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Common Goods and the Common Good: Transboundary Natural Resources, Principled Cooperation, and the Nile Basin Initiative.

*Zewdineh B. Haile** and *Ian L.G. Wadley***

***Abstract:** Transboundary natural resources pose particular problems for the international community, and the community of African States presents no exception. The peaceful management and utilization of these resources is a universal aspiration, but the principles and norms governing international cooperation over natural resources are often just as contested as the ownership of the resource itself. In Part One, the emergent practices, norms and principles applicable to transboundary freshwater and petroleum are reviewed, along with the possibility of further development of these norms through the current mandate of the UN Special Rapporteur on Shared Natural Resources, Ambassador Chusei Yamada. The history of the UN Convention on the Law of Non-Navigational Uses of International Watercourses is reviewed, with an emphasis upon the foundational principles which it contains. The emergence of the petroleum Joint Development Agreement is also analyzed, again emphasizing the fundamental norms of cooperation upon which this practice has been built. Part Two addresses the specific example of the Nile River Basin, examining theories of distributive justice in the light of State practice in the Nile River Basin to date. A vision of distributive justice and state action is advanced, drawing on the theoretical bases of literature regarding the morality of states, and cosmopolitanism. A combination of pragmatic and theoretical perspectives permits the development of recommendations for future action by States engaged in the Nile Basin Initiative, for the common good.*

Natural Resource Issues in Africa – A Cause for Conflict?

It has been observed that ‘the problem of achieving effective cooperation between relevant parties represents one of the greatest obstacles to ensuring the equitable and sustainable management of transboundary resources.’¹ Unfortunately, effective cooperation may easily be eclipsed by outright conflict over natural resources, and this reality is particularly evident in the case of transboundary natural resources.²

The Nile River Basin is a case in point, combining great strategic and symbolic value for the riparian States. Egypt, the major downstream State and the regional power-broker,

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¹ Peter R. Hocknell, *Boundaries of Cooperation: Cyprus, de facto Partition, and the Delimitation of Transboundary Resource Management*, 15 (International Boundary Studies Series, Blake, Gerald et al (Eds), 2001).

² See the analysis of Thomas Homer-Dixon in support of this conclusion, in Thomas F. Homer-Dixon, and Jessica Blitt, *Ecoviolence : Links Among Environment, Population and Security*. 1-17, 1998.

considers the Nile River flow a national security issue.³ So much so that when the upstream State of Sudan suggested in 1995 that it might review its existing water arrangements with Egypt, the 1959 Nile Waters Agreement, the Egyptian President Muhammed Hosni Mubarak was inclined to resort to open threats of military action against its neighbor, stating: ‘Any step taken to this end will force us into confrontation to defend our rights and our life. Our response will be beyond anything they can imagine.’⁴ The Sudanese Government withdrew its threats of damming the Nile, which were perhaps more rhetorical than substantive.⁵

In order to prevent disputes over transboundary natural resources escalating into threats of the use of force, States must look for common principles and accepted international norms and standards by which these transboundary natural resources may be equitably and efficiently utilized, without causing significant harm to the environment or to other users of the resource. This paper concerns itself with this challenge.

In Part One of the paper, Ian Wadley provides an overview of international cooperation on transboundary freshwater and petroleum, and describes the emergent norms and principles on which future cooperation may be based. This discussion addresses the current context of transboundary natural resource management, reviewing the definition of central terms, and outlining the development of international responses to the problem of transboundary natural resources. The appointment by the United Nations International Law Commission of a Special Rapporteur on Shared Natural Resources is discussed, and possible outcomes reviewed.

In Part Two of the paper, Zewdineh Haile addresses the specific example of the Nile River Basin, in theory and in practice. The contemporary and historical practice of the Nile States is reviewed in the light of various theories of distributive justice in international affairs. This analysis affords a basis from which the status quo of the Nile River’s use may be called into question, and proposals advanced for the just and equitable future management of the entire Nile River Basin.

PART ONE: Transboundary Natural Resources in Context

Transboundary Natural Resources Defined

The term ‘transboundary natural resource’ would not be particularly problematic to define, were it not for the abundance of diverging terminology which characterizes the field of natural resource management in the international domain. In the interests of clarity, it is necessary to define the term ‘transboundary natural resource’, and then to distinguish it from the plethora of other competing terms which have emerged in international law and international relations to describe problematic natural resources.

³ See Michael T. Klare, *Resource Wars* 152 (2001), citing Waterbury, *Hydropolitics of the Nile Valley* 77-86 (1979).

⁴ Quoted in *War of Words and Water*, Al-Ahram Weekly, July 6-12, 1995, as quoted in Greg Shapland, *Rivers of Discord* (St Martin’s Press: 1997), cited in Michael Klare, *Resource Wars*, *ibid*, 158. See also The Times, July 7, 1995, Friday, ‘In The Heat Of The Nile’.

⁵ The Irish Times, July 21, 1995, Page 8, ‘Palestinians to get fairer share of water supplies, but no control’ Michael Jansen.

For the purposes of this paper, a natural resource will be understood to mean a valued raw material which occurs in its primary state without human intervention or initiative. Adding the term ‘transboundary’ to ‘natural resource’ then denotes a natural resource which is transected in its natural state by a political boundary such as a national frontier.⁶

Furthermore, a transboundary natural resource should be taken to mean a natural resource which is not only transected by a national frontier, but which is capable of traversing that frontier by virtue of its state of flux. The process of self-equilibration, whether observed in oil fields, natural gas deposits, groundwater, or surface water, is a key characteristic of the transboundary natural resource for the purposes of this discussion. Given this key characteristic, it would perhaps be better to describe these resources as ‘*Mobile Transboundary Natural Resources*’, but in the interests of a less cumbersome description, this paper will denote these resources simply as transboundary natural resources.

Transboundary natural resources therefore exclude static natural resources such as gold, timber, diamonds, and coltan. Some might assert that a seam of gold-bearing ore might be appropriately described as being ‘transected by an international frontier’, and therefore would qualify as a Transboundary Natural Resource according to our definition. However, the physical properties of static natural resources nevertheless distinguish them from mobile natural resources such as water and oil, in terms of their physical characteristics, and the processes required for their extraction and commercial exploitation. Static natural resources are therefore distinguished from mobile Transboundary Natural Resources in this paper, and in international and domestic law.

This distinction may be simply illustrated. Although the ownership of static natural resources such as gold is often contested, the application of simple geographic and geological survey techniques can quickly resolve these disputes, at least in principle. In the African context, the Organization of African Unity Resolution on Border Disputes of 1964 established the post-colonial boundaries of the African States as legally binding, if not historically legitimate, thereby removing the prospect of many ongoing border disputes.⁷ By combining these recognized international boundaries with the doctrine of permanent sovereignty over natural resources,⁸ it is possible to ascertain with relative ease the rights held by each claimant over the contested resources. In cases involving contested static natural resources, and where no boundary has been demarcated, the solution is quite simply the demarcation of the boundary, or the adoption of interim measures pending the delimitation of the boundary.

For these reasons, this paper gives no consideration to the case of disputed or transboundary static natural resources.

⁶ Sub-national boundaries and regions are also relevant for the consideration of transboundary natural resources, but in the interests of space, this paper addresses itself only to the question of national boundaries in relation to natural resources.

⁷ Organization of African Unity Resolution on Border Disputes, July 21, 1964, OAU AGH/Res. 16(1) (1964).

⁸ Derived from the *United Nations Charter on the Economic Rights and Duties of States*, UNGA Resolution 3281(XXIX), 12 December 1974, Article 2.

This paper also excludes from the definition of transboundary natural resources those natural resources which are capable of traversing a boundary because they are animate creatures. This discussion will not concern itself with straddling and migratory species such as fish, birds, whales, seals, or with living natural resources which are passively transported by currents and tides.⁹ Instead, this paper concerns itself solely with non-living transboundary natural resources, and specifically with petroleum and fresh water, as examples of natural resources which present particular problems of cooperation and coordination in the international and municipal domains.

In place of the term ‘transboundary natural resources’, some commentators have preferred to describe this kind of natural resource as a ‘shared natural resource’. This preference is reflected in the current mandate conferred by the General Assembly upon the International Law Commission’s Special Rapporteur on Shared Natural Resources.¹⁰ However, it is arguable that the term ‘shared’ may be less appropriate than ‘transboundary’ in the circumstances of the resources described above. The word ‘transboundary’ is both accurate and precise in denoting a thing which traverses a boundary, while the word ‘shared’ may be inaccurate or imprecise, given that it speaks of the actions and attitudes of parties with respect to the resource (i.e. ‘sharing’), and not simply of the state of the resource itself.¹¹

This distinction becomes more evident when it is observed that transboundary natural resources could be best described in many cases as ‘contested’ or ‘divided’, rather than as ‘shared’. In any case they remain transboundary in their natural state, and the authors of this paper therefore prefer to denote these resources as *transboundary* natural resources.

The terminology employed in the *UN Convention on the Law of the Non-navigational Uses of International Watercourses (1997)*¹² (‘The Non-Navigational Uses Convention’) has also contributed the concept of an ‘international watercourse’ to the language employed in the description of transboundary natural resources. It is useful to review this definition for the purposes of the present discussion.

⁹ The living natural resources of surface water, including fish and crustaceans are relevant to this discussion when considered as part of the ecological system of the river basin, which riparian states should seek to preserve. However, this paper does not concern itself directly with these living natural resources, focusing instead on the primary resource of the water itself.

¹⁰ Despite the objections raised by some States. See *Shared Natural Resources: First Report on Outlines*, First Report of the Special Rapporteur on Shared Natural Resources, Amb Chusei Yamada, International Law Commission, 55th Session, U.N. Doc. A/CN.4/533 (2003) at p.3.

¹¹ The Special Rapporteur on Shared Natural Resources has expressed the view that the current wording of his mandate should not be changed without due consideration, given that it has received the official approval of the General Assembly. In the short term, the Special Rapporteur intends to clarify the meaning of ‘shared natural resources’ by defining the resources in physical terms. See UN Doc.A/58/10, *Report of the International Law Commission, 55th Session, 2003*, (GAOR 58th Session, Supp. No.10, 2003) at p.p262, 266.

¹² *UN Convention on the Law of the Non-navigational Uses of International Watercourses (1997)*, UN Doc. A/51/869.

According to the Convention, a watercourse is ‘a system of surface water and groundwaters constituting by virtue of their physical relationship a unitary whole and normally flowing into a common terminus’,¹³ while an *international* watercourse is ‘a watercourse, parts of which are situated in different states’.¹⁴ As defined, this term applies only to a system of inter-related ground and surface water and not to decoupled aquifers, which form another subset of transboundary water resources. An international watercourse should therefore be understood to be a subset of transboundary water resources.

This brief review of definitional issues illustrates some of the difficulties inherent in the treatment of transboundary natural resources within international law and institutions.¹⁵ By contrast, static natural resources present a relatively ‘easy case’, which may be resolved with reference to the boundary line agreed between two disputing parties or established through judicial determination.

In this paper, the focus is therefore placed upon the ‘hard case’ of transboundary natural resources, and upon the emerging responses of the international community to foster the principled and cooperative management of these resources. In particular, Part Two of this discussion will draw attention to the progress made towards the principled and cooperative management of the Nile River Basin under the auspices of the Nile Basin Initiative. Before turning to address this theme, this paper will note the general context of international cooperation on transboundary natural resources, and the international efforts being made to regulate the use and conservation of transboundary river basins, petroleum fields and fresh water aquifers.

Responses by the International Community to Transboundary River Basins

The international community’s response to transboundary natural resources begins in the modern era with the development of norms and principles by which States should regulate the use of transboundary rivers. A number of multilateral arrangements between European States in the late 18th and early 19th century are worthy of note. The 1804 Convention between the French and German Empires provided that the Rhine River was common property between the riparian empires, and that navigation along the Rhine was to be regulated by agreement between the parties.¹⁶ The Congress of Vienna in 1815 also occupied itself with the critical issue of navigational uses of international rivers, resulting in the proclamation of the principle of free navigation on international rivers.¹⁷ This

¹³ *Ibid*, Article 2(a).

¹⁴ *Ibid*, Article 2(b).

¹⁵ The definition of an international watercourse was a particular challenge for the ILC when this matter was addressed, occupying a great deal of time and lengthy negotiations. See Stephen C. McCaffrey, *Seventh Report on the Law of the Non-Navigational Uses of International Watercourses*, UN Doc. A/CN.4/436 (1991), and commentary in Eyal Benvenisti, *Collective Action in the Utilization of Shared Freshwater: the Challenges of International Water Resources Law*, 90 AJIL 384, at 398 (July 1996).

¹⁶ See Commentary in Hilal Elver, *Peaceful Uses of International Rivers*, (Transnational Publishers: New York, 2002), at pp.108.

¹⁷ See Commentary in Hilal Elver, *Ibid*. Also see *Shared Natural Resources: First Report on Outlines*, First Report of the Special Rapporteur on Shared Natural Resources, Amb Chusei Yamada, International Law Commission, 55th Session, U.N. Doc. A/CN.4/533 (2003) at p.3.

concern with the navigational uses of international rivers continued with the establishment of the European Danube Commission under the Peace Treaty of Paris in 1856.¹⁸ This treaty provided the template for future international cooperation regarding the regulation of international rivers.

In 1970, the UN addressed a sub-set of transboundary natural resources, namely transboundary river basins. A request was submitted from the General Assembly of the United Nations to the International Law Commission via Resolution 2669(XXV), to take up the study of the law on the non-navigational uses of international watercourses with a view to the progressive development and codification of that law.¹⁹

The more general theme of transboundary natural resources was addressed by the Declaration of the United Nations Conference on the Environment held at Stockholm from 5 to 16 June 1972, notably in principles 21, 22, and 24.²⁰ From this basis, the General Assembly in Resolution 3129 (XXVIII) of December 1973 called upon States to establish ‘adequate international standards for the conservation and exploitation of the natural resources shared by two or more States, by means of an effective system of cooperation’,²¹ referring to the Economic Declaration of Algiers in 1973.²²

The wide-ranging appeal made by Resolution 3129 (XXVIII) in 1973 may be contrasted with the earlier request from the General Assembly of the United Nations to the International Law Commission in Resolution 2669(XXV) of 1970 to take up study of the law on the non-navigational uses of international watercourses with a view to the progressive development and codification of that law.²³ The earlier request was focused upon a specific manifestation of the problem of transboundary natural resources – namely the non-navigational uses of international watercourses. A resolution of the UN Economic and Social Council on 25 July 1975 explained the intention behind this mandate, appealing to the Secretary General to use all the resources of the United Nations system to assist the ILC with its work, ‘...to enable the Commission to decide on the

¹⁸ *Ibid.*

¹⁹ G.A. Resolution 2669(XXV). For those readers unfamiliar with the role of the ILC, see the introductory text at <http://www.un.org/law/ilc/introfra.htm>, accessed 20 April 2004, and see also the helpful explanation of the role of the ILC Special Rapporteurs under the heading ‘Methods of Work’ at <http://www.un.org/law/ilc/progfra.htm>, accessed 20 April 2004. The matters drawn to the attention of the ILC by member States of the UN tend to be issues with which a large number of States are concerned, and in which the States are in fact actively seeking a framework for regulation, cooperation, or other means of formalizing their relationships. In responding to the need of States for certainty in contentious areas of law and practice, a special rapporteur’s function is to identify those State practices which, combined with the requisite element of *opinion juris*, are contributing to the emergence of new areas of customary international law. In addition, a special rapporteur has the opportunity to make recommendations for the crafting of these emerging norms into draft articles for a convention or treaty so that the best practice of States might become crystallized in an international agreement.

²⁰ 11 I.L.M. 1416 (1972)

²¹ UN Doc. A/RES/3129(XXVIII), UN General Assembly (GAOR, 28th Session; Supp no.30, 1973, pp.48,49), *Cooperation in the field of the environment concerning natural resources shared by two or more States*, 2199th plenary meeting, 13 Dec, 1973.

²² UN Doc. A/9330 and Corr.1, p.57, *The Economic Declaration adopted by the Fourth Conference of Heads of State or Government of non-Aligned Countries*, held at Algiers from 5 to 9 September 1973.

²³ G.A. Resolution 2669(XXV).

principles and methods for determining criteria for the *equitable* sharing of responsibilities and benefits in the management and integrated development of international river basins.²⁴ [Emphasis mine] The concept of equity is central to this resolution, and this concern finds its reflection in many of the international agreements and statements concerning transboundary natural resources, as will be seen below.

It is important to note that the focus upon the law of the non-navigational uses of international watercourses contained in the 1970 UN General Assembly resolution has until recently arguably served to obscure the broader question of the cooperative conservation and exploitation of *all* transboundary natural resources, or in the original words of the 1973 UNGA Resolution 3129(XXVIII), resources shared by two or more States.²⁵ The more narrow focus of the 1970 resolution is arguably in tension with the 1973 resolution, to the extent that the 1970 resolution excluded from the International Law Commission's mandate the contentious but highly important issue of transboundary petroleum.

Notwithstanding the limitation of the ambit of inquiry to 'the non-navigational uses of international watercourses' in place all 'resources shared by two or more States', it is clear that the mandate conferred upon the International Law Commission ('ILC') in 1970 served to develop the purview of international law and institutions over international watercourses, and this restriction in scope was arguably a prudent measure.²⁶ The International Law Commission's long-running inquiry allowed for the consideration of a wide range of potentially deleterious uses of watercourses by States (the construction of dams and levees, dredging, industrial and residential pollution, fishing etc) and the effects of those uses on other riparian States. The Commission's work represented an important conceptual expansion from the previous pre-occupation of States with purely navigational uses of international watercourses:

'The aim of the navigational regime is to provide the concerted administrative measures to guarantee free navigation on the river system. The non-navigational use regime must focus on providing an equitable balance of interests to the states concerned and to safeguard against adverse effects on the environment.'²⁷

The concern with adverse effects on the environment and upon the equitable balancing of the interests of multiple users of an international river ('externalities' in the economist's

²⁴ UN Doc. E/RES/1955(LIX), UN Economic and Social Council Res.1955(LIX), (ESCOR, 59th Session, Supp. No.1, 1975, p.10), *International river basin development*, 1975th plenary meeting, 25 July 1975.

²⁵ UN Doc. A/RES/3129(XXVIII), UN General Assembly (GAOR, 28th Session; Supp no.30, 1973, at p.49), *Cooperation in the field of the environment concerning natural resources shared by two or more States*, 2199th plenary meeting, 13 Dec, 1973.

²⁶ Note that the ILC required 20 years of investigation and negotiation in order to propose draft articles regarding international watercourses to the General Assembly, and these articles were finally approved by the General Assembly in 1997, 26 years after the ILC began work on this complex topic.

²⁷ *Shared Natural Resources: First Report on Outlines*, First Report of the Special Rapporteur on Shared Natural Resources, Amb Chusei Yamada, International Law Commission, 55th Session, U.N. Doc. A/CN.4/533 (2003) at p.3.

language²⁸) is reflected in ancient principles of law and custom, including the maxim *sic utere tuo ut alienum non laedas* (one should use his own property in such a way as to not injure that of another).²⁹ This fundamental concern with equity, and with the balancing of the needs and interests of the community of States is a common thread in the emerging norms of international cooperation over transboundary natural resources.

A concerted effort by the ILC to address the non-navigational uses of international watercourses commenced in 1971 with the appointment of a Special Rapporteur to investigate the topic, with direct input from concerned States. This process of fact finding and analysis continued until 1991, when the ILC prepared draft treaty articles and presented them to the General Assembly for consideration by States.

These articles were received with very little criticism by the States at their first reading in 1991,³⁰ and following a two-year period for feedback from interested States, a Working Group of the Sixth Committee was constituted in order to prepare a framework convention on the law of the non-navigational uses of international watercourses. This convention was based upon the draft articles provided by the ILC, and was eventually adopted by the General Assembly on 21 May 1997, by a vote of 103 votes to 3, with 27 abstentions.³¹ Despite this apparently widespread support, the Convention has not yet received the 35 ratifications necessary for it to enter into force.³²

Leaving aside the seemingly lukewarm response of States to the ratification of this Convention, it is nevertheless noteworthy that the draft articles prepared by the ILC were received with very few objections by the member states of the UN. The non-navigational use of international watercourses is no doubt a very contentious political and security issue in many international river basins. How then did the ILC succeed in achieving consensus, or tacit consent, among the interested States? The formula adopted by the Convention in delineating the rights and responsibilities towards international watercourses is the key to understanding the relatively widespread acceptance which this framework convention received, at least in principle, if not yet in practice.

Convention on Non-navigational Uses of International Watercourses

The key elements embodied in the Convention are found in two main principles. Firstly, the Convention calls for the equitable and reasonable utilization of international

²⁸ See a definition of economic externalities in Peter H. Lindert and Thomas A. Pugel, *International Economics*, (Irwin McGraw Hill: Boston, 1996), at p.226.

²⁹ Cited in *Shared Natural Resources: First Report on Outlines*, First Report of the Special Rapporteur on Shared Natural Resources, Amb Chusei Yamada, *ibid*, at p.4.

³⁰ *Shared Natural Resources: First Report on Outlines*, First Report of the Special Rapporteur on Shared Natural Resources, Amb Chusei Yamada, *ibid*.

³¹ UN Doc. A/RES/51/229, 21 May 1997, (NB: Document banner reads 21 May 1996), 99th plenary Meeting of the UN General Assembly. ‘No’ votes were received from Burundi, China, and Turkey, (see UN Docs. A/51/251 and A/51/L.72).

³² The Convention has received 26 signatures and 13 ratifications as at 21 April 2004. See <http://untreaty.un.org/ENGLISH/bible/englishinternetbible/partI/chapterXXVII/treaty40.asp#N1>, and UN Doc. A/51/869.

watercourses, and the equitable and reasonable participation of ‘Watercourse States’ in that utilization.³³ Secondly, the Convention sets out the obligation of Watercourse States to take all appropriate measures not to cause significant harm to other Watercourse States through their utilization of the international watercourse.³⁴

The Convention calls for these twin principles (equitable utilization and the prevention of significant harm) to be put into effect through a system of good-faith cooperation among the States concerned,³⁵ involving timely notification of intended projects related to the watercourse and the exchange of relevant information, followed by consultations and negotiation.³⁶ Disputes arising under the Convention may be referred to an impartial fact-finding commission, although the findings of such a commission would not be binding upon the parties concerned, and States may even opt out of this aspect of the Convention.³⁷

The Convention therefore operates as a ‘framework convention’ rather than as a treaty establishing firm rules for the conduct of States party to the agreement. It may be argued that this deliberate ambiguity in the operation of the Convention explains why States were willing to accept the text, and that a more prescriptive formula may have prevented the emergence of well-adapted agreements through negotiation.³⁸

The Convention on the Law of Non-navigational Uses of International Watercourses provides a principled basis from which States party to the convention might begin to develop binding agreements and arrangements between themselves. These agreements must serve the primary goal of equitable utilization, without transgressing the injunction against significant harm.

Following the recommendations of UN Special Rapporteur, Professor Stephen McCaffrey,³⁹ the ILC included in the scope of the Convention those bodies of groundwater which could be said to form part of the ‘unitary whole’ of the watercourse, described in general terms as a ‘system of surface and underground waters’. The Convention therefore extends to include all connected elements of a watercourse, including related aquifers.⁴⁰ However, the ILC’s consideration of the difficult issues

³³ *United Nations Convention on the Law of the Non-navigational Uses of International Watercourses*, UN Doc. A/51/869, Signed May 21, 1997, Not yet in force, Article 5.

³⁴ *Ibid.* Article 7.

³⁵ *Ibid.* Article 8.

³⁶ *Ibid.* Articles 9-19.

³⁷ *Ibid.*

³⁸ In this regard see Eyal Benvenisti, *Collective Action in the Utilization of Shared Freshwater: The Challenges of International Water Resources Law*, 90 AJIL 384, at 403, 404 (July 1996).

³⁹ Stephen C. McCaffrey, *Seventh Report on the Law of the Non-Navigational Uses of International Watercourses*, UN Doc. A/CN.4/436 (1991), paragraphs 8-58.

⁴⁰ Broadly speaking, an aquifer is a single geological formation of permeable water-bearing rock, from which water may be feasibly extracted to the surface. A related aquifer is one which receives recharge from or provides discharge to a surface and groundwater hydraulic system, and may therefore be said to be related to that system. A de-coupled aquifer is a ‘fossil’ aquifer, receiving negligible recharge from and providing negligible recharge to a surface and groundwater hydraulic system. A series of hydraulically connected aquifers is known as an aquifer system.

surrounding international watercourses did not extend to include groundwater in decoupled or isolated aquifers, which cannot be described as forming part of the system of the watercourse.

Some members of the ILC argued that relatively little was known about decoupled aquifers, and it was suggested that even where the aquifer was transboundary, it would not be appropriate to include such bodies of water in a convention which purported to deal with watercourses, not with decoupled aquifers. Members of the ILC concluded that the issues arising from the utilization of decoupled aquifers were closely related to those issues connected with analogous natural resources contained in single geological structures, such as oil and gas, and should be dealt with in that light, in a separate legal instrument.⁴¹

As a result of these discussions, it was suggested that the ILC should continue its examination of problematic transboundary natural resources with a new mandate to address issues arising from ‘shared natural resources’. This marked the genesis of the present mandate regarding Shared Natural Resources, which was conferred upon Ambassador Chusei Yamada as Special Rapporteur. This recent mandate will be considered in greater detail below.

The Special Rapporteur on Shared Natural Resources

During the first part of its fifty-fourth session in 2002, the ILC, following the invitation of the General Assembly, included in its forthcoming programme of work an item entitled ‘Shared natural resources’, appointing Ambassador Chusei Yamada the Special Rapporteur on this topic, and creating a working group to assist him in his responsibilities.⁴² Ambassador Chusei Yamada is a diplomat and a distinguished scholar, with a long record of service to his country and to the wider international community.⁴³

The fact that Ambassador Yamada has been appointed by the International Law Commission as the Special Rapporteur on this important topic is particularly significant. Japan does not share any transboundary water aquifer with a neighbor, and it does not have a direct interest in any transboundary petroleum fields. In fact, Japan’s vested interest on the issue of contested natural resources lies in the establishment of peaceful means of resolving disputes over transboundary natural resources, given its reliance on imported oil,⁴⁴ and its proximity to the contested Spratly Island Group in the South China

⁴¹ GAOR 55th Session, Supp No.10 (UN Doc.A/55/10), annex, sect.3.

⁴² GAOR, 56th Session, Supp No.10, and corrig. (A/56/10, and Corr.1), para 518

⁴³ Born in Osaka, Japan, and graduated from the University of Tokyo, Law School (BLL) in 1954 and from the Fletcher School of Law and Diplomacy (MA), Massachusetts, USA, in 1956. Ambassador Yamada is Professor of International Law, Faculty of Law, Waseda University in Tokyo, and Special Assistant to the Minister for Foreign Affairs of Japan. He joined the Japanese Ministry of Foreign Affairs in 1954 and has served in various Japanese diplomatic posts abroad, and as a representative of the Government of Japan to numerous international conferences and organisations. Ambassador Yamada has been a member of the UN International Law Commission since 1992 and served as First Vice-Chairman of the 46th Session in 1994 and 1995. From <http://www.unu.edu/council/members/yamada.html>, accessed 6 February 2004.

⁴⁴ Three quarters of Japan’s oil supply is imported, and passes through the South China Sea on its way from the Persian Gulf, according to Michael T. Klare, *Resource Wars* 131 (2001).

Sea. In selecting Ambassador Yamada as Special Rapporteur, the ILC emphasized the importance of an impartial and measured response to the problems of transboundary natural resources, and the development of recommendations which will constitute a workable compromise between the various interests of States.

The Program of Work of Special Rapporteur Yamada

Given the breadth of the nominated topic, in 2002 the Special Rapporteur prepared a discussion paper indicating his intention to consider transboundary aquifers and petroleum fields within the ambit of his mandate,⁴⁵ and distinguishing these resources from straddling and migratory living natural resources.⁴⁶ The Special Rapporteur also initially limited the scope of his inquiry with reference to the work already completed by the ILC in relation to the non-navigational uses of international watercourses, indicating that his mandate should only extend to those natural resources not covered by the Convention on the Law of the Non-navigational Uses of International Watercourses.⁴⁷

Given the background of the ILC's discussions, Special Rapporteur Yamada proposed in 2002 a four-year programme of investigation from 2003 to 2006, covering two main topics: transboundary aquifers and petroleum fields.⁴⁸ The inclusion of petroleum in the scope of the study immediately met with opposition. During the debate in the Sixth (Legal) Committee of the UNGA at its 57th session in 2002, some States argued that the scope of the Special Rapporteur's mandate should be restricted to groundwater, and should not address the issue of transboundary petroleum fields.⁴⁹ In the views of these States, transboundary petroleum fields are rarely a cause for ongoing differences between States, a suggestion which seems unpersuasive in view of the ample evidence to the contrary.⁵⁰ Those States opposing the extension of the Special Rapporteur's mandate to transboundary petroleum fields also argued that the Special Rapporteur would find no consistent pattern of response by States to these problems, and that therefore any attempt to identify an emerging norm of customary international law would be illusory.⁵¹

⁴⁵ UN Doc. ILC (LIV)/IC/SNR/WP.1

⁴⁶ According to the narrative provided by the Special Rapporteur in a later report, *Shared Natural Resources: First Report on Outlines*, First Report of the Special Rapporteur on Shared Natural Resources, Amb Chusei Yamada, International Law Commission, 55th Session, U.N. Doc. A/CN.4/533 (2003), at p.2.

⁴⁷ *Shared Natural Resources: First Report on Outlines*, First Report of the Special Rapporteur on Shared Natural Resources, Amb Chusei Yamada, International Law Commission, 55th Session, U.N. Doc. A/CN.4/533 (2003), at p.8. Note that article 2(a) of the Convention on the Law of the Non-navigational Uses of International Watercourses defines 'watercourse' widely, including all of those hydrological elements of surface and ground water which may be regarded as related to the watercourse system.

⁴⁸ In UN Doc. ILC (LIV)/IC/SNR/WP.1, and see *Shared Natural Resources: First Report on Outlines*, First Report of the Special Rapporteur on Shared Natural Resources, Amb Chusei Yamada, International Law Commission, 55th Session, U.N. Doc. A/CN.4/533 (2003), at p.2.

⁴⁹ *Shared Natural Resources: First Report on Outlines*, First Report of the Special Rapporteur on Shared Natural Resources, Amb Chusei Yamada, *ibid*, at p.3.

⁵⁰ See, e.g. Michael T. Klare, *Resource Wars*, 27-137 (2001).

⁵¹ UN Doc. A/CN.4/529, Paragraph 236. It may be argued that even this limited outcome would provide a useful basis on which States could work together to establish principles and norms reflecting best practice in this sphere.

Despite these indications of opposition, the Special Rapporteur has indicated his intention to continue with the programme of work as initially endorsed by the UN General Assembly, beginning with transboundary aquifers, and moving on to transboundary petroleum fields. However, Ambassador Yamada has noted that the study on aquifers might require more time than originally envisaged in his programme of work.⁵² It remains to be seen whether the limitations of time may eventually preclude a study of transboundary petroleum within his mandate term.

The Special Rapporteur's recommendations will be drawn from the response of the international community to transboundary natural resources, specifically petroleum and fresh water. This discussion will therefore now turn to examine these areas of State Practice, with a view to identifying the emergent norms and principles which will form the basis of the Special Rapporteur's recommendations to the international community.

Responses by the International Community to Transboundary Aquifers

The Special Rapporteur's early reports on this subject indicate that there is a paucity of knowledge regarding the management and exploitation of transboundary aquifers, in the domains of law, science and policy.⁵³ However, enough is known about these resources to enable the Special Rapporteur to indicate early to the ILC that his recommendations will call for the creation of a specific legal regime to cover the situation of transboundary 'fossil aquifers', which are de-coupled fresh water aquifers that receive no contemporary re-charge from surface or ground water, and therefore constitute a non-renewable resource. Because of these characteristics, fossil aquifers are particularly vulnerable to pollution and depletion.⁵⁴

While these aquifers are of vital importance in many arid regions, the Special Rapporteur has noted that the principle enjoining 'significant harm' in the Convention on the Law of the Non-Navigational Uses of International watercourse is not appropriate for the situation of fossil aquifers.⁵⁵ The absence of flow into and within these aquifers in their natural state means that they could be almost impossible to restore if polluted. In addition, the principle of 'equitable and sustainable use' is not readily applicable to the transboundary fossil aquifer over the long run, given that the aquifer will be depleted irreversibly by any use, whether rapid or gradual.

⁵² *Shared Natural Resources: First Report on Outlines*, First Report of the Special Rapporteur on Shared Natural Resources, Amb Chusei Yamada, *ibid.*, at p.3.

⁵³ See *Shared Natural Resources: First Report on Outlines*, Amb Chusei Yamada, International Law Commission, 55th Session, U.N. Doc. A/CN.4/533, at p.9 (2003), noting the establishment of the Internationally Shared Aquifer Resources Management program, sponsored by UNESCO. See also *Shared Natural Resources: First Report on Outlines*, Addendum to the First Report of the Special Rapporteur on Shared Natural Resources, Amb Chusei Yamada, International Law Commission, 55th Session, U.N. Doc. A/CN.4/533/Add.1 (2003), reviewing the state of knowledge regarding transboundary aquifers.

⁵⁴ *Shared Natural Resources: First Report on Outlines*, Addendum to the First Report of the Special Rapporteur on Shared Natural Resources, Amb Chusei Yamada, International Law Commission, 55th Session, U.N. Doc. A/CN.4/533/Add.1 (2003), at p.3.

⁵⁵ *Ibid.* at p.3.

Given these observations, the Special Rapporteur intends to propose measures specifically adapted to the utilization of the fossil aquifer, noting the absence of any suitable legal regime.⁵⁶ More general treatment will be given to the case of transboundary aquifers which receive re-charge from surface and groundwater, and do not therefore qualify as de-coupled, or fossil aquifers. In his early work on transboundary groundwater and aquifers the Special Rapporteur has also indicated his inclination towards the development of regional responses to transboundary natural resources.⁵⁷

However, there are currently no accepted norms or principles for the cooperative management of decoupled transboundary aquifers. The recommendations contained in Ambassador Yamada's eventual final reports will therefore have a significant impact upon the expectations of States regarding the norms which should govern the peaceful management of transboundary aquifer resources, globally, regionally, and bilaterally. It remains to be seen whether States are prepared to endorse a long-range vision which emphasizes distributive justice and equitable utilization, or whether States will choose to pursue an approach emphasizing the short-run self-serving principle of prior appropriation, also known as the 'law of capture'.

Given that the physical properties of fossil, or decoupled, freshwater aquifers are analogous to petroleum fields, it is instructive at this point to review the development of international cooperation in relation to transboundary petroleum fields. It is possible that the lessons learned in the international petroleum industry may prompt analogous recommendations concerning the management of transboundary petroleum fields.

Responses by the International Community to Transboundary Petroleum

It is readily apparent that petroleum deposits which are transboundary or which lie in areas of contested jurisdiction may be the source of significant conflict for contiguous States.⁵⁸ Despite the numerous examples of degenerative conflict over petroleum resources, it is arguable that a new framework of cooperation is emerging in the international practice regarding transboundary petroleum deposits, through the use of joint development agreements.

If the Special Rapporteur on Shared Natural Resources is able to study this issue as initially indicated in his program of work,⁵⁹ one might expect that much of his report will deal with the emergence of the joint development agreement in international petroleum exploitation, and the norms and principles which underpin these agreements. Accordingly, this discussion will briefly review the observations which the Special Rapporteur might draw in his eventual report on this subject, currently scheduled for publication in 2005.

⁵⁶ *Ibid.* at p.3.

⁵⁷ UN Doc. A/58/10 *Report of the International Law Commission on its 55th Session*, (GAOR 58th Session, Supp. No.10) at p.266.

⁵⁸ Fawcett, J.E.S., and Parry, Audrey, *Law and International Resource Conflicts*, (Oxford, Clarendon Press, 1981), 118-136.

⁵⁹ *Shared Natural Resources: First Report on Outlines*, Amb Chusei Yamada, International Law Commission, 55th Session, U.N. Doc. A/CN.4/533, at p.2 (2003)

Historical Emergence of Joint Petroleum Ventures

The international development of petroleum reserves was originally accomplished through the grant of concessions to a small number of dominant international oil companies, commencing in the latter part of the nineteenth century. Mikesell draws upon the earlier work of Hossain⁶⁰ in noting the emergence of this international resource exploitation practice:

‘[T]he operations of the Royal Dutch Company (later Royal Dutch Shell) in the Dutch East Indies (Indonesia)... were followed by a British Group (later the Anglo-Persian Oil Company, predecessor of British Petroleum), which first obtained a concession in Iran in 1901. American firms began acquiring oil properties in Mexico in the early 1900s. ... By the late 1920s, seven American, British and Dutch-British oil companies... controlled most of the oil produced in Latin America, the Middle East, and the Far East.’⁶¹

With the end of the colonial era, many newly independent countries marked their economic and political autonomy by calling into question the one-sided concession arrangements imposed by colonial masters.⁶² This was accomplished principally through the formation of government-owned oil enterprises, and the compulsory renegotiation of the concession agreements, effectively nationalizing the petroleum operations granted under the former concession regimes.⁶³

Another feature of this economic and political independence was the formation of joint venture arrangements, in order to give the host governments formal as well as *de facto* participation in management. The earliest joint venture arrangement noted by Hossain was entered into in 1957 between the Italian state oil corporation E.N.I., and the Egyptian and Iranian government oil enterprises.⁶⁴ This development marked the beginning of a period of dynamic change in the formulation of international petroleum development projects, continuing into the mid 1970’s, as recorded by contemporary commentators Smith and Wells:

‘The 1960’s brought major innovations in the forms of mineral agreements. Most important, the new structures have broken the tight link between ownership, control, and financial risks and benefits that was inherent in the traditional concessions. Arrangements have been negotiated which have re-packaged these elements in ways which were not feasible under the old structures ... Because ownership and control have now become important political symbols in most developing countries, new contractual forms have to

⁶⁰ Hossain, Kamal, *Law and Policy in Petroleum Development: Changing Relations between Transnationals and Governments*, (London, Frances Pinter (Publishers) 1979, pp.1-12.

⁶¹ Mikesell, Raymond Frech (1984) *Petroleum Company Operations and Agreements in the Developing Countries*, (Washington D.C.: Resources for the Future, Johns Hopkins University Press, 1984), p.20.

⁶² For further discussion of this evolution in the terms of petroleum concessions and licenses, see International Bar Association Section on Energy and Natural Resources Law, *International Energy Law*, Symposium of the International Bar Association Section on Energy and Natural Resources Law, Houston, Texas, 1984 (New York: Matthew Bender, 1984) 1428pp, at pp. 693-860.

⁶³ Mikesell (1984) op cit, at 23.

⁶⁴ Hossain (1979) op cit, at 121.

be created to allow greater freedom in allocating ownership, control and financial risk in ways that reflect the bargaining power of the parties.’⁶⁵

Notwithstanding the variety of options available to the parties, the overwhelming tendency in international petroleum exploitation arrangements has been the close involvement of the State or its instrumentalities in the undertaking,⁶⁶ often through a mechanism akin to a joint venture, which is perhaps the most widely used vehicle for the conduct of transactions in the course of international trade and investment.⁶⁷

As Hossain notes, the joint venture structure adopted in the petroleum industry possesses unique properties: ‘The distinctive feature of a [petroleum] joint venture... is the direct involvement of the government or national company in the management and control of operations.’⁶⁸ This direct involvement is often motivated by the desire to enhance the transfer of technology and industry-related skills from the petroleum industry into the less developed host states. Such a joint venture structure may also be motivated by the state’s desire not to ‘alienate’ completely its control over the symbolic value of its own natural resources – in the case of petroleum, often the richest asset in the country’s patrimony. Regardless of the motivation, the direct involvement by the host government creates the significant effect of mingling both private and public spheres in the petroleum joint venture, shifting the venture away from the realm of private contract, and creating an interdependence between the functions of the host government and the commercial objectives of the venture.

The Petroleum Joint Development Agreement

The petroleum joint development agreement (‘JDA’) represents a further mingling of the public and private spheres in the development of natural resources, adding further complexity to the already multifaceted nature of the typical single-state petroleum joint venture agreement. Given that the JDA is a joint venture which implicates two or more States in the development of transboundary natural resources, it may be seen as an attempt to harmonize the deeper interests of those states, perhaps with resource enterprises functioning as their proxies.⁶⁹

⁶⁵ Smith D.N., and Wells, L.T. Jnr, *Negotiating Third World Mineral Agreements*, (Cambridge MA: Ballinger Publishing Co, 1975), at p.589, as cited in Hossain (1984:172).

⁶⁶ Buxbaum, Richard M., *International Mining Projects as a Research Paradigm of Transnational Economic Law*, in Jaenicke, Gunther, Kirchner, Christian et al (Eds), *International Mining Investment: Legal and Economic Perspectives*, (Papers and Proceedings of the AIW Institute Conference, Bad Homburg and Frankfurt, 1986) *Studies in Transnational Law of Natural Resources*, Vol.11, 1988. (Kluwer: Deventer, 1988), pp.101-124, at p.104.

⁶⁷ Duncan, W.D., *Joint Venture Law in Australia*, (Federation Press: Sydney, 1994), at p.321. For further discussion of the form of international joint venture agreements in general, see Goldsweig, David N., and Cummings, R.H., (Eds) *International Joint Ventures: A Practical Approach to Working with Foreign Investors in the U.S. and Abroad*, (American Bar Association Section of International Law and Practice, Washington DC, 1985, 1990) 428 pp, including a model joint venture agreement and commentary.

⁶⁸ Hossain, Kamal, *Law and Policy in Petroleum Development: Changing Relations between Transnationals and Governments*, (London, Frances Pinter (Publishers) 1979, at p.175)

⁶⁹ This was the proposition studied by the ‘Frankfurt Project’, and analysed in Buxbaum (1988:102).

Indeed, when an international agreement for the exploitation of natural resources takes on the form of a joint venture, Professor Richard Buxbaum comments that the agreement will adopt a ‘uniquely institutional nature’, making provision not merely for the substantive rules governing the operation of the project, but rather providing ‘procedural rules determining how those substantive decisions are to be made’.⁷⁰

The international resources joint venture in the form of a JDA is therefore a constitutive arrangement, providing a regime for the conduct of a project, usually over the long-term, and frequently with multiple layers of complex interdependence within the parties and phases involved in the project, and dependent upon the physical properties of the resource in question.⁷¹ The resulting petroleum JDA may therefore be properly regarded as a *regime* for resource governance than as a private joint venture contract between entrepreneurs. It is therefore desirable to define the JDA beyond Vicuna’s proposition that the essential element of joint development is to seek commercial co-operation between states and petroleum project operators.⁷²

Townsend-Gault & Stormont (1995:55) have refined Vicuna’s broad statement with their assertion that ‘a true joint development zone requires the pooling of the rights of the respective states.’⁷³ Lagoni describes joint development as ‘the co-operation between states with regard to the exploration for and exploitation of certain deposits, fields or accumulations of non-living resources, which either extend across a boundary or lie in an area of overlapping claims’.⁷⁴ And according to Onorato & Shihata, ‘joint development is, in fact, a procedure under which boundary disputes are set aside, without prejudice to the validity of conflicting claims, and the interested States agree, instead, jointly to explore and exploit and to share any hydrocarbons found in the area subject to overlapping claims’.⁷⁵

In more operational terms, Onorato & Valencia describe four elements of the ‘classic’ legal format for the joint development of transboundary petroleum reserves, integrating the practice of States with the reality of the involvement of international commercial interests. Those fundamental elements are:

⁷⁰ Buxbaum (1988) op cit, at p.107.

⁷¹ Valencia, Mark J., *Taming Troubled Waters: Joint development of Oil and Mineral Resources in Overlapping Claim Areas*, San Diego Law Review, Vol.23, 1986, p.661-683.

⁷² Vicuna, F.O., *Regional Cooperation in Non-Living Resources: Joint Management Zones*, in Payoyo, P.B., *Ocean Governance: Sustainable Development of the Seas*, (Tokyo: UN University Press, 1994), pp.171-182. at p.172.

⁷³ Townsend-Gault, I., & Stormont, W.G., *Offshore Petroleum Joint Development Arrangements: Functional Instrument? Compromise? Obligation?*, in *The Peaceful Management of Transboundary Resources*, Blake, G.H. et al (eds) (London: Martinus Nijhoff, 1995) pp.51-75, at p.55.

⁷⁴ Lagoni, Rainer, *Joint Development of Non-living resources in the Exclusive Economic Zone*, Report of the International Committee on the EEZ, ILA, *Report of the 63rd Conference*, 1988, 509-558. Cited in Vicuna (1994:171,172).

⁷⁵ Onorato, W.T., & Shihata, I.F.I., *The Joint Development of International Petroleum Resources in Undefined and Disputed Areas*, ICSID Review, Foreign Investment Law Journal, Vol.11, No.2, Fall 1996, pp.299-317, at p.300.

1. A treaty between the interested States which establishes the area subject to the accord, and the legal basis for such joint development;
2. The establishment under such a treaty of an international joint commission (JC) of equal representation between the contracting states, which acts as the administrative, supervisory and consultative overseer of the venture;
3. The grant of exploitation rights to licensees or concessionaires (rights holders) – normally by the interested states but, possibly, also directly by the JC; and
4. The nomination by the rights holders, subject to approval by the JC, of a single operator to conduct joint operations on their behalf.⁷⁶

Having reviewed the definitions and descriptions offered by the learned authors cited above, a conceptual synthesis of their various perspectives is advanced below as a tentative definition of the joint development agreement:

Joint Development denotes the creation of a natural resource management regime through the joint exercise by interested states of sovereign rights and jurisdiction over an area of conflicting territorial claims, based on an agreement between the states to explore, exploit and apportion a natural resource within that area, pending final settlement of their territorial claims.

The Normative Basis for the JDA in International Law

Some authors assert that the JDA is simply one method of exploiting contested transboundary petroleum resources, and that the cooperative norms implicit within the JDA concept should hold no primacy over the so-called ‘law of capture’ or prior appropriation. In this view, there is no place for the principle of equitable utilization, prevention of significant harm, or any other normative or communitarian restraints upon the ‘race to the bottom of the well’.⁷⁷ This carries the immediate implication that, in the absence of an agreement to the contrary, a state or international oil company is free to maximise production from its side of the boundary line notwithstanding the detriment to neighboring states sharing the same field.

Some authors have referred to the 1982 United Nations Convention on the Law of the Sea⁷⁸ (UNCLOS) in support of the proposition the law of capture is the pre-eminent

⁷⁶ Onorato, W.T., & Valencia, M.J., *International Cooperation for Petroleum Development: the Timor Gap Treaty*, ICSID Review, Foreign Investment Law Journal, Vol.5, No.1, Spring 1990, pp.1-29., at p.21. In keeping with this operational focus, Hazel Fox and her co-authors at the British Institute of International and Comparative Law published in 1989 a model agreement for States use in drafting joint development agreements, with explanatory commentary. Fox, Hazel, McDade, Paul et al, *Joint Development of Offshore Oil and Gas. A Model Agreement for States for Joint Development with Explanatory Commentary*, (British Institute of International and Comparative Law, 1989), reviewed by Ernest E. Smith in 86 AJIL, January 1992, pp 241-243.

⁷⁷ See, e.g. Bundy, R.R., *Natural Resource Development (Oil and Gas) and Boundary Disputes*, in *The Peaceful Management of Transboundary Resources*, Blake, G.H. et al (eds) (London: Martinus Nijhoff, 1995) pp.23-39. at pp.24ff, and cf Lagoni, Rainer, *Oil and Gas Deposits Across National Frontiers*, AJIL Vol 73, Iss.2, (April 1979), pp.215-243, at p219 ff.

⁷⁸ 21 I.L.M. 1261 (1982).

principle in the management of transboundary petroleum fields.⁷⁹ This argument reflects the self-serving logic embodied in the so-called ‘Harmon Doctrine’, through which the USA purported to declare unfettered discretion in its use of transboundary natural resources.⁸⁰ However, a deeper consideration of the provisions and context of UNCLOS 1982 demonstrates that it is the principle of mutual cooperation which is pre-eminent within the treaty, and which also lays the groundwork for the emergence of the JDA as a mechanism of international cooperation. For example, the 1982 UNCLOS treaty provides in Article 74(3) (regarding EEZ delimitation) and Article 83(3) (regarding continental shelf delimitation) that, pending delimitation of a boundary line between States, the parties must seek to agree on an equitable solution:

‘...the States concerned, in a spirit of understanding and cooperation, shall make every effort to enter into provisional arrangements of a practical nature and, during this transitional period, not to jeopardise or hamper the reaching of the final agreement. Such arrangements shall be without prejudice to the final delimitation.’⁸¹

The emergence of internationally accepted principles of co-operation in the optimal use of resources, embodied in the *UN General Assembly Resolution 3129* of 1973,⁸² and the *Charter of Economic Rights and Duties of States* of 1974,⁸³ adds considerable weight to the argument for the pre-eminence of the normative standards of cooperation and equity.⁸⁴ In the latter of these resolutions, Articles 3 and 10 provide as follows:

‘A.3 In the exploitation of natural resources shared by two or more countries, each State must co-operate on the basis of a system of information and prior consultations in order to achieve optimum use of such resources without causing damage to the legitimate interests of others;

⁷⁹ For example, Robson, C., *Transboundary Petroleum Reservoirs: Legal Issues and Solutions*, in *The Peaceful Management of Transboundary Resources*, Blake, G.H. et al (eds) (London: Martinus Nijhoff, 1995) pp.3-21. at p.5, cites Article 76 of UNCLOS in this fashion, which states that every coastal state has the right (subject only to the legitimate claims of its neighbours), to exploit the natural resources of the continental shelf, the sea-bed and subsoil of the submarine area that extends from the baseline to a distance of 200nm or to the edge of the Continental Shelf, whichever is greater. Each coastal state also has jurisdiction to regulate all activities within established maritime boundaries, which is normally done through the granting of licences or contracts by the state, through its agencies.

⁸⁰ The Harmon Doctrine finds its origin in the 1895 declaration by US Attorney-General Harmon, stating that international law does not constrain the upper riparian state in its use of the river, with specific application to the Rio Grande, a transboundary river shared between the USA and Mexico. See Stephen C. McCaffrey, *Second Report on the Law of the Non-Navigational Uses of International Watercourses*, [1986] 2 Y.B. International Law Commission, Pt.1, at 87, 105-110, UN Doc. A/CN.4/SER.A/1986/Add.1.

⁸¹ UNCLOS Articles 74(3) and 83(3), 21 I.L.M. 1261 (1982).

⁸² UN Doc A/9030

⁸³ UNGA Res.3281, 28 UNYB 1974, 403. In addition, the UNEP Draft Principles of 1978 are worthy of note. These principles, which were framed in terms of ‘encouragement’ and ‘guidance’, were explicitly not intended to affect the status of existing law. (See Bundy (1995:37,38)). A further UN action which preceded UNCLOS 1982 was the General Assembly resolution 34/99 of 14 December 1979, on the development and strengthening of good neighbourliness between states, commented upon by Szekely (1987:258). Central to this resolution was the principle of co-operation in the exploitation of ‘common resources’.

⁸⁴ Bundy (1995) op cit, at pp.36-39; Onorato & Shihata (1996) op cit at pp.302,303.

A.10 All States have the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States.’

More fundamentally, an appeal may be made to Article 2(3) of the *Charter of the United Nations* in order to support the existence of a general obligation upon states to negotiate with one another in good faith. The principle of co-operation and friendly relations between states finds pre-eminent status as one of the fundamental goals and principles of the *Charter* in Article 1.

It is therefore arguable that these principles of cooperation, equitable utilization, and the injunction against significant harm are the norms of international law and practice in relation to transboundary petroleum fields, and not the so-called ‘law of capture’. The Special Rapporteur on Shared Natural Resources will carry out a thorough consideration of state practice and existing international agreements in the preparation of his report on transboundary petroleum, and will therefore have ample opportunity to test this assertion.

The brief overview provided in this paper tends to suggest that the Special Rapporteur will find that the doctrine of permanent sovereignty over natural resources, and its corollary, the law of capture, must be subjugated to a sense of responsibility to the wider community, and that the rigid assertion of sovereign rights exemplified by the so-called Harmon Doctrine⁸⁵ should be regarded as an historical relic, rather than as a norm to guide the future collaboration and peaceful coexistence of States.

Conclusion: The International Community’s Response to Transboundary Resources

In the absence of a comprehensive legal regime governing transboundary natural resources, the international community has embarked, piecemeal, upon the construction of many bilateral and trilateral treaties governing the management of these shared natural resources. These treaties, while holding great value in providing a stable relationship between the contracting parties, do not have any binding effect upon other States, and cannot serve to create a general international obligation regarding the equitable and efficient use and conservation of transboundary natural resources.

In order to address this *lacuna*, the United Nations International Law Commission has embarked upon two projects regarding transboundary natural resources. The first, the commissioning of a series of Special Rapporteurs on the subject of the Non-navigational Uses of International Watercourses, culminated in the drafting of a framework convention which has not yet entered into force. The second project is captured in the mandate given to Ambassador Chusei Yamada as Special Rapporteur on Shared Natural Resources, to investigate, report upon, and make appropriate recommendations regarding the development of international law and cooperation over transboundary groundwater and petroleum. These initiatives are essential in giving the international community a forum in which to engage these important issues.

Despite these global initiatives, regional and bilateral initiatives will continue to hold particular relevance in the case of most transboundary natural resources. It is the States

⁸⁵ See note 80

sharing the resource which must determine the terms of their cooperation, and this is usually achieved with reference to the regional or bilateral realities of the situation, rather than the global. Until a universal treaty such as the UNCLOS comes into existence for transboundary natural resources, contests over rivers, aquifers and petroleum will be determined at the regional scale.

The development of responsible regional initiatives towards the coordination of transboundary natural resources should therefore be strongly encouraged. Many contemporary examples of this kind of cooperation may be cited, including the case chosen for Part Two of this paper, The Nile Basin Initiative. The Nile Basin Initiative is a prominent contemporary example of a regional effort by the riparian States to harmonize their vision and their actions in order to make best use of an extraordinary transboundary natural resource. The focus of this paper now turns towards this example of international conflict and cooperation, analyzing the Nile Basin Initiative from the perspective of various theories of justice in the discourse of political and legal theory. The tension described above between the ‘law of capture’ and equitable utilization in the international petroleum industry proves salient, and finds a corollary reflection in this strategic and important riparian context.

A QUEST FOR DISTRIBUTIVE JUSTICE IN THE NILE BASIN

Emphasizing the need for vision and leadership to facilitate the sustainable development and management of the Nile River Basin, the Council of Ministers of Water Affairs of the Nile Basin States noted the following in its Policy Guidelines for the Nile River Basin Strategic Action Program (adopted on February 22, 1999):

‘The Nile is one of the world’s greatest riches and is of inestimable value for its peoples—a resource which needs to be held in trust for future generations. Sustainable development and management of the Nile Basin presents a great challenge and there remain many opportunities for growth and development for the future, bringing the promise of regional harmony and economic development. At the heart of this challenge is the imperative to eradicate poverty. Without action today, the riparian countries will face many problems including famine, extreme poverty, environmental degradation and rapid population growth. This is a clear challenge for the peoples of the basin and calls for vision and leadership.’⁸⁶

A careful examination of this preambular paragraph will enable the astute reader to identify the following embedded notions: (a) Nile has not been sustainably developed and managed; (b) future cooperation toward the development of the basin will ensure harmony and economic advancement; (c) the need to sustainably utilize this nature-given resource in order to meet the needs of the riparian populations, and to address their problems of famine, extreme poverty, environmental degradation and rapid population growth.

⁸⁶ Council of Ministers of Water Affairs of the Nile Basin States. Pamphlet on Policy Guidelines for the Nile River Basin Strategic Action Program (1999).

Hundreds of meetings at various levels have been conducted so far to search for a viable solution for cooperation on the River Nile. Regardless of continued negotiations, nothing tangible has been achieved as far as the main question of water allocation is concerned, and it seems that a revolutionary change in the status quo is unlikely, at least in the foreseeable future. The frustration of some member states recently resulted in certain unilateral measures, which will have a spillover effect unless carefully handled and addressed in a timely fashion within the existing cooperative framework. To have a clear understanding on the emerging positions of certain member states, a few recent facts are mentioned below.

It has been reported in a newspaper⁸⁷ that the Ugandan parliamentary committee on Natural Resources has endorsed a motion tabled by Rwampara MP, Amon Muzoora seeking to abrogate the colonial agreements on the use of River Nile waters. The MP was quoted as saying ‘[the fact that] it has taken over 40 years for us [Ugandans] to rise up and seek to walk out of an enslaving colonial treaty is testimony to how casually we have taken our independence’. In support of its argument the paper noted that the 1929 Anglo-Egyptian Nile Basin Treaty, allocated Egypt two-thirds of the 74 million cubic meters of the waters of the Nile and the remaining one third was given to Sudan (in 1959) which makes the total 55 million and 18 million cubic meters respectively. The paper further emphasized the following elements of the situation:

‘the 10 upper riparian states, including Uganda, then still under the yolk of colonialism (save for Ethiopia), were on the other hand left with nothing and required to seek permission from Egypt and Sudan before undertaking any project that might affect the volumes of water downstream.... Uganda should, instead, publicize the unfairness of the colonial agreements to shame Egypt and Sudan into accepting new terms. But above all, we must demonstrate what we can do with the Nile waters.... It is not enough to wrest control of the Nile from Egypt and Sudan, without coming up with programs like irrigation, hydro-power development, etc., and show the world that we can make a difference to our people's lives with this God-given resource, just like the Middle-East countries have done with oil.’

Tanzania, another member of the ten riparian states sharing the Nile River, was also reported in a national newspaper⁸⁸ to have launched a 27.6 billion Shilling (\$27.6 million) project⁸⁹ to draw water from Lake Victoria to supply Kahama in Shinyanga region, in contravention of two colonial treaties Britain signed with Egypt and Sudan controlling the use of water from the lake. The colonial agreements restrict riparian countries from initiating projects that would affect the volume of Nile waters without the

⁸⁷ Editorial. ‘*We Need More Than Just Control of Nile.*’ Monitor (Kampala) <http://www.allafrica.com/stories/2000402160513.html> (February 15, 2004).

⁸⁸ Faustine, Rwambali. ‘*Tanzania Ignores Nile Treaty, Starts Victoria Water Project.*’ The East African (Nairobi) < <http://www.allafrica.com/stories/2000402160513.html> > (February 9, 2004).

⁸⁹ The China Civil Engineering Construction Corporation was awarded the contract to lay a 170 kilometers pipeline. The second phase of the contract, said to be worth about \$ 57.5 billion shillings (\$57.5 million), is expected to commence in July 2004, and will be completed in 2005. The total cost of the water project is estimated at 85.1 billion shillings (\$85.1 million).

permission of Egypt. The newspaper quoted Dr C. Nyamurunda, the Deputy Permanent Secretary of the Ministry of Water and Livestock Development, in Dar es Salaam:

‘Tanzania... [has lost] patience with talks involving Kenya, Uganda and Egypt over the validity of the two [colonial] agreements signed... Despite engaging in lengthy negotiations over the use of waters from Lake Victoria and the Nile, Tanzania has maintained that the two [colonial] agreements were illegal’.

A Kenyan newspaper,⁹⁰ on the other hand, reported on the debate provoked by a presentation by Dr Adronico Adede, (Commissioner with the Constitution of Kenya Review Commission) of a thought-provoking hour-long lecture on the impact of international treaties on the country. As a result of Dr Adronico’s presentation, Delegates (to the technical committee on representation of the people) demanded that the controversial Nile Treaty be reviewed. It was also said that they [the delegates] described the treaty, signed before independence between the British Government, Egypt and the Sudan as ‘against Kenya’s national interests,.. Demanded that an amendment be included in the draft Constitution compelling the Government to review all international treaties. It should also list which agreements had been ratified and which ones had not.’

The above selection of declaratory statements and specific actions, taken only between January and February 2004, demonstrate that some riparian states are currently taking unilateral measures on their ‘share’ of Nile Water with a view to addressing their immediate needs by all available means, and regardless of any political and diplomatic consequences. The tone of the message is ‘No to the status quo; all riparian countries have a right to equitably use the Nile River; there’s an urgent need for renegotiation on the Nile water allocation, making existing unjust colonial treaties formally null and void.’

Theorizing the Nile Basin: Distributive Justice

Having outlined the contemporary legal and political context of the Nile River Basin, this discussion now turns to examine issues related to water allocation in the Nile Basin, from the point of view of theories of distributive justice. Charles Beitz argues that when choices are to be made regarding the ends and means of political action, or the structures and rules of institutions and practices, it is natural to ask by what principles such choices should be guided⁹¹. It is with this view that this paper endeavors to scrutinize how the concept of distributive justice explains more plausibly the yet-to-be settled problem of transboundary water allocation in the Nile Basin.

One of the most important goals of the Nile Basin Initiative (NBI)⁹² is to consolidate and support the equitable utilization concept among the Nile Basin countries. Equitable

⁹⁰ Odhiambo, Orlale. ‘*Constitutional Conference Delegates: Renegotiate Nile Treaty.*’ The Nation (Nairobi) < <http://www.allafrica.com/stories/2000402160513.html>> (January 29, 2004).

⁹¹ Charles, Beitz R. 1979. *Political Theory and International Relations*. New Jersey: Princeton University Press, 5.

⁹² The Nile Basin Initiative (NBI) was officially launched in Dar es Salaam, Tanzania in February 1999, at an extraordinary meeting of the Nile Basin Council of Ministers. For the first time, all Nile Basin states became members of the NBI, with the exception of Eritrea. It is envisaged that the initiative will serve as a transitional mechanism pending an agreement to be reached amongst the Nile riparian countries on a

utilization of water resources is not an easy goal to achieve in a regional context, especially where water-related national goals and priorities could be in conflict with regional goals. Achieving equitable utilization of water resources becomes more complex when it may be viewed from the differing perspectives offered by diverging priorities, different political process, and separate cultural and economic systems.

The following analysis of distributive justice in the context of the Nile River Basin is based upon Beitz's discourse of international distributive justice, the concept which he borrowed, by analogy, from John Rawls'⁹³ interstate distributive principle in '*A Theory of Justice*'.

The allocation of transboundary natural resources, particularly surface water, is essentially a moral decision. The inter-state treaties and legal institutions that regulate water allocation determine how, and to what extent, various groups receive water. Consequently, decisions regarding water allocation have the potential to discriminate according to a variety of factors, such as social or economic standing, nationality, or need. It is appropriate, then, to determine whether the current methods for allocating water across international borders are just from the perspectives of the idealist morality of states and cosmopolitan theories.

The morality of states theory suggests that water should be allocated with respect for state sovereignty, in which states have 'the sovereign right to exploit their own resources,' provided that they ensure that activities within their jurisdiction or control do not cause damage to the environment of other states or areas beyond the limits of national jurisdiction.'⁹⁴ Cosmopolitanism, however, suggests that water should be allocated with regard to the international community, and the basic human right to water.⁹⁵

Using the historical confrontation over the Nile River as a case study, and relying upon the morality of states and cosmopolitan theories as indicators of justice, this brief analysis examines three facets of transboundary water allocation:

- a) past allocation through interstate treaties;
- b) recent trends toward basin wide allocation of the Nile water; and
- c) solutions or insights that distributive justice might provide for more equitable water distribution between the States.

Historically, and paradoxically, Ethiopia⁹⁶ and the majority of the upper riparian countries⁹⁷ have been seriously disadvantaged by their upstream position and status as

permanent legal and institutional framework under the ongoing Nile Basin cooperative framework that is part of the NBI.

⁹³ For further reading, see, Rawls, John A..1991. *A Theory of Justice*. Cambridge: Harvard University Press. Revised Edition.

⁹⁴ MacCaffrey, Stephen C. 2000. '*Water, water everywhere, but too few drops to drink: the freshwater crisis and international environmental law.*' *Denver Journal of International Law and Policy* 28, no 3: 325.

⁹⁵ Gleick, Peter. 1999. '*The Human Right to Water.*' *Water Policy* 1, no 5: 487

⁹⁶ Ethiopia contributes 86% of the total flow of the Nile going downstream to Sudan and Egypt, whose major river basins are Abbay (Blue Nile)-59%, the Baro-Akobo (Sobat)-14% and Tekezie (Atbara)-13%.

least developed countries, lack of political will and economic power relative to Egypt. As a result, Egypt, and to a much lesser extent Sudan, has largely controlled the decisions regarding the allocation of the waters of the Nile, thus confirming author Philip Fradkin's notion that "water flows toward the powerful and the rich."⁹⁸ Early treaties regarding the Nile Rivers were made by the then colonial powers between, and on behalf of, the riparian States. These treaties completely neglected the principles of sovereignty and territorial integrity (which are both central elements of the morality of states viewpoint).

Recently, while seemingly adopting a more cosmopolitan approach, some downstream countries have made attempts to introduce market mechanisms for the allocation of the Nile's water resources, and thereby expanded the discussion of just distribution to include water quality and quantity, and water as both a resource and commodity. To this end, some Kenyan and Ugandan parliamentarians had proposed a market principle as a means for just distribution of water. Their proposals include a public denunciation of the colonial treaties, which they characterize as unjust, and a call for compensation by Egypt for its previous 'monopolized' utilization of the Nile water.⁹⁹

While the morality of states and cosmopolitan theories do not directly address issues of transboundary water resources, this brief analysis permits the application of these theories to the current situation of the Nile River.

The morality of states theory provides three specific obligations for the state: upholding the social contract with the political community it represents, maintaining its own autonomy, and respecting the sovereignty of other states. A state, therefore, has the right to own the water within its border 'for the sake of its people as a resource for social and economic development and growth,'¹⁰⁰ thereby honoring the social contract. It is also granted ownership over rivers, to protect 'the survival and continued autonomy of the sovereign, territorially defined state, especially when seen as...a defensive boundary or economic lifeline.'¹⁰¹ Additionally, the state is obligated to honor the autonomy of other states. This is the most problematic element of the theory, as surface water and rivers are not obedient to territorial boundaries.

Equitable distribution of water resources must therefore satisfy two requirements under the morality of states theory: first, provision of a sufficient quantity of water for the citizens of the upstream states while maintaining water flow across the border toward the

In fact, the Blue Nile contributes approximately 95% of the Nile waters during the long rainy season (July-September), and 86% overall annually.

⁹⁷ The remaining 14% is contributed by the White Nile catchment area that includes Rwanda, Burundi, Tanzania, Uganda, Democratic Republic of Congo and Kenya. Sudan and Egypt do not contribute to the waters of the Nile but are the predominant users of its waters to date.

⁹⁸ Fradkin, Philip L. 1981. *A River No More*, 156.

⁹⁹ Chege, Mbitiru. 'Egypt May Soon Loose Control Over Nile Waters.' The Nation (Nairobi), <<http://www.allafrica.com/stories/2000402160513.html>> (February 16, 2004). See also, Supra notes 88, 89 and 90.

¹⁰⁰ Blatter, Joachim, and Helen Ingram. 2001. *Reflections on Water: New Approaches to Transboundary Conflicts and Cooperation*. Cambridge: MIT Press, 36.

¹⁰¹ *Ibid.*, 36.

downstream state, and second, minimization of the damage incurred by the downstream state.¹⁰² Directly applied to water allocation, the morality of states theory emphasizes Ethiopia's and the remaining riparian states sovereignty and their rights to water, but not at the expense of the autonomy of the lower riparian states, namely Egypt and the Sudan.

Cosmopolitanism provides a different set of criteria for determining just allocation, and differs from the morality of states approach specifically because it addresses issues of water quality. From both a utilitarian and deontological viewpoint, Ethiopia and the remaining upstream states have a duty to the larger international community, either by allocating water so that they provide the greatest benefit to the greatest number without preference for their own citizens, or on the basis of individual human rights.

The following international legal instruments provide concrete examples of the embodiment of a cosmopolitan position in current international law. The basic human right to water is reflected in the UN Convention on Human Rights, and in particular, the UN Mar del Plata Conference of 1977 which states that 'all peoples whatever their stage of development and their social and economic conditions, have a right to have access to drinking water in quantities and of a quality equal to their basic needs.'¹⁰³ Additionally, Article 10 of the UN Framework Convention on the Law of the Non-Navigational Uses of International Waterways asserts that special regard shall be given to meet 'vital human needs' if a conflict should arise over the uses of water in an international watercourse.

For Michael Walzer, distributive justice is an important idea. He considers human society a distributive community that comes together to share, divide, and exchange. According to him, we (the human society) also come together to make the things that are shared, divided, and exchanged, but that very making – work itself – is distributed among us in a division of labor. It can be said that I have what I have rightly or wrongly, justly or unjustly; but given the range of distributions and the number of participants, such judgments are never easy.¹⁰⁴

This brings us to Walzer's definition of distributive justice in the sphere of welfare and security. He said, 'distributive justice has a twofold meaning: it refers, first, to the recognition of *need* and, second, to the recognition of *membership*. Goods (natural resources) must be provided to needy members because of their neediness, but they must also be provided in such a way as to sustain their membership.'¹⁰⁵

In sum, just allocation of water resources from a cosmopolitan perspective requires the fulfillment of basic human rights of citizens or the maximization of utility across borders. With these positions in mind, we shall now examine existing colonial treaties and other legal instruments related to the Nile River.

¹⁰² It is unclear, however, under the morality of states theory whether a downstream state would be entitled to the same quantity of water that once flowed through its borders prior to upstream diversion. Practically (although perhaps not theoretically), a downstream state must accept some upstream use.

¹⁰³ *Supra* note 96, 95.

¹⁰⁴ Walzer, Michael. 1983. *Spheres of Justice: A defense of Pluralism and Equality*. New York: Basic Books, Inc., Publishers, 3.

¹⁰⁵ *Ibid.* 78

International Distributive Justice Ignored And Being Restored: An Overview Of The Legislative History Of The Nile Water

What makes the Nile Basin merit such international attention? The following facts make the case. As Tafese has rightly stated there is no other river basin in the world that is shared by as many states as the Nile. Quoting from Tereje Tvedt's work, he further stated that these states currently possess 40% of Africa's population and envelop 10% of its landmass. The total population of the basin will rise from 245 million in 1990 to 859 million by the 2025.¹⁰⁶ The population of the three principal Nile basin countries, Egypt, Ethiopia and the Sudan, who now stand together at 157 million people, is projected to reach 388 million by the year 2050.¹⁰⁷ Looked at from another perspective and considering the current population projections, Egypt's population, which is now about 10% larger than that of Ethiopia, would be 20% lower by the year 2025.¹⁰⁸ The Nile Basin extends over 3,030,000 km² and encompasses territory of ten countries with a combined population of 260 million inhabitants. It is estimated that over half of this populations lives in the Nile Basin.¹⁰⁹

To the astonishment of many, the world's longest river, the Nile, exists without a comprehensive agreement to date. This situation is mainly due to the unwillingness of some riparian states to accept the principle of distributive justice. This principle arguably provides a just solution, as it takes into account both the needs of the community and maintains the health of its members. Consideration of basic human needs, according to this principle, assumes reasonable use and reasonable return of used water to the common river. But political powers on either side of the border most often demand the right to use all or most of the waters of the common river without consideration of the needs of the people on the other side of the border.

The demand for water in the basin is increasing for all uses, especially for irrigation to develop the low-income communities, struggling with severe poverty and starvation. Hence, it is high time for a pragmatic regional cooperation, in order to achieve a successful joint water resources management to meet the increasing different water requirements of the riparian countries. This could be achieved on an equitable basis without causing any adverse effects on downstream countries. One notable strategy to achieve this aim is the integration of water resources planning and management between the riparian countries.

¹⁰⁶ Tafese, Tesfaye. 2000. '*The Hydro- political Perspective of the Nile Question.*' Proceedings of the VIII Nile 2002 Conference (June 26-29) Addis Ababa. 589

¹⁰⁷ BBC news online. (July 17, 1999).

¹⁰⁸ Whittington, Dale and McClelland E. 1992. 'Opportunities for Regional and International Cooperation in the Nile Basin' *Water International* 17: 146.

¹⁰⁹ The Nile River is one of the longest rivers in the world. It has two main tributaries. The White Nile has its main source in the Great Lakes Region of Africa. The Blue Nile rises in the Central highlands of Ethiopia at the Lake Tana, which flows northwards to join the White Nile at Khartoum, the Sudanese capital. Another medium-sized tributary called the Atbara, which rises, in northern Ethiopia, joins the Nile 108 kilometers north of North of Khartoum. The two main tributaries together with Atbara form the Great River Nile, which flows through the Sudan and Egypt to join the Mediterranean Sea in the form of the Rashid (Rosetta) and the Damiat (Damietta).

This section of the paper will try to reveal the status of distributive justice in pre-and post independence Africa. As it will be shown shortly, all colonial treaties exclude consideration of the notion of distributive justice; while the post independence undertakings show a gradual shift toward undeclared recognition of the applicability of the principle as the best alternative measuring tool for joint project selection, and water appropriation.

For the purpose of easy reference, we shall follow Yacob Arsano's categorization of past water agreements, although his list is by no means considered exhaustive.¹¹⁰ He classifies past water agreements into three major blocks, viz, (a) agreements made between the colonial powers, (b) agreements made between the colonials and independent Egypt, and (c) agreements made between independent states.¹¹¹

Pre independence period

The following colonial legal instruments are categorized as 'agreements made between the colonial powers':

1. A Protocol signed between Great Britain and Italy in April 15, 1891;¹¹²
2. A Brussels agreement made between Great Britain and the Belgian Colonial Authorities in May 12, 1894;¹¹³
3. An Amendment made on the 9th May 1906 to the above stated 1894 Agreement.¹¹⁴
4. Tripartite Agreement made between Great Britain, France and Italy in December 13, 1906;¹¹⁵
5. Exchange of Notes made between the United Kingdom and Italy in December 14-20, 1925.¹¹⁶

¹¹⁰The legislative history of the efforts made by members of the basin cannot be completed until a well-researched historical account of the pre-colonialism period is given. While recognizing that this is a gray area left for researchers, it is worth mentioning the interesting account made by Dedjazmatch Zewdie Gebresellasi, in his paper presented at the VIII Nile 2002 Conference. He revealed that there are also some centuries old diplomatic recordings referring to official communication made between the Egyptian and Ethiopian authorities. Referring to the record made by the Arab historian al-Makin, he informed us how the Egyptian authorities, around 1089-1090, believing that the Ethiopians either blocked or diverted the flow, but little suspecting that the reduction in the flows was caused by drought in the headwaters of the River, used to send embassies to the courts of the Ethiopian kings to request that the water be released.

¹¹¹ Arsano, Yacob. 2000. *The Nile Basin: Upstream Perspective of Cooperation in the New Millennium.* Proceedings of the VIII Nile 2002 Conference. (June 26-29) Addis Ababa., 613.

¹¹² By this agreement the Italian government promised not to construct any structures for irrigation on Atbara (Tekezie) River that would have a significant impact or alter river flows or discharges in the main Nile.

¹¹³ It mainly deals with the colonial powers spheres of influence and boundary issues.

¹¹⁴ The Third part of this agreement obliges the Congo Free State not to construct or allow construction of any type on or near the Semelike or Isango Rivers that would decrease or diminish volume of inflows or discharges to Lake Albert, except in agreement with the Sudanese Government.

¹¹⁵ This is an agreement, which considered maintenance of the political and territorial situation in Ethiopia. In the Fourth part of this agreement, the three countries agreed to concert and work together in case of disturbances in Ethiopia and would safeguard the interests of Great Britain and Egypt in the basin of Nile, in particular in matters related to the regulation of the Nile and its tributaries, and follow-up of the local interests, and secure the Italian interests in Ethiopia and French interests in the coast of Somalia under the French colony.

6. Agreement made between the United Kingdom representing Tanganyika (Tanzania) and Belgium representing Rwanda-Burundi, in November 22, 1934;¹¹⁷
7. Agreement made between the United Kingdom and Italy in April 1938;¹¹⁸

The following instruments are categorized as agreements made between colonial powers and independent countries:

1. A boundary agreement made between Great Britain and Ethiopia in May 15, 1902;¹¹⁹
2. Exchange of Notes made between Great Britain and Egypt in May 7, 1929;¹²⁰
3. Exchange of Notes made between Great Britain and Egypt in the periods 1940- 1950, and 1952-1953 (May 30-31, December 5, 1949; January 19, February 28, March 20, 1950;...)¹²¹

The third category of agreements embodies the most relevant legal instrument: An agreement signed between the United Arab Republic (Egypt) and the Government of

¹¹⁶ In His message to the Prime Minister of Italy, dated 14th December 1925, the United Kingdom stressed on the importance of maintaining continuous flows of the Nile to Egypt and Sudan the possibility of increasing the volume of water for irrigation from the Blue and White Niles and other Nile tributaries. In parallel, the United Kingdom promised to support Italy in getting some economic concessions in Ethiopia. The reply of the of the Italian Prime Minister (and Minister of Foreign Affairs), issues on 20th December 1925, accepted the British conditions and concluded: 'I note that His Britannic Majesty's government have every intention of respecting the existing water rights of the populations of the neighboring territories, which enter into the sphere of exclusive Italian economic influence. It is understood that, in so far as is possible and is compatible with the paramount interests of Egypt and the Sudan, the scheme in contemplation should be so framed and executed as to afford appropriate satisfaction to the economic need of the populations'.

¹¹⁷ The first part of this agreement provided that water diverted from Kagera River (a stream wholly within Tanzania, or Rwanda-Burundi, and a branch of Victoria) should be returned without substantial reduction at some point before the stream flowed into the other territory or formed the common boundary between them. In part Six, the agreement wished 'to utilize the waters of any river or stream on the aforesaid boundary or to permit any person to utilize such water for irrigation purposes', such government should give permit the consideration of any objections which the other contracting government also included provisions regarding navigation, fishing, and pollution.

¹¹⁸ The agreement in some part mentioned a declaration regarding Lake Tana. It stated; 'That the Italian Government of the United Kingdom in the matter of Lake Tana and had no intention whatever of overlooking or repudiating them'.

¹¹⁹ This agreement explained the intention of Edward the 7th, king of Britain, Ireland, Overseas Colonies, Emperor of India, and Emperor Menelek, King of Ethiopia to improve bilateral and cordial relations. The first two parts of the agreement were concerned with delimiting the boundaries. The other two parts of the agreement were dealing with normal domestic issues. In the 1902 agreement, it is stated that the inheritors and those who follow in the government of both parties should continue with the agreed point in order to ensure its sustainability.

¹²⁰ Britain and Egypt (the later, newly independent, and condominium authority over the Sudanese colony) agreed, among other things, on the following: (a) Egypt would take 23/24 of the waters that pass through Sudan and the latter to retain 1/24; (b) Egypt to supervise water related activities in the entire basin from source to mouth; (c) Britain recognized the 'historical' and 'natural' rights of Egypt with respect to the waters of the Nile.

¹²¹ These exchange of notes revealed that the two governments of the United Kingdom and Egypt agreed, 'in accordance with the spirit of the Nile Waters Agreement of 1929', that the Uganda Electricity Board should construct and maintain the Owen Falls Dam in Uganda but that an Egyptian resident engineer was to regulate the discharge water through it.

Sudan in November 8, 1959. The agreement recognizes that the waters actually used by Egypt and the Sudan at the time of signature constitute their established or perspective rights, amounting in the case of Egypt to 48 milliards cubic meters per year and in the case of Sudan to 4 milliards, measured at Aswan. They also agreed to the construction of the Sudd el Aali reservoir at Aswan by Egypt as the first of a series of projects for storage on the Nile. They further agreed to the construction of Rosaries dam on the Blue Nile by Sudan, and allowed Sudan to construct any other works deemed necessary to exploit its share of the waters. By this agreement, if any question relating to Nile water needs to be discussed with other riparian states, the two governments will agree beforehand to have a unified view. If the negotiations result in agreements to construct works outside the two countries, the joint committee shall in cooperation with the governments concerned, execute the technical provisions of such agreements. If other riparian states demand shares in the Nile Waters, the two governments also agree to take a unified view. If discussions result in allocation to any other riparian state, the quantity, calculated at Aswan, is to be deducted equally from the shares of the two countries.

Characterizing the legacy of the colonial water agreements, Kinfe Abrham has said that, ‘after colonizing Egypt in 1882 and Sudan, Kenya and Uganda in the last decade of the 19th century, Britain through political and legal maneuvers tried to ensure the unobstructed and continuous flow of the Nile River to Egypt. Interestingly and paradoxically enough, it has also signed agreements on behalf of its other colonies pledging not to construct dams on the Nile River.’¹²² Italy, France and Belgium also have played a significant role in distorting the very concept of distributive justice in this basin.

Various authors from countries belonging to the Nile basin have given their observations on the historic aspect of the legal regime of the Nile River during the colonial period.¹²³ Our study of their papers reveals that these legal regimes, in most cases bilateral, fail to be binding for various reasons. First of all, all the treaties emphasize the colonialists’ unilateralist position by negating the notion of distributive justice. The very absence of consideration of principles like comity and good neighborliness has sown a long lasting suspicion and the fear of the unknown among the riparian states.

Secondly, these agreements fail to accommodate all of the riparian countries of the basin. They are isolationist, reflecting the then colonial policy of ‘divide and rule’. Most of the treaties were signed by colonial powers during their rule in the basin. In the process, these powers either ignored independent Ethiopia and the then colonized upstream co-basin countries, or imposed their will upon them.

¹²² Abrham, Kinfe. 2000. ‘*The Nile Imperatives: Avenues for Cooperation*’: Proceedings of the VIII Nile 2002 Conference (June 26-29) Addis Ababa, 477.

¹²³ See also, Abdalla, Seifedin. 2000. ‘*The Nile Basin: A Century of Cooperation*’: Proceedings of the VIII Nile 2002 Conference (June 26-29) Addis Ababa; Arsano, Yakob. Supra note, 26. Kasimbazi, Emmanuel. 2000. ‘*Challenges of negotiating an Agreement on a Transboundary River: Lessons for the Nile Basin*’: Proceedings of the VIII Nile 2002 Conference. (June 26-29) Addis Ababa; Aberra, Getachew. 2000. ‘*The Law Relating To The Apportionment of the Waters of International Rivers With Special Reference to the Nile*’: Proceedings of the VIII Nile 2002 Conference. (June 26-29) Addis Ababa; Amare, Girma. 2000. ‘*Nile Waters- Hydrological Cooperation Vs Hydro politics*’: Proceedings of the VIII Nile 2002 Conference. (June 26-29) Addis Ababa; Tafese, Tesfaye. Supra note, 106.

Thirdly, for strategic and economic reasons, these treaties were drafted to favor the British colonial interests in Egypt and the Sudan. It is particularly noteworthy that the British colonial agreements purport to give Egypt a unilateral right to the use of the Nile waters, apparently (and errantly) assuming that the Nile River rises, flows and ends within Egyptian territory.

Fourthly, the treaties cannot be accepted by any riparian States except Egypt and the Sudan, due to the Egyptian protectionist policy embedded with the inherited colonial-era mentality. The evident bias in these colonial agreements again negates the applicability of the principle of distributive justice for water allocation in the Nile River, and has served as a long-standing obstacle to an amicable solution between riparian States.

Postcolonial era developments

Due to the dictate of the fundamental changes of circumstances around the globe and in the region, a notable change of attitude among the riparian countries began to be observed in the 1990s. All riparian countries presumably realized that they would remain losers should they continue upholding the status quo ante. Bilateral, trilateral and multilateral talks proliferated across the region with common objective of bringing all the stakeholders under a unified negotiating roof. In this sub-section this discussion briefly records and examines the negotiation efforts undertaken since the demise of the colonial period in the African continent.

In 1967, the Intergovernmental Committee for the hydro-meteorological survey of Lake Victoria, Kyoga and Lake Albert (otherwise known as the Hydromet Project) was established. It was the first intergovernmental initiative to be funded by the UNDP to promote cooperation in the Nile Basin. The basic objective of the project was to collect and analyze hydrological and meteorological data in the Great Lakes catchments area. It also envisaged laying the groundwork for intergovernmental cooperation in the storage, regulation and use of Nile waters. All Nile Basin countries, with the exception of Ethiopia, were members of this organization, based in Entebbe, Uganda. Ethiopia joined Hydromet as an observer in 1971.¹²⁴ Hydromet did not discuss substantive issues, including the allocation of Nile waters, or entitlements of upstream riparian countries to use Nile waters. The Hydromet ended in December 1992, because member states felt a need to redefine the objective of future cooperation in the Nile Basin to the satisfaction of all riparian countries in order to achieve a lasting basin-wide cooperation in allocation and use of Nile waters.

In 1992, the Technical Cooperation Committee for the Promotion of the Development and Environmental Protection of the Nile Basin (TECCONILE) was established with the initial support of the Canadian International Development Agency (CIDA). Egypt, Sudan, Tanzania, Uganda, Rwanda, and Zaire were members, while the other four riparian countries, namely, Ethiopia, Kenya, Burundi and Eritrea participated as observers. In conjunction with the establishment of the TECCONILE, a Council of Ministers of

¹²⁴ Ethiopia opted to remain an observer mainly because Egyptian and Sudanese interests dominated its agenda.

Water Affairs of the Nile Basin states was formed acting as the highest decision-making body. At the third meeting in Arusha, Tanzania in 1995, the Council of ministers endorsed the Nile River Basin Action Plan that identified several projects of regional and sub-regional interest. One of the projects is known as the Nile Basin Cooperative framework (otherwise known as project D3). It was endorsed by all the countries and is currently being implemented with the support of the UNDP.

In 1995, the Council of Ministers of Water Affairs, the supreme governing body of the NBI¹²⁵, requested the World Bank to take a lead role in coordinating the inputs of external agencies to finance and implement the Nile River Basin Action Plan. This was accepted by the World Bank, which undertook the task in partnership with UNDP and CIDA. A review of the Nile River Basin Action Plan was undertaken and led to the formation of what is currently called the Nile Basin Initiative.¹²⁶ The NBI is guided by a commonly shared vision: ‘...[of achieving] sustainable socio-economic development through the equitable utilization of, and benefit from, the common Nile Basin water resources’¹²⁷ It could be argued that this declaration is a point of departure for further recognition and application by all members of the Nile Basin of the principle of distributive justice.

For the purpose of translating the shared vision into concrete action, the NBI comprises of two main complementary action programs, namely, the Shared Vision Program (SVP) and the Subsidiary Action Program (SAP). The SVP is a basin wide program that is intended to create an enabling environment for cooperative action in the Nile Basin through building a strong foundation of mutual trust among the Nile Basin countries by enlarging human and institutional capacity and creating the opportunity for basin-wide engagement and dialogue. These, it is believed, will facilitate agreement on a permanent legal and institutional framework. The framework is currently under negotiations by the riparian countries as part of the Nile Cooperative Framework Project.¹²⁸ As indicated earlier, negotiation on establishing a cooperative framework is ongoing, with the support of the UNDP since 1995 (Project D3).

The main purpose of the Nile Basin Cooperative Framework is to agree upon a set of legal and institutional principles on the basis of which future cooperation on the use and management of Nile Waters is to proceed. A panel of experts composed of three members from each Nile Basin country was formed in 1997 to establish a set of

¹²⁵ The Council is the highest decision-making body and has the responsibility of setting out policy and guidance on issues related to the Nile waters. Under the council is a technical advisory committee that consists of two senior officials from the member countries who give support and technical advice to the council of ministers. A Secretariat was also established in Entebbe, Uganda, which began operations from June 1999.

¹²⁶ See, *Supra* note, 92.

¹²⁷ See, *Supra* note 86.

¹²⁸ The SVP currently comprises seven projects, including the Nile Trans-Boundary Environmental Action; Nile Basin Regional Power Trade; Efficient Water Use for Agricultural Production; Water Resources Planning and Management; Confidence-Building and Stakeholder involvement; Applied Training and Socio-economic Development and Benefit Sharing. The indicative cost to implement the above seven projects is estimated at approximately US \$ 122 million.

commonly agreed legal and institutional principles to cooperatively manage the Nile waters. Although agreement was reached on some provisions, there are still disagreements on some substantive issues in the document. The issues that remain unresolved relate to the status of existing agreements, the relationship between the principles of equitable entitlement and the obligation not to cause significant harm, as well as procedures related to plan projects within the Nile Basin.¹²⁹ As in the past, Egypt and Sudan are opposed to any reduction in their allocation of waters under the 1959 agreement. Meanwhile, upstream riparian states demand a new water sharing agreement.

The subsidiary action programs aim to identify water resource development projects at the sub-basin level involving two or more countries and to account for ‘...benefits and effects of planned activities on other countries.’¹³⁰ In other words, any measure that would be taken to address the comparative needs of the community should also consider the health of remaining water community. This brings us to deduce that the Nile Basin countries, without formally denouncing the unjust colonial treaties, indirectly call for the application of distributive justice whose main elements are consideration of human needs and protection of the health of the water community. All identified development projects, like the hydropower development and interconnection, irrigation and drainage, environmental management, river regulation, drought and flood control, and water use efficiency improvements, widely considers distributive justice. To make the applicability of this principle more plausible, the subsidiary action programs were developed on the basis of two distinct sub-basins namely, the Eastern Nile Subsidiary Action Program (ENSAP) comprising Egypt, Sudan and Ethiopia, and the Nile Equatorial Lakes Subsidiary Action Program (NELSAP) comprising Burundi, the Democratic Republic of Congo, Kenya, Rwanda, Tanzania and Uganda. Egypt and Sudan also joined as participants in the development of the program in November 2000. The two Subsidiary Action Programs have identified major sub- projects deemed to be mutually beneficial to all basin countries¹³¹.

In search of funding for the cooperative water resources development projects and other projects identified in the strategic action programs of the NBI, an International Consortium for Cooperation on the Nile (ICCON) was held in Geneva, Switzerland in June 2001. The international donor community, the Ministers of Water Affairs of the Nile Basin states and some Ministers of Finance and Planning, as well as other water

¹²⁹ Tafese, *Supra* note 106.

¹³⁰ *Supra* note 86.

¹³¹ For Example, the ENSAP projects include: the Eastern Nile Planning Model Sub-Project; Baro-Akobo Multi-Purpose Water Resources Development Sub-Project; Flood Preparedness and Early Warning Sub-Project; Ethiopia-Sudan Transmission Interconnection Sub- Project; Eastern Nile Power Trade Investment Program, Irrigation and Drainage Sub-Project; and the Water shade Management Sub-Project. Of these, four (Eastern Nile Planning model; Flood Preparedness and Early Warning; Ethiopia- Sudan Transmission Interconnection Sub Project and Water shade Management Sub-Project) are considered to be ‘fast-track’ and will proceed at an accelerated pace for final appraisal. These initial investments are considered to be of crucial importance to build confidence among the riparian countries, as well as to demonstrate real results on the ground after years of policy dialogue. An Eastern Nile Regional Office has also been set up in Addis Ababa, Ethiopia.

resources experts from the basin countries participated. Donor statements at the meeting supported the strategic action program as an important step to achieving cooperation in the Nile Basin.¹³²

Being a recent regional cooperative model, the Nile Basin Initiative can be seen as an important step in paving the way for Nile Basin countries to seriously consider cooperation in the utilization and management of the Nile waters. All basin countries seem to consider the NBI as a positive step that should lead to a stronger cooperation in the future. However, the expectations of the different riparian states of the current cooperation differ. All the upper riparian states expect to get tangible benefits in terms of increased agricultural production and generation of hydropower. Ethiopia, in particular, also intends to improve environmental management by reducing population pressure in areas of high population density during the first phase of the projects identified in the eastern Nile. Egypt and Sudan, on the other hand, do not want their uses of Nile waters adversely affected by developments in Ethiopia. However, it is recognized that the projects identified during the first phase are of limited significance and that they will not meet all the water demands within the basin, particularly for irrigated agriculture.

The Way Forward For A Win-Win Arrangement

Careful reading of the preceding sections of this paper gives us the following insight. There is no comprehensive regulatory mechanism for the Nile River. Reference made by some countries to the colonial treaties as existing and applicable governing international legal instruments for the Nile River, have been successively challenged, revoked and unilaterally denounced by the majority members of the Nile community. Due to the delay in reaching amicable solution through a just share of the Nile water, some member states are seen taking unilateral legislative and practical measures on the ground. Such isolated unilateral actions might jeopardize the functioning of the basin-wide cooperative framework, the Nile Basin Initiative. It is worth maintaining various negotiations including basin and sub basin based ones under the NBI roof, but any further delay that hinders the speedy conclusion of final agreement related to water allocation should be discouraged. Before things could be overtaken by events, it is better to begin by immediately recognizing the principle of distributive justice, as an optimal solution for the Nile Water allocation. Members should bear in mind that the two cardinal principles of 'equitable utilization' and 'no significant harm', which are enshrined in the UN Framework Convention on the Law of the Non-Navigational Uses of International Waterways, are subordinates and qualifying principles of the omnibus principle of Distributive Justice.

Regardless of which theory is applied, it is apparent from the Nile case that all except Egypt and the Sudan are disadvantaged by their lack of political and economic power in relation to Egypt. While the ongoing negotiations, and joint project developments under the umbrella of the Nile Basin Initiative give a glimmer of hope, our assessment through morality of states and cosmopolitan theories of existing agreements of the Nile basin

¹³² The ICCON promised initial financial support of at least US \$ 140 million and support for the first phase of the US\$ 3 billion investment program in the respective sub-basins once the projects are ready for funding.

point out the injustice that remain to be addressed. We suggest that distributive justice, in particular, Rawls notion of distributive justice principle may provide optimal solution for allocation of transboundary water, especially in our situation where a few have benefited disproportionately from a monopoly of water usage and reached a better economic standard at the cost of others.

Rawls' 'difference principle' states, 'social and economic inequalities are to be arranged so that they are ...to the greatest benefit of the least disadvantaged.'¹³³ This principle is applicable to natural resources as well. Beitz provides the necessary link between natural resources and social and economic inequalities when he states that natural resources are determining factors in the advancement and development of societies and economies. He notes that, 'In a world of scarcity...the appropriation of valuable resources by some will leave others comparatively, and perhaps fatally, disadvantaged.'¹³⁴ Those who are disadvantaged would be justified, under Rawls model, to push for a more equitable share in the resource or to reallocate the resource under a type of 'resource distribution principle'.¹³⁵ This would assure people 'in resource-poor societies that their adverse fate will not prevent them from realizing economic conditions sufficient to support just social institutions and to protect human rights.'¹³⁶ In the Nile case, upstream states experience significant economic disadvantage when they are prevented from using the waters of the Nile because of unwarranted threats from Egypt (the lower riparian state). These disadvantages could be moderated by the adoption of a distribution principle in the Nile Basin.

This Nile case study provides valuable insight into larger questions of allocation of both water and other natural resources of a transboundary nature, and the ethical concerns that shape or should shape resource distribution. Different mechanisms for equitable allocation of the Nile water have been proposed. Tafese¹³⁷ quotes some Nile experts in his recent paper. He quotes the proposal submitted by Whittington and McClelland, suggesting the establishment of reservoirs on the Blue Nile in Ethiopia: '...it offers the greatest opportunity over the long term for dramatic improvements in the overall management of Nile resources'¹³⁸ Wild is also quoted as stating, '...the main method of achieving this [the exploitation of joint gains in the Nile basin] would be the transfer of much of the storage of Lake Nasser upstream to the Ethiopian highlands'¹³⁹ Elhance too has been quoted reiterating the same argument: 'such a storage [on the blue Nile in Ethiopia] would have much lower evaporation rate than any alternative storage reservoir that could be built within Egypt or Sudan or on the headwaters of the White Nile'¹⁴⁰

¹³³ Beitz, Supra note 91, 129.

¹³⁴ Ibid., 139.

¹³⁵ Ibid., 138.

¹³⁶ Ibid., 142.

¹³⁷ Tafese, Supra note 106, 600

¹³⁸ Whittington, Dale and McClelland, E. 1992. 'Opportunities for Regional and International Cooperation in the Nile Basin' Water International 17: 152.

¹³⁹ Wild, Jonatan. 1995. 'Towards an Economic Reallocation of Blue Nile Water' <<http://www.geogr.unipid.it/B7SEM.HTM>>

¹⁴⁰ Elhance, Arnun P. 1999. *Hydro-politics in the Third World: Conflict and Cooperation in International River Basins*. United States Institute of Peace Press, 67.

Referring to these and other writers' arguments, Tafese reports them as saying that 'the transfer could be of help in having much water in the basin, reducing evaporation to a much lower rate than at Egypt's Aswan High Dam, eliminating the annual Nile flood and diminishing siltation in dams and barrages in the Sudan and Egypt. Tafese also makes an interesting observation in this regard, referring to Kliot's book¹⁴¹, that the water savings so made, which could be in the order of 12-21.4 billion cubic meters per year, would quadruple Ethiopia's irrigated area without reducing supplies to Egypt and the Sudan.¹⁴²

In fact, some authors have gone as far as proposing a hypothetical 'reasonable' equitable water share of the Nile for some fiercely contesting riparian states. Tafese, again quoting Whittington and MacClelland, suggests that Ethiopia's share of the Nile water should be at least equal to Sudan's. The approximate share allocations, which have been proposed by these authors, are 52 billion cubic meters for Egypt, 14 billion cubic meters for the Sudan and 14 billion cubic meters for Ethiopia (assuming 6 billion cubic meters or more of water could be saved by building storages in the Blue Nile basin of Ethiopia).¹⁴³ Others have proposed the concept of 'virtual water' in food staples instead of relying on shared water, given that the riparian states use 80% of the Nile water for agricultural consumption.¹⁴⁴ It has been argued, in keeping with this observation, that the economic and financial situations in Egypt and the Sudan could permit them to import 'virtual water' embedded in food staples.¹⁴⁵ The idea of apportioning water by way of injecting a Addis Ababa 'virtual water' concept is a market-oriented approach.

It is difficult however to determine through the established theories whether the allocation of water through market mechanisms, like the application of the 'virtual water' concept, is just. Cosmopolitan theorists would experience a split between the utilitarian and deontological (proponents of moral obligation) camps. Utilitarians would support market allocation provided that it achieved significant improvements in efficiency, gains, and overall utility. Deontologists, however, would advocate against such market mechanisms, as they circumvent the perceived duty to other citizens and to human rights. Morality of states theorists, particularly Walzer, would argue that the market mechanisms [in our case 'the virtual water concept'] cannot account for the different social meanings attributed to water across state boundaries. As he states, 'there has never been a universal medium of exchange' because 'social goods have social meanings' that are dependent upon culture.¹⁴⁶ It is hard to predict, by applying Walzer's explanation, how far the Egyptian farmers are ready to buy the idea of detaching themselves from producing agricultural products, should the Egyptian government agree to implement the 'virtual water' scheme. For the ordinary Egyptian farmer this is an ultimatum until the state, as a central actor, does the job of scrupulously and gradually convincing the would-be temporary losers.

¹⁴¹ Kliot, Nurit. 1994. *Water Resources and Conflict in the Middle East*.

¹⁴² Tafese, *Supra* note 106, 601.

¹⁴³ *Ibid.*

¹⁴⁴ Allan, Tony. 1996. 'Watersheds and Problem Shades: Where do Governments find Economic Solutions?': Paper presented at the 5th Nile 2002 Conference (February 24-28) Addis Ababa.

¹⁴⁵ Tafese, *Supra* note 106.

¹⁴⁶ Walzer, *Supra* note 104, 16

These mechanisms, if accepted by Egypt, are *just* from the morality of states and cosmopolitan point of view, satisfying the requirements of international distributive justice. An argument based upon international distributive justice as elaborated by Beitz and originated by Rawls, would serve as a valuable model for addressing many of the inadequacies of allocation through legislation (conclusion of a comprehensive multilateral treaty on the utilization of water resources) and market, offering instead a moral principle by which to compensate states and provide for a more equitable and just distribution across borders.

Conclusion: Distributive Justice and the Nile Basin

The reference to justice in this paper has the sole purpose of contextually defining the notion of fairness. As the theory of justice informs us, both in social ethics and in law, the concept of justice has a conservative and a reformative role. The conservative role is to maintain the established order of things, taken to be entitlements. A person is entitled to the things that he has acquired, provided that the method of acquisition was not itself wrong. But justice is also given the reformative role of changing the existing pattern of entitlements by taking account of merit and of need. Conservative and reformative justice are not at loggerheads with each other. Each tries to fulfill a good purpose. Conservative justice assumes that everyone benefits from a stable social order, however imperfect, and so it aims to preserve stability. Reformative justice supplements this good purpose by another, trying to remove the imperfections, and redistributing rights so as to make the social order fairer.¹⁴⁷

As shown in this paper, colonial treaties regarding the Nile waters, though boldly regarded by some countries as valid and sacrosanct, are imperfect to the extent that they legitimize ‘illegally’ acquired water shares. It may therefore be argued that this blemish caused by conservative ‘justice’ should be remedied. This can be done peacefully, through the application of a notion of reformative justice. Reformative justice in this situation implies changing the *status quo ante* of the Nile water allocation through redistribution. Affirming and enriching this view, Rawls defends the general primacy of justice: laws and institutions, no matter how efficient and well arranged, must be reformed or abolished if they are unjust.¹⁴⁸

The question which then arises is which criteria to apply while reforming injustice. Addressing this matter remains a daunting task unless negotiators and policy makers draw their attention to political theories in their search for a win-win arrangement. A plethora of criteria proposed by various authors quoted in this paper and other writings¹⁴⁹, are short of addressing the allocation problem from the viewpoint of theories of justice. This is partly because they are mainly driven only from hydrological and environmental points of view. Informed by theories of justice in general, and distributive justice in particular, Raphael’s criteria of merit, equality and needs are compelling, along with

¹⁴⁷ Raphael, D.D. 2001. *Concepts of Justice*. Oxford: Clarendon Press, 4.

¹⁴⁸ Rawls. *Supra* note 93, 3.

¹⁴⁹ Waterbury, John. 2003. *The Nile Basin: National Determinants of Collective Action*. New Haven and London: Yale University Press, 41-47.

Walzer's twofold framework of distributive justice as a measure of just allocation. Walzer refers, first, to the recognition of need and, second, to the recognition of sustaining membership of the water community. Goods (natural resources) must be provided to needy members because of their neediness, but they must also be provided in such a way as to sustain their membership.¹⁵⁰

The Merit criteria of distributive justice claims that people should be given what they deserve. On the other hand, looking to equality and need as a basis for distributive justice, Raphael argued that discrimination in favor of some and against others is contrary to justice, with one exception. If you discriminate in favor of the disadvantaged, your aim is to reduce inequality, to bring the needy a little nearer to the level of the better off, and that of course serves the basic egalitarian purpose of justice. So the principle of justice is to aim at equality and to favor the needy, in order to reduce inequality.¹⁵¹

If this abstraction is translated into the current reality of the Nile basin, the concept of reformative justice requires the riparian governments to institute a change, given that the fundamental circumstances in the Nile Basin are changed. These changes, both in environment, population, international relations and even in human perception, have caused unbearable injustice. This injustice can be explained in the prevalence of famine, absolute poverty, ethnic conflicts and instability. A reasonable thinker, who recognizes the existence of injustice and inequality in the Nile basin, will not employ coercive measures, but will rather choose reformative justice. In order therefore to avoid coercive actions aimed at forcefully establishing justice, members should first recognize the imperative importance of water sharing, collective development and principled management of projects in a sustainable manner. This can only be effectively done in rational application of the principle of distributive justice at all levels.

Due to the delay in reaching an amicable solution for the just distribution of the Nile's water, some member states have elected to take unilateral legislative and practical measures on the ground.¹⁵² Such isolated unilateral actions may jeopardize future possibilities for a negotiated outcome and the emergence of a cooperative framework. On the other hand, changing attitudes among the policy makers of Egypt provide some encouragement for concerned observers. Mr. Abdel Fattah Metawie, the chairman of the Nile Water sector in Egypt's Ministry of Water Resources and Irrigation, was recently quoted in *The Wall Street Journal* as saying, that 'people are suffering in Ethiopia; without development in the Blue Nile basin, you have to expect a crisis in the area.' He was also reported saying, 'there's enough water- it is a matter of managing it. To look at the Nile from a selfish point of view won't help anyone.'¹⁵³

It is worth maintaining various negotiation fora under the NBI roof, but any further delay in the conclusion of a final agreement related to water allocation should be discouraged.

¹⁵⁰ Walzer. *Supra* note 104, 78

¹⁵¹ Raphael. *Supra* note 147, 5.

¹⁵² *Supra* notes 87, 88, 90.

¹⁵³ Thurow, Roger. 2003. 'Changing Course: Ravaged by Famine, Ethiopia finally gets Help From the Nile.' *The Wall Street Journal* (November 26), A8

The principle of distributive justice based on the ‘merit’, ‘needs’, ‘equality’, and ‘membership’ criteria must be promptly recognised as the optimal solution for the allocation of the Nile waters, before the prospect of a mutually beneficial outcome is overtaken by events. Riparian states should bear in mind that both the obligation of ‘equitable utilization’ and the prohibition of ‘significant harm’ are subordinate to the omnibus principle of distributive justice, and should modify their policies and practice accordingly.

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