliament that no experts had given him a satisfactory explanation as to the cause of the raised level of the lake. He added, "I believe that the [Jinja] dam causes the water to rise and consequently lakeshore residents are often subjected to floods."<sup>111</sup>

It seems that the last word on the problem has not been said. The Hydro-meteorological Survey team could have given a more complete answer to the question. However, should Kenya and Tanzania find that report unsatisfactory with regard to this particular matter then they should seek an agreement on a balanced formula for assessing the causes of unusual rise in the Lake Victoria level. Some general observers report that the level has been on the upswing since the beginning of 1978 and that the change is already noticeable at popular spots such as Hippo Point at Kisumu. The Ministry of Water Development are understood to be conducting studies to verify this state of affairs and they may have some explanation or better hypotheses in the near future.

(b) The establishment of the Lake Victoria Basin Development Authority to spearhead comprehensive development in the catchment area of Lake Victoria is a unique development. Through the working programmes of the Authority Kenya might soon begin to realize aspects in which it needs to consult with the other two riparian states.

Some of the questions may be hydrological. For instance, programme planning might be treacherous unless problems such as erratic rise in the level of the lake are eliminated. On the other hand, increased use of the waters of

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111. Hon. James Osogo, Minister of Health in parliamentary debate, reported in *The Standard* (Nairobi), July 8, 1976.

e rivers before they reach the lake may have effect on the level of the lake. y the same token, if such utilization of water can make a difference for the ke level, then it might also have impact on the water flowing down the Nile. i which case, Egypt might want to discuss with Kenya the seasonality and antity of water used on the Kenya side. This might be particularly the case Tanzania also decides to carry out the Smith Sound Project because the ombined impact of the use by the major source of Lake Victoria waters might ake a major difference in the water storage which Egypt has always coveted. here seem to be some problem for Egypt in this general scheme of projects.

There is also the question of conservation of fishery resources of the lake. lthough the popular view is that there has been very little migration of fish in id out of the Winam Gulf, conservation measures to maintain the proper source balance might still be necessary. Absence of large-scale migratory atterns by the lake fish species does not mean that fish obey the territorial oundaries because by nature, fish move the hydrosphere according to their espective biology. After all, the Nile perch is supposed to have wandered from e Nile into Lake Victoria upto Winam Gulf on their own volition.<sup>112</sup> There- ore, a modicum of consultative framework among the three littoral states ight be necessary if the Authority is to have effective long-term control of fish s an important development resource.

(c) It has been mooted in Kenya that, given adequate technology, Kenya hould transfer the Lake Victoria catchment water to the arid areas of the ountry for purpose of irrigation.<sup>113</sup> Perhaps the handiest scene for that kind f experiment would be the Kerio Valley for which a special development Authority has been established by the Kenyan Parliament. The question of easibility of such projects is an engineering one which some observers say is within reach. One expert opinion has estimated that irrigable land in the Kenyan part of the Nile basin is about 52,212 acres that requires  $296.85 \cdot 10^6 \text{m}^3$  of water annually, but that there must be additional areas that would require another  $182 \cdot 10^6 \text{m}^3$  of water per year.<sup>114</sup> To what extent Kenya has checked these estimates and/or takes the possibility seriously is not publicly known.

Such undertaking would use massive quantities of water if it was to be xecuted at all. In large measure, the projects would be analogous to that of Tanzanian irrigation of the Vembere Steppes. And perhaps for engineering easons the two governments alone would need to consult with one another so that they can establish the amount taken which, in turn, would determine the lake level and therefore given indication of the power needed to transfer water from the lake to the fields.

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112. Kongere, P.C., "Production and Socio-Economic Aspects of Fisheries in the Lake Victoria Basin" (Kenya), Seminar Series on Lake Victoria Basin Development No. 6, (Institute for Development Studies, University of Nairobi, May 1979), pp. 10-11.

113. *Daily Nation* (Nairobi), March 17, 1978, p.3.

114. See Dekker. G., "A Note on the Nile" in *Water Resources Research*, Vol. 8, No. 4, Aug.1972, pp. 818, 827.

Once more, such projects would make Egypt very nervous since it has stationed resident engineers at Jinja just to oversee the water storage value of the lake. Needless to say, it would be up to Egypt to change its attitude to date, and urge for an agreement on the hydrological and legal regime of the entire Nile basin.

## 6 General

Some general developments in the international scene which would have impact on the use of the internationally shared water resources may be mentioned below.

First, there are changes in the global political economy. No group of states demonstrated it better than the Arabs that a national natural resource is a powerful political weapon when they imposed an oil embargo against the friends of Israel. Thus, informal commentators have argued that water should be used to bargain with Arab states for their oil. So the slogan would go, "one barrel of oil for a barrel of water" flowing down the Nile past Nimule! The seeming joke makes the point even though Egypt may have had its problems with some of the oil producing Arab states.

The foregoing point relates to the question of the New International Economic Order whereby states are supposed to cooperate in the management of resources to promote equitable development.<sup>115</sup> The accent here is on cooperation to prevent both waste of resources as well as conflicts arising from absence of cooperative framework for management.

Secondly, the range of demands on the water resources is increasing and one of the most serious one is the problems of pollution. As noted earlier, conservation of the resources of Lake Victoria must be approached on a lake-wide basis because pollution will not respect territorial boundaries. Municipal and industrial effluents discharged into one part of the lake in one of the three countries will have consequences for another state. Thus, in 1973 V. M. Eyakuze, of the then East African Medical Research Institute, and his colleagues called on the East African states to form a regional commission on water pollution to find mechanisms for preventing continuing pollution in Lake Victoria.<sup>116</sup> They observed that lake pollution was becoming "increasingly evident in the past few years" to the extent that it threatened some fish species. Similar alarm had been sounded by Kenyan authorities.<sup>117</sup> What is important in these pollution-related developments is not the alarmist content but that they are pointers to an impending problem which requires early preventive action.

Thirdly, as pointed out earlier the applicable law on internationally shared water resources has been developing and is certainly more crystallized to day than in 1960 when the last agreement on the Nile waters was signed. Therefore,

115. See comments referenced in note 27.

116. *Daily Nation* (Nairobi), February 7, 1973.

117. *East African Standard* (Nairobi), Dec. 12, 1971, p.7. See some recent concerns expressed in *Daily Nation*, April 12, 1979, p.5.

it might be worthwhile for all the basin states to have a fresh look at the legal regime and to begin working together on the formulation of a regional practice meeting local exigencies of the time.

## VI FINAL COMMENTS

For every issue discussed here conclusions have been drawn at the end of every section. What seems clear throughout is the desirability for a framework for consultation and exchange of information on actual or intended projects involving utilisation of the basin waters. One responsibility to be accomplished within the framework might be actual hydrological and meteorological studies to ascertain basic or secondary facts and consequences of the use of such waters.

What the countries decide to call the "framework" is immaterial so long as it involves all the basin states and embraces the kinds of issue areas that have been apparent in the above analysis. That is, the present system where Egypt decided to cooperate with Britain as a colonial power and to ignore all upper riparians should be rejected as untenable. The present writer recommends an urgent agreement on a treaty creating a *regulatory* framework, involving all states of the Lake Victoria and Nile system. Such a framework would then provide for the creation of *development* authorities to deal with development work for various parts of the basin; the latter category to include Kagera Commission or the Kenyan Lake Victoria Basin Development Authority. But the disarray noticeable in the present treaty situation should not be allowed to continue in view of the recent developments we have seen above.

Kenya, Tanzania and Uganda ought to remember that pursuant to the 1959 Agreement, Sudan and Egypt have undertaken to adopt a joint position in the event of any negotiations with third states. It is also important that the two countries are better equipped in terms of hydrological and meteorological data because they have worked at it since the 1959 agreement. They may also be favoured in terms of access to the basic facts in the present hydro-meteorological survey done under the auspices of the World Meteorological Organization. There is very little advantage for the three East African countries in terms of technical information as compared to Egypt and Sudan. They let go the concept of Consultative Committee started in 1956. But they can surely use bargaining skills given the present state of the art in law of internationally shared water resources. The question is not one of re-negotiation of the legal regime but one of a "clean-slate" negotiation because for most of the states there is no previously negotiated agreement on this subject area. It is easier to agree on such a framework while there is a propitious atmosphere than after a conflict has arisen among all or some of the basin states.